DRAFT

Initial Study and Mitigated Negative Declaration Altaville Forest Fire Station Auto Shop Replacement Project

August 2014

Lead Agency:

State of California
Dept. of Forestry and Fire Protection (CAL FIRE)
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Prepared For:

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DRAFT MITIGATED NEGATIVE DECLARATION
ALTAVILLE FOREST FIRE STATION
AUTO SHOP REPLACEMENT PROJECT

Lead Agency: State of California Department of Forestry and Fire Protection (CAL FIRE)

Project Proponent: State of California Department of General Services – Real Estate Services Division

Project Location: The Project is located at the Altaville Forest Fire Station (FFS) in the City of Angels Camp, Calaveras County, California at 125 North Main Street, Angels Camp, California 95221.

Project Description: The Proposed Project consists of a new five-bay auto shop at the Altaville FFS to replace the existing facility at the San Andreas FFS. The Project site covers approximately 1.84 acres and is located within the 5.95 acres owned by CAL FIRE. The new auto shop facility would consist of new single-story buildings that would include an Auto Shop/Welding Shop with a vehicle wash bay and a Generator/Flammable Storage building. In general, the Proposed Project would consist of the following site improvements:

- Retaining walls
- Grading and paving
- Utilities extension and fiber optic utility extension
- Landscaping and irrigation
- Site exterior lighting
- 6-foot chain-link fence at the Project site boundary on the south, west, and east.
- Pump test pit
- Trash enclosure
- Retention pond.

The proposed buildings would be located within the southern portion of the Altaville FFS property, adjacent to the existing FFS buildings. The Auto Shop/Welding Shop, including the vehicle wash rack, would be approximately 75 feet wide and 120 feet long and would be located directly southwest of the fuel tanks near the center of the property. The vehicle wash rack would be located on the northern edge of the Auto Shop/Welding shop. The wash rack would be approximately 4 feet from the building and be approximately 33 feet wide and 20 feet long. The wash bay waste disposal container would be located at the edge of the southwestern boundary of the Project site. Concrete pads would be installed along the perimeter of the building.

The floor plan would consist primarily of the five-bay Auto Shop. The southeastern facing portion of the building would include a tool storage room, a break room, bathrooms, a locker room, and offices. In order to address CAL FIRE's current programing needs, the floor plan may be reconfigured to include a Battery Room, and inmate restroom. A change in the existing floor plan would be determined during the preliminary plan phase; however, the overall floor plan's square footage will remain the same. The Welding Shop would be located adjacent to the Auto Shop facing the southwestern corner of the Project site and would be approximately 19 feet wide and 41 feet long. A new pump test pit would be located adjacent to the Welding Shop. It is possible that an elevator would be installed for access to a mezzanine storage space above the offices; however, this

has yet to be determined. In order to eliminate the need for an elevator to access the mezzanine area due to the State's interpretation of the new California Building Code 2013, the State may eliminate the mezzanine area and locate the equivalent area at ground level. The space will be designated as storage. Entrances and exits to the Auto Shop/Welding Shop would be provided on all four sides of the building.

The Generator/Flammable Storage building would be located along the southeastern property line near the center of the Altaville FFS property and would be approximately 16 feet wide and 44 feet long. The floor plan of the building would consist of the generator room, storage building, and a well/fire sprinkler pump room. If the well/fire sprinkler pump room is not required, which will be determined during the preliminary plan phase, the space will be designated as a storage area. The new trash enclosure and new liquefied petroleum gas (LPG) tanks would be located adjacent to the Generator/Flammable Storage building along the southeastern property line. The two new fuel storage tanks will be installed adjacent to the existing fuel tanks which are located at the northeastern boundary of the Project site. An office/utility shed located along the southeastern property line would be retained as part of the Proposed Project.

The Proposed Project would require grading and paving throughout the Project site. A van-accessible parking space and nine standard parking spaces would be paved and striped, and would be located directly adjacent and northeast of the Auto Shop/Welding Shop. The perimeter of the Project site would be paved for vehicle access, consequently requiring the removal of several oak trees located along the western and southwestern boundary of the Project site and adjacent to the proposed vehicle wash rack. The Project site would be graded and paved around the Auto Shop/Welding Shop, with the exception of a landscaped area located on the south and southwestern boundary. A paved area for 17 parking spaces without striping and a turning radius space of approximately 70 feet in diameter would be located on the southwestern boundary of the Project site. Cut and fill would be required along the northwestern boundary to create a level building pad for the vehicle wash rack. A vehicle or partial airplane was reported buried within the Project site and may be required to be excavated prior to construction of the Proposed Project; however, this would be determined pending a soils report and geotechnical survey of the Project site.

Utilities

The electrical systems for the proposed buildings would consist of 600 amp electrical service. There would be 120/208 Three-Phase Four-Wire circuits located in the Generator/Flammable Storage building, with underground feeders to the Auto Shop/Welding Shop. The Auto Shop/Welding Shop would be designed to meet the US Green Building Council's Leadership in Energy and Environmental Design (LEED) requirements in order for the building to receive a Silver rating. A 100-kilowatt (kW) or less generator would be provided for the Auto Shop/Welding Shop and would be located in the Generator/Flammable Storage building.

The domestic water for the new buildings would be provided by the main Altaville FFS facility system and would be extended to the Auto Shop/Welding Shop and Generator/Flammable Storage building. The waste system for the Auto Shop/Welding Shop would require a lift station and tie into an existing 6-inch sewer line on-site. Stormwater runoff from the Project site would be collected into an on-site interceptor. Waste water generated by the vehicle wash rack, located on the southwestern boundary of the Project site, includes a filtration system to filter water, which is then recycled for reuse (see above for discussion regarding Auto Shop/Welding Shop floor plan).

Runoff from the Project site currently flows to the southwest boundary of the Project area. A retention pond would be located near the southwestern corner of the Project site and is currently

estimated to be 50 feet long, 50 feet wide, and 10 feet deep. The actual volume will be determined during the preliminary plan phase. Propane gas service is already provided on-site. However, three new propane tanks would be added for this Project. One propane tank will service the Auto Shop/Welding Shop and two propane tanks would service each of the standby emergency generators. The air conditioning unit and cooling coils condensate drains for the Auto Shop/Welding Shop would be piped to the waste system or storm system. All the plumbing fixtures would be stainless steel and any plumbing systems exposed to freezing conditions would be provided with heat trace freeze protection.

Fire Protection

A hydraulically calculated full dry pipe automatic fire sprinkler system would be installed in all buildings and any overheads and combustible blind spaces. All the flow switches and tamper switches would be monitored by the fire alarm system. Any fire protection piping in locations exposed to freezing conditions would be provided with heat trace to prevent freezing. The fire line for the Auto Shop/Welding Shop would be connected to the existing main fire line, double check backflow valve and post indicator valve located on-site.

A diesel fire pump would be located in the Generator/Flammable Storage building and would be connected to the fire water system serving the site. A diesel day tank would be provided for the fire pump and would be connected to the main fuel tank. The interconnecting fuel piping would be double-contained and monitored where it is routed underground.

Proposed Finding: Based on the information contained in the attached Initial Study, CAL FIRE finds that there would not be a significant effect to the environment because the mitigation measures described herein would be incorporated as part of the Proposed Project.

Public Review Period: August 8, 2014 to September 8, 2014

Mitigation Measures Incorporated into the Project to Avoid Significant Effects

Aesthetics

The Project site is located adjacent to the main Altaville FFS facilities and would not contribute to a substantial change in current conditions; however, lighting associated with the Proposed Project could change the nighttime views of the Project site. In order to minimize light spillage onto the adjacent residential properties, a lighting plan shall be developed describing specific measures regarding light shielding Implementation of Mitigation Measure AES-1 would reduce potentially adverse impacts to a less than significant level.

Mitigation Measure

AES-1 Lighting Plan

Prior to construction, a lighting plan for the Project site specifying the location and type of exterior light sources shall be prepared and submitted to CAL FIRE and DGS for approval. All exterior lighting shall be shielded, directed downward, and have sharp cutoff qualities at property lines, in order to minimize light and glare spillover effects that would affect adjacent residences located on the northwestern boundary of the Altaville FFS property.

Biological Resources

The Altaville FFS site supports potentially suitable habitat for one special-status bird species (Cooper's hawk) and nesting birds. All native birds, including raptors, are protected under the Fish and Game Code and the Federal MBTA. To ensure that there are no impacts to protected active nests, Mitigation Measure B-1 shall be implemented to reduce potentially adverse effects to nesting birds to a less than significant level.

Mitigation Measures

B-1 Pre-construction Nesting Bird Survey

Conduct a pre-construction nesting bird survey of all suitable habitat on the Project site within 14 days prior to the commencement of construction during the nesting season (February 1 through August 31). If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist. Once the young are independent of the nest, no further measures are necessary. Pre-construction nesting surveys are not required for construction activity outside of the nesting season.

The Project site supports native blue oak woodland, and development of the site may require removal or encroachment into the protected area surrounding a tree (1.5 times the distance between the trunk and the drip line) (ECORP 2013a). A preliminary estimate determined seven oak trees would be removed by the Proposed Project: two (2) 16 inch Diameter at Breast Height [DBH], four (4) 18 inch DBH and one (1) 20 inch DBH. Mitigation Measures B-2 and B-3 shall be implemented to reduce potentially adverse effects as a result of the removal of blue oak trees to a less than significant level.

B-2 Blue Oak Protection

A. To protect trees being retained on-site, the following measures shall be implemented:

    1. All trees, including blue oaks or groups of trees outside the construction area, shall be protected during and following construction by establishing a root protection zone (RPZ) that is 1.5 times the distance from the trunk to the canopy dripline.
    2. Temporary construction fencing shall be used to mark the RPZ and no grading, trenching, or vegetative alteration should be allowed in the RPZ.

B-3 Blue Oak Mitigation and Monitoring Plan

A. To compensate for the of loss blue oak trees, oak tree replacement will be conducted at an off-site location within the City of Angels Camp or Calaveras County. A Blue Oak Mitigation and Monitoring Plan shall be prepared in accordance with specifications outlined below. Oak tree replacement requirements will be based on the final number of trees to be removed once grading plans have been finalized:

    1. Blue oaks removed during project construction shall be replaced by planting seedlings or acorns from local genetic stock.

2. A replacement ratio of 1 seedling planted for every tree removed shall be applied (1:1).
3. A Replacement Tree Mitigation Plan shall be prepared. The Plan shall include: the species of trees to be planted, planting locations, the distances between replanted trees, irrigation requirements, success criteria, monitoring and reporting, and corrective actions if success criteria is not met.
4. A success rate (live tree survival defined by pliable, green stems but not leaf retention) of 80% shall be achieved at Year 5.
5. Establishment of planted replacement trees shall be monitored annually for five years after planting. If survivorship objectives are not met, dead or low vigor trees shall be replaced using methods based on an adaptive management approach. A report summarizing survival rates of planted trees and other issues affecting mitigation success shall be prepared annually during the monitoring period.

Cultural Resources

Due to the sensitivity of the Project Area, there remains a possibility that unrecorded cultural resources are present beneath the ground surface, and that such resources could be exposed during Project construction. Both CEQA and Section 106 of the National Historic Preservation Act require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Implementation of Mitigation measures C-1, C-2, and C-3 would reduce potential adverse impacts to less than significant.

Mitigation Measures

C-1 On-Site Awareness and Monitoring

A. All ground-disturbing activities will be monitored by a qualified professional archaeologist, who has the authority to halt construction activity in accordance with the unanticipated discovery procedures discussed in mitigation measure C-3.

B. The State of California Department of General Services requires cultural resources awareness training to be provided to on-site construction personnel associated with the Altaville Forest Fire Station Auto Shop Replacement Project, to contribute to compliance with this mitigation measure. The construction awareness training will be carried out by a qualified Archaeologist with experience in prehistoric and historic-era archaeology in California.

C-2 Altaville Grammar School

A. The Project shall be designed to avoid the footprint of the former schoolhouse.

B. Construction fencing shall be installed around the footprint and no construction vehicles shall enter this area.

C. If the footprint of the former schoolhouse cannot be avoided by construction activities:

1. A qualified archaeologist shall monitor activities as stated in mitigation measure C-1.

2. Any artifacts discovered shall initiate implementation of mitigation measure C-3.

3. A small monument shall be erected to show the location of the former schoolhouse.

C-3 Unanticipated Discovery

If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. A Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, will be required if the nature of the unanticipated discovery is prehistoric.

Work cannot continue within the no-work radius until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR.

If a potentially-eligible resource is encountered, then the archaeologist, lead agency, and Project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations to evaluate eligibility and, if eligible, total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the lead agency as verification that the provisions in CEQA/NEPA for managing unanticipated discoveries have been met.

In the event that evidence of human remains is discovered, construction activities within 100 feet of the discovery will be halted or diverted and the requirements of this mitigation measure will be implemented. In addition, the provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and AB 2641 will be implemented. When human remains are discovered, state law requires that the discovery be reported to the County Coroner (Section 7050.5 of the Health and Safety Code) and that reasonable protection measures be taken during construction to protect the discovery from disturbance (AB 2641). If the Coroner determines the remains are Native American, the Coroner notifies the Native American Heritage Commission which then designates a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted, to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).

In the event that fossils are encountered, they shall be analyzed to a point of identification and curated at an established accredited museum repository with permanent retrievable paleontological storage. A technical report of findings shall be prepared with an appended itemized inventory of identified specimens and submitted with the recovered specimens to the curation facility.

Geology and Soils

Native soils at the site are stable. However, fill soils were identified in the center portion of the property. A portion of the Proposed Project, including the western third of the auto shop building, a portion of the proposed parking area, and a portion of the proposed generator and storage building, would be located in fill soils, which are not suitable for direct support of structures. Specific removal and re-compaction recommendations are provided in the geotechnical evaluation. Impacts would be less than significant with the implementation of Mitigation Measure G-1.

Mitigation Measure

G-1 Site Specific Geotechnical Design Recommendations

The site-specific recommendations from the *Geotechnical Investigation, CAL FIRE Altaville – Auto Shop* prepared for the *Altaville Forest Fire Station Auto Shop Replacement Project Administrative Draft Initial Study and Mitigated Negative Declaration* shall be followed during site design and construction.

Hazards and Hazardous Material

CAL FIRE and its contractors shall follow all applicable federal, state, and local regulations, including California Occupational Health and Safety Administration (Cal-OSHA), California Fire Code, and National Fire Protection Association (NFPA) requirements, and manufacturer instructions for the management, storage, and handling of hazardous materials and hazardous waste for the construction, demolition, and operation and maintenance of the Proposed Project. Impacts from the routine transport, use, and disposal of hazardous materials during the Proposed Project demolition, construction, and operation and maintenance phases would be less than significant with implementation of mitigation measures HM-1, HM-2, HM-3, and HM-4.

Mitigation Measures

HM-1 Hazardous Building Materials

Prior to demolition of the fire pump test pit, all hazardous materials associated with the facility shall be removed by a qualified contractor and disposed of in accordance with federal, state, and local regulations.

HM-2 Phase II ESA

Prior to Project initiation, a Phase II ESA shall be conducted to determine if the buried metal debris/waste and burn pile on the southern portion of the site have resulted in a release of hazardous materials. If the Phase II ESA determines that a release of hazardous materials has occurred, all requirements for remediation shall be implemented.

HM-3 LUST Cleanup Area

A. Prior to grading activities within the LUST cleanup area (contamination north of MW-5):

B. Continue to pursue closure of the site LUST case through monitored natural attenuation.

C. Review the results of the forthcoming soil vapor survey to determine if the potential VEC identified has impacted the site.

D. All monitoring wells associated with the Altaville FFS site shall be protected and avoided until a final closure letter from the Central Valley RWQCB is received.

HM-4 Avoidance and Minimization Measures for Personnel

A. All personnel working on the Project site shall be informed of the possibility that contaminated soil, soil vapor, and/or groundwater may be encountered on the job site.

B. If previously unknown contaminated soils are encountered in the field during demolition or grading, ground disturbance activities in the vicinity of the discovery shall cease until a qualified hazardous materials management specialist can assess the potentially hazardous substances and, if necessary, develop appropriate management measures in coordination with the appropriate regulatory agencies.

Noise

Construction of the Proposed Project may generate exterior noise levels exceeding 65 dBA Leq at the adjacent residences located approximately 100 feet west of the Project site. Based upon a typical construction work schedule of 7:00 a.m. to 5:00 p.m., the CNEL for construction activity would be approximately 3 dB less, or 62 dB CNEL. This would exceed the City's 60 dB CNEL exterior noise level standard. Daytime construction activity is typically exempt from local regulation. However, based on the existing low ambient noise measured at the adjacent residential uses, construction noise control measures should be implemented in order to reduce the potential for annoyance to sensitive receptors. Therefore, temporary construction noise impacts would be less than significant with implementation of Mitigation Measure N-1.

Mitigation Measures

N-1 Sensitive Receptors

A. Limit construction to between the hours of 8:00 a.m. and 8:00 p.m. on weekdays;

B. Allow exceptions to the specified construction hours only for construction emergencies and when requested by the City of Angels Camp;

C. During construction, temporary sound barriers shall be used to shield residences along the northwestern boundary of the property from direct line of sight to construction equipment.

In the event of an emergency situation, the auto shop could operate 24 hours a day for the duration of the emergency. 24-hour operations are predicted to cause an exceedance of the City of Angels Camp 60 dB CNEL exterior noise level standard. Additionally, the Project-generated noise is predicted to cause an increase in ambient noise levels of 12.8 dB CNEL under the 24-hour operations scenario. This would also exceed the FICON criteria of 5 dB (see section 4.12.1 Environmental Setting Table 5). Implementation of Mitigation Measure N-2 would reduce impacts to ambient noise conditions associated with 24-hour operations to a less than significant level.

N-2 Noise Barrier

An 8-foot tall noise barrier shall be constructed to shield the vehicle wash rack. The location of the barrier shall be the same as recommended in the Noise Assessment prepared for the *Altaville Forest Fire Station Auto Shop Replacement Project Administrative Draft Initial Study and Mitigated Negative Declaration*. The noise barrier shall be constructed of a masonry type material, such as CMU block or concrete panels. Wood is not recommended for use as a noise barrier material.

Transportation/Traffic

While development of the Proposed Project does not by itself create the need for long term improvements, the Proposed Project traffic would incrementally contribute to the need for improvements that have been identified in existing or pending plans and fee programs. In the long term, a feasible access plan for SR 49 would need to be created by Caltrans and the City of Angels Camp which perpetuates access to local properties. The 2012 Calaveras County Regional Transportation Plan (RTP) suggests that the plan could involve creation of a new local street linking Dogtown Road with Clinton Avenue, although other options, roundabout intersections on SR 49, new traffic signals with u-turn capability, and a new SR 49 alignment, were identified. Therefore, the Proposed Project would contribute to potentially significant cumulative impacts to traffic conditions on SR 49. Implementation of Mitigation Measure T-1 would reduce cumulative impacts to a less than significant level.

Mitigation Measure

T-1 Traffic Impact Mitigation Fees

Prior to construction, the Project Proponent shall pay the City of Angels Camp Traffic Impact Mitigation (TIM) fees associated with regional improvements. The estimated 30 trips per day shall be used to calculate the TIM fee based on the City of Angels Camp's current dollar amount per trip. The current fee is roughly $274 per daily trip; therefore, based on the Proposed Project's estimated 30 daily trips the estimated fee would equal $8,220.

This Mitigated Negative Declaration meets the requirements of the California Environmental Quality Act. I hereby recommend approval:

_____ _____

Chris Browder Date
Deputy Chief, Environmental Protection
CAL FIRE

Pursuant to Section 21082.1 of the California Environmental Quality Act, the [Lead Agency] has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the proposed Project and finds that the Initial Study and Mitigated Negative Declaration reflect the independent judgment of the California Department of Forestry and Fire Protection (CAL FIRE)The lead agency further finds that the Project mitigation will be implemented as stated in the Mitigated Negative Declaration.

I hereby approve this Mitigated Negative Declaration:

_____ _____

Duane Shintaku Date
Deputy Director, Resource Management
CAL FIRE

[To be signed upon approval of the proposed Project after the public review period is complete]

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ACRONYMS AND ABBREVIATIONS

AADT	Annual Average Daily Traffic
AB	Assembly Bill
ADA	Americans with Disabilities Act
AFY	Acre-Feet Per Year
APCD	Air Pollution Control District
APN	Assessor Parcel Number
AST	Above Ground Storage Tank
ASTM	American Society of Testing Materials
BLM	U.S. Bureau of Land Management
BMPs	Best Management Practices
BRA	Biological Resources Assessment
CAA	Clean Air Act
CAL FIRE	State of California Department of Forestry and Fire Protection
Cal-EPA	California Environmental Protection Agency
Cal-OSHA	California Occupational Health and Safety Administration
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CH_4	Methane
CHP	California Highway Patrol
CNDDB	California Natural Diversity Database
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CRHR	California Register of Historic Places
CWA	Clean Water Act
DBH	Diameter Breast Height
DSA	Department of State Architect
DTSC	Department of Toxic substances Control
EPA	U.S. Environmental Protection Agency
EQ	Equalization
ESA	Environmental Site Assessment
FEM	Forestry Equipment Manger
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulation Commission
FESA	Federal Endangered Species Act
FFS	Forest Fire Station
FICON	Federal Interagency Committee on Noise
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gas
HCP	Habitat Conservation Plan
HEM	Heavy Equipment Mechanics

HFEO	Heavy Forestry Equipment Operators
IRA	Initial Response Area
IRA	Initial Response Area
IS/MND	Initial Study and Mitigated Negative Declaration
kW	Kilowatts
LEED	Leadership in Energy and Environmental Design
Leq	Average Value
Lmax	Maximum Value
LOS	Level of Service
LPG	Liquefied Petroleum Gas
LSAA	Lake or Streambed Alteration Agreements
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MLD	Most Likely Descendant
MMT	Million Metric Tons
MND	Mitigated Negative Declaration
Mpg	Miles Per Gallon
MT/yr	Metric Ton per Year
N_2O	Nitrous Oxide
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NFPA	National Fire Protection Association
NMFS	National Marine Fisheries Services
NOA	Naturally Occurring Asbestos
NO_x	Nitrous Oxide
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Services
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NWIC	Northwestern Information Center
OES	Office of Emergency Services
OPR	Office of Planning and Research
P	Public
ppd	Pounds Per Day
PS	Public Service
REC	Recognized Environmental Conditions
RM	Resource Management
ROG	Reactive Organic Gas
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SIPs	State Implementation Plans
SJVAB	San Joaquin Valley Air Basin
SO_2	Sulfur Dioxide
SR	State Route

SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TIM	Traffic Impact Mitigation
TWLT	Two Way Left Turn
UCB	Uniform Building Code
UCMP	University of California Museum Paleontology
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
UWPA	Utica Water and Power Authority
VEC	Vapor Encroachment Condition
VESM	Vapor Encroachment Screening Matrix
WTP	Water Treatment Plant
WWMP	Wastewater Master Plan
WWTP	Wastewater Treatment Plant

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SECTION 1. BACKGROUND

1.1 Summary

Project Title:	Altaville Forest Fire Station Auto Shop Replacement Project
Lead Agency Name and Address:	State of California Department of Forestry and Fire Protection Sacramento Headquarters 1416 9th Street PO Box 944246 Sacramento, California 94244
Contact Person and Phone Number:	Stephanie Coleman State of California Department of General Services RESD-PMDB-Environmental Services – MS 509 707 3rd Street, Fourth Floor P.O. Box 989052 West Sacramento, California 95605 (916) 376-1602
Project Location:	125 North Main Street Angels Camp, California 95221
General Plan Designation:	Public
Zoning:	Public Service (PS)

1.2 Introduction

The State of California Department of Forestry and Fire Protection (CAL FIRE) is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the proposed Altaville Forest Fire Station Auto Shop Replacement Project (Proposed Project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 *et seq.*) and State CEQA Guidelines (14 CCR 15000 *et seq.*). CEQA requires that all state and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before acting on those Projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

1.3 Surrounding Land Uses/Environmental Setting

The Proposed Project is located in Altaville, a formerly unincorporated community in Calaveras County now located in the northwest portion of the City of Angels Camp. (Figure 1. *Project Vicinity*). The Project site is located adjacent to State Route (SR) 49 on the northeast, approximately 2 miles northwest of the City of Angels Camp's city center, and approximately 10 miles south of the City of San Andreas. The Project site is located approximately 60 miles southeast of Sacramento and approximately 300 miles north of Los Angeles.

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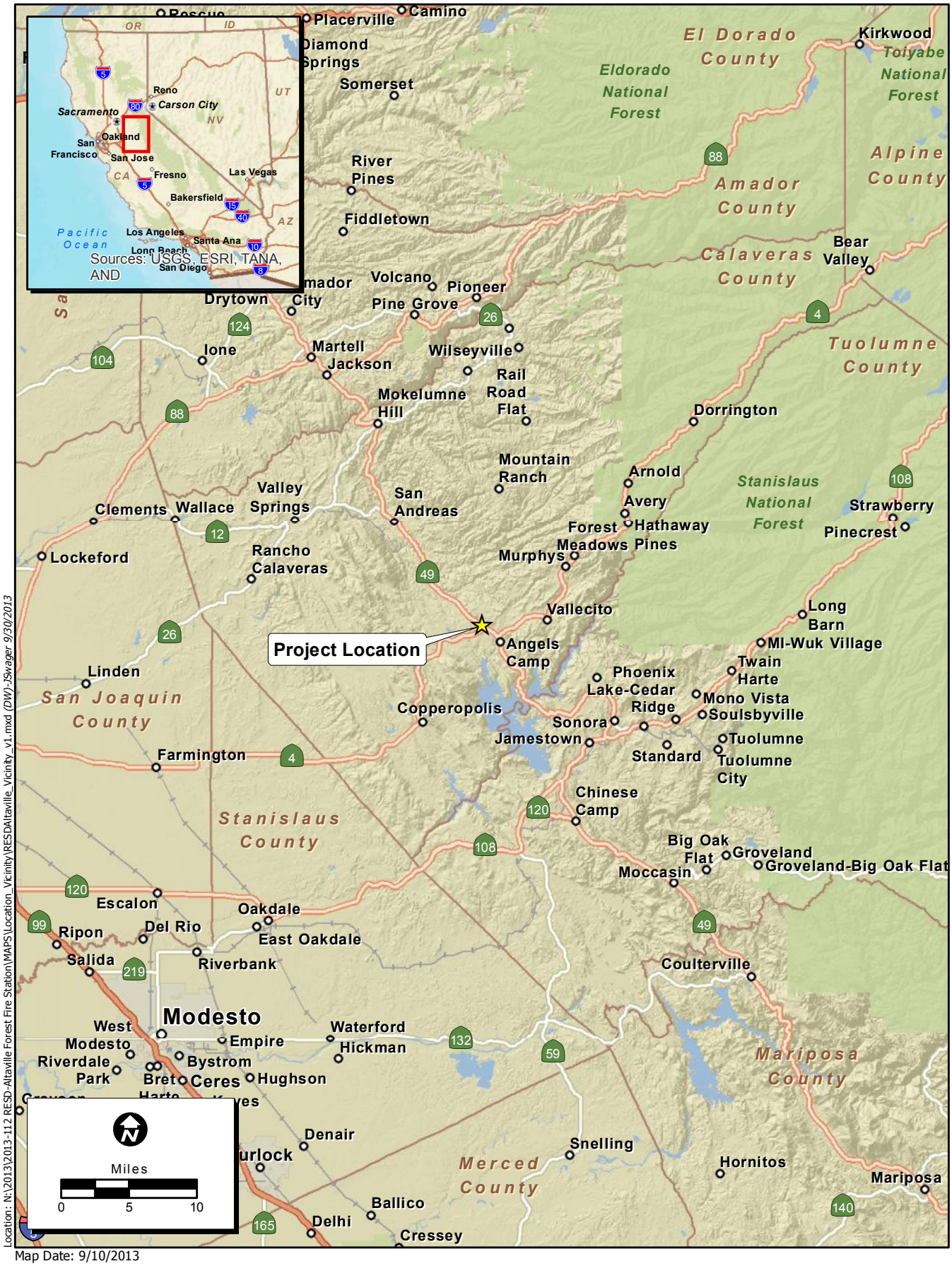

Location: N:\2013\2013-112 RESD-Altaville Forest Fire Station\MAPS\Location_Vicinity\RESDAltaville_Vicinity_v1.mxd (DW)-JSwager 9/30/2013

Map Date: 9/10/2013

Service Layer Credits: Sources: USGS, ESRI, TANA, AND

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Figure 1. Project Vicinity

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The Proposed Project would be located at the Altaville Forest Fire Station (FFS) at 125 North Main Street, designated as Assessor Parcel Number (APN) 058-013-011-000. The Altaville FFS consists of 5.95 acres bound by SR 49 on the northeast, Altaville Historical Schoolhouse and residences on the northwest, private undeveloped land on the south, and a commercial shopping center and SR 4 on the east and southeast (Figure 2. *Project Location*). The Altaville FFS property is surrounded primarily by mixed-use commercial and residential development and private undeveloped land consisting of oak woodland. Access to the Project site is provided by SR 49, also known as North Main Street, located on the northeastern boundary of the Altaville FFS property. The Project site is located on the southern half of the Altaville FFS property, oriented northeast to southwest and covering approximately 1.84 acres. The Altaville FFS facilities are located adjacent and northeast of the Project site (see Representative Site Photo 1). The Altaville FFS facilities include the following buildings and structures:

- Pump test facility and water tank
- Storage building with two 2,000 gallon fuel storage tanks
- Bulldozer facility
- Two-bay apparatus building
- Ten-bed barracks

The center of the Project site is characterized by a mixed dirt and gravel surface with a paved road circling the perimeter also shown in Representative Site Photo 1 below.

Representative Site Photo 1. Overview of Project site, view northeast, September 4, 2013.

The pump test pit is located within the paved perimeter on the northeast portion of the Project site and an outdoor storage space is located on the southwest portion of the Project site (Representative Site Photos 2 and 3).

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Map Date: 1/7/2014
Photo Source: Google Earth (2013)

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Figure 2. Project Location

2013-112 RESD-Altaville Forest Fire Station

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Representative Site Photo 2. Overview of Project site, existing pump test pit, view southwest, September 4, 2013.

Representative Site Photo 3. Outdoor storage located within the paved road perimeter of Project site, view west, September 4, 2013.

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The majority of the Project site is relatively flat with the exception of the western boundary, which drops sharply approximately 8 to 10 feet and then gradually flattens towards the western boundary of the property as shown in Representative Site Photos 4 and 5.

Representative Site Photo 4. Southwestern corner of Altaville FFS property, scattered mature oak and oak seedlings, view northeast, September 4, 2013.

Representative Site Photo 5. Edge of western facing slope, location of proposed vehicle wash rack, view west, September 4, 2013.

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The western boundary of the Project site is comprised of fallow grasses and scattered mature oak trees. As part of the mitigation for the Altaville Forest Fire Replacement Project (completed in 2012), oak seedlings were planted throughout the property. Although the majority of these seedlings failed, the seedlings were not removed and are contained within white plastic sleeves as shown in Representative Site Photo 4. Please note that since the field investigation conducted by ECORP on September 4, 2013, oak seedlings were replanted throughout the property as a second attempt to comply with the mitigation for the Altaville FFS Replacement Project and are not reflected in the Representative Site Photos below.

The Project site is bound by an outdoor storage area comprised of two storage sheds, one large storage container, and additional outdoor storage space on the southwest. Several mature oak and eucalyptus trees are scattered along the perimeter property fence behind the storage area to the southwest of the Project site (Representative Site Photos 6, 7, and 8).

Representative Site Photo 6. Outdoor storage space at southwestern boundary of Altaville FFS property, view southwest, September 4, 2013.

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Representative Site Photo 7. Two storage sheds, storage crate, and outdoor storage space located at southwestern boundary of Altaville FFS property; view southwest, September 4, 2013.

Representative Site Photo 8. Overview of Project site and storage building from southwestern boundary of Altaville FFS property, view northeast, September 4, 2013.

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Private undeveloped land characterized as open grassland and oak woodland bounds the Altaville FFS property on the southwest (Representative Site Photo 9). A large storage shed, a carport for fire engine storage, and two mature oak trees bound the Project site on the east and southeast (Representative Site Photos 10 and 11).

Representative Site Photo 9. Adjacent private undeveloped land, southwestern boundary of Altaville FFS property, view southwest, September 4, 2013.

Representative Site Photo 10. Overview of Project site and office/storage shed (To be retained); view southeast, September 4, 2013.

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Representative Site Photo 11. Carport with fire engine, view northeast, September 4, 2013.

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SECTION 2. PROJECT DESCRIPTION

2.1 Project Background

The California Department of Forestry and Fire Protection (CAL FIRE) acquired the land for the Altaville Forest Fire Station (FFS) in 1950. The Altaville FFS is located at the intersection of SR 4 and SR 49 in the City of Angels Camp, Calaveras County. The historic Altaville Schoolhouse was located on the land acquired by CAL FIRE in 1950. The Altaville Schoolhouse was built in 1858 and is listed on the National Register of Historic Places (ECORP 2013b). In 1983, the Altaville Schoolhouse was relocated and restored in order to accommodate plans for a new FFS for Altaville. CAL FIRE and the Calaveras Historical Society were responsible for the relocation and restoration of the Schoolhouse, which was completed by 1989 (ECORP 2013b).

The Altaville FFS facility provides fire response and emergency response services to its Initial Response Area (IRA), which includes the rural communities of Arnold, Sonora, Murphy's and San Andreas (Cal FIRE 2002). The original two engine FFS facility was built in the 1950s. In 2002, an Initial Study and Mitigated Negative Declaration (IS/MND) was prepared and adopted in early 2003 for the Altaville Forest Fire Station Replacement Facility Project. The original Altaville FFS was replaced in order to fix operational constraints, which included outdated buildings that were not compliant with Americans with Disabilities Act (ADA) standards. The Altaville FFS Replacement Project consisted of demolition of the existing FFS facilities and construction of a new one-engine facility with a ten-bed barrack, a two-bay apparatus building, a bulldozer facility, and a storage building with two new 2,000 gallon fuel storage tanks (CAL FIRE 2002).

The Project was amended once in 2008 to document two minor changes including the removal of 10 cypress trees in the front of the property to comply with the Project encroachment permit and the relocation of the facility access driveway to avoid removal of a 70-foot high, 36-inch valley oak tree. The relocation of the driveway resulted in removal of a less valuable 30-inch oak tree (CAL FIRE 2008). Subsequent to the initial addendum, the Project was amended again in 2011 to document two minor changes including the narrowing of the access driveway to avoid the removal of two 18-inch oak trees and the removal of two additional valley oak trees located at the corner of the barracks building (CAL FIRE 2011). The Altaville FFS Replacement Project, including the minor changes proposed in the 2008 and 2011 addendums, was completed in late summer 2012 (ECORP 2013b).

The San Andreas FFS and the Altaville FFS are seasonal fire stations in the Tuolumne-Calaveras Unit, part of CAL FIRE's Southern Region (CAL FIRE 2012). The Proposed Project would construct a new five-bay Auto Shop/Welding Shop at the Altaville FFS and continue to improve and maintain the existing facilities as part of the Proposed Project. In addition the auto shop located 10 miles north at the San Andreas FFS in the City of San Andreas in Calaveras County, California would be dismantled and retained for CAL FIRE storage. There would be no environmental impacts associated with the reuse of the San Andreas FFS auto shop building, and the reuse of the building is not discussed further in this Initial Study

2.2 Project Objectives

The following are the objectives for the Proposed Project:

- Provide a new five-bay Auto Shop/Welding Shop with vehicle wash rack and Generator / Flammable Storage building for the Altaville FFS to replace the existing facility at the San Andreas FFS; and

- Continue to improve and maintain high quality firefighting equipment, apparatus, and facilities for CAL FIRE's statewide fire protection system.

2.3 Project Characteristics

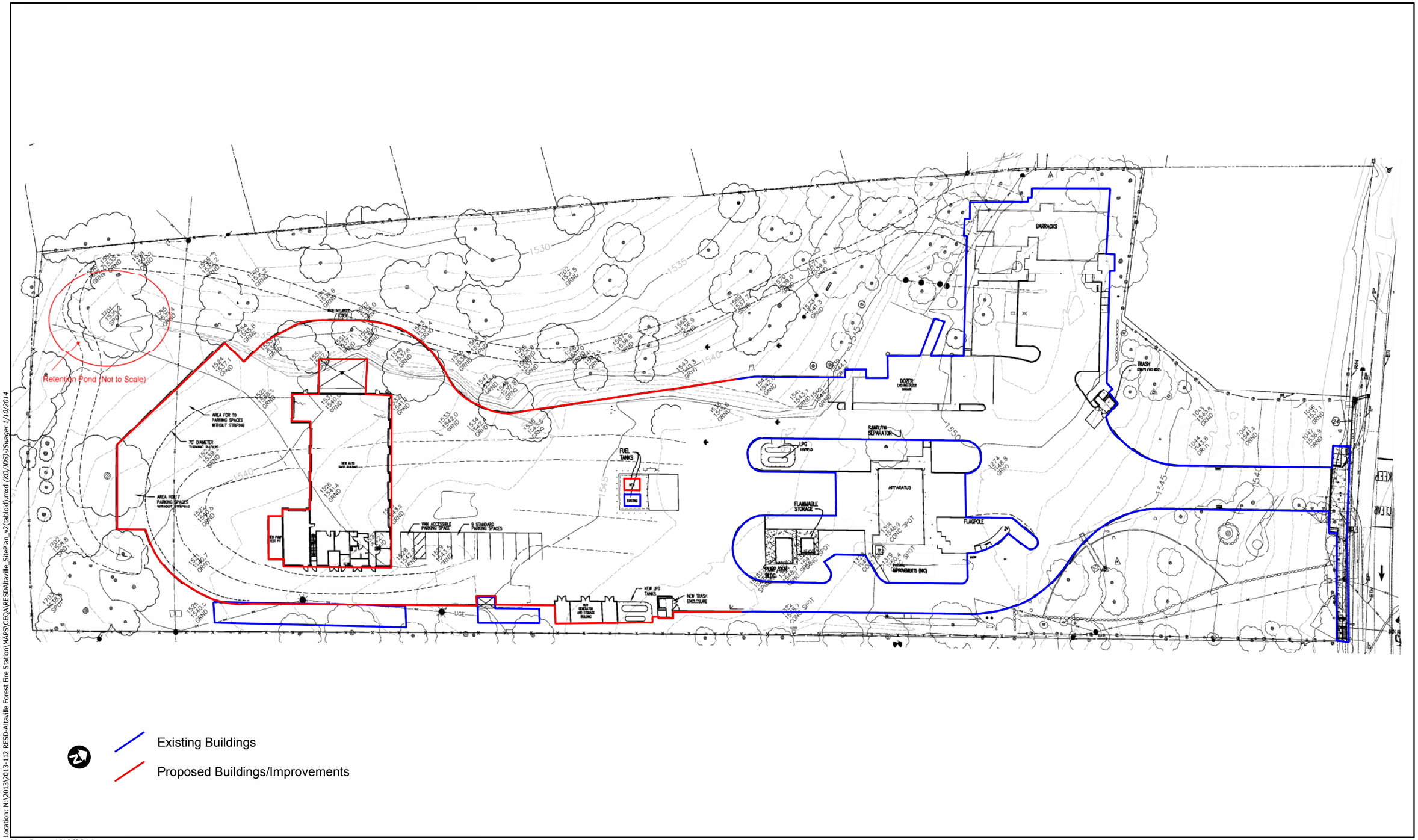
The Proposed Project consists of a new five-bay auto shop at the Altaville FFS to replace the existing facility at the San Andreas FFS. The Project site covers approximately 1.84 acres and is located within the 5.95 acres owned by CAL FIRE. The new auto shop facility would consist of new single-story buildings that would include an Auto Shop/Welding Shop with a vehicle wash bay and a Generator/Flammable Storage building. In general, the Proposed Project would consist of the following site improvements:

- Retaining walls
- Grading and paving
- Utilities extension and fiber optic utility extension
- Landscaping and irrigation
- Site exterior lighting
- 6-foot chain-link fence at the Project site boundary on the south, west, and east.
- Pump test pit
- Trash enclosure
- Retention pond

Figures 3 through 6 depict the proposed site plan, Auto Shop/Welding Building floor plan, Generator/Flammable Storage building floor plan, and exterior building elevations.

The proposed buildings would be located within the southern portion of the Altaville FFS property, adjacent to the existing FFS buildings. The Auto Shop/Welding Shop, including the vehicle wash rack, would be approximately 75 feet wide and 120 feet long and would be located directly southwest of the fuel tanks near the center of the property (Figure 3. Site Plan). The vehicle wash rack would be located on the northern edge of the Auto Shop/Welding shop. The wash rack would be approximately 4 feet from the building and be approximately 33 feet wide and 20 feet long. The wash bay waste disposal container would be located at the edge of the southwestern boundary of the Project site. Concrete pads would be installed along the perimeter of the building.

The facility would be built to comply with the 2013 California Green Code. The majority of the building's area would consist primarily of the five-bay Auto Shop (Figure 4. Auto Shop-Welding Shop Floor Plan). The southeastern facing portion of the building would include a tool storage room, a break room, bathrooms, a locker room, and offices. In order to address CAL FIRE's current programing needs, the floor plan may be reconfigured to include a Battery Room and inmate restroom. A change in the existing floor plan would be determined during the preliminary plan phase; however, the overall floor plan's square footage will remain the same. The Welding Shop would be located adjacent to the Auto Shop facing the southwestern corner of the Project site and would be approximately 19 feet wide and 41 feet long. A new pump test pit would be located adjacent to the Welding Shop.



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Map Date: 1/10/2014
Base Source: State of California - Department of General Services

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Figure 3. Site Plan

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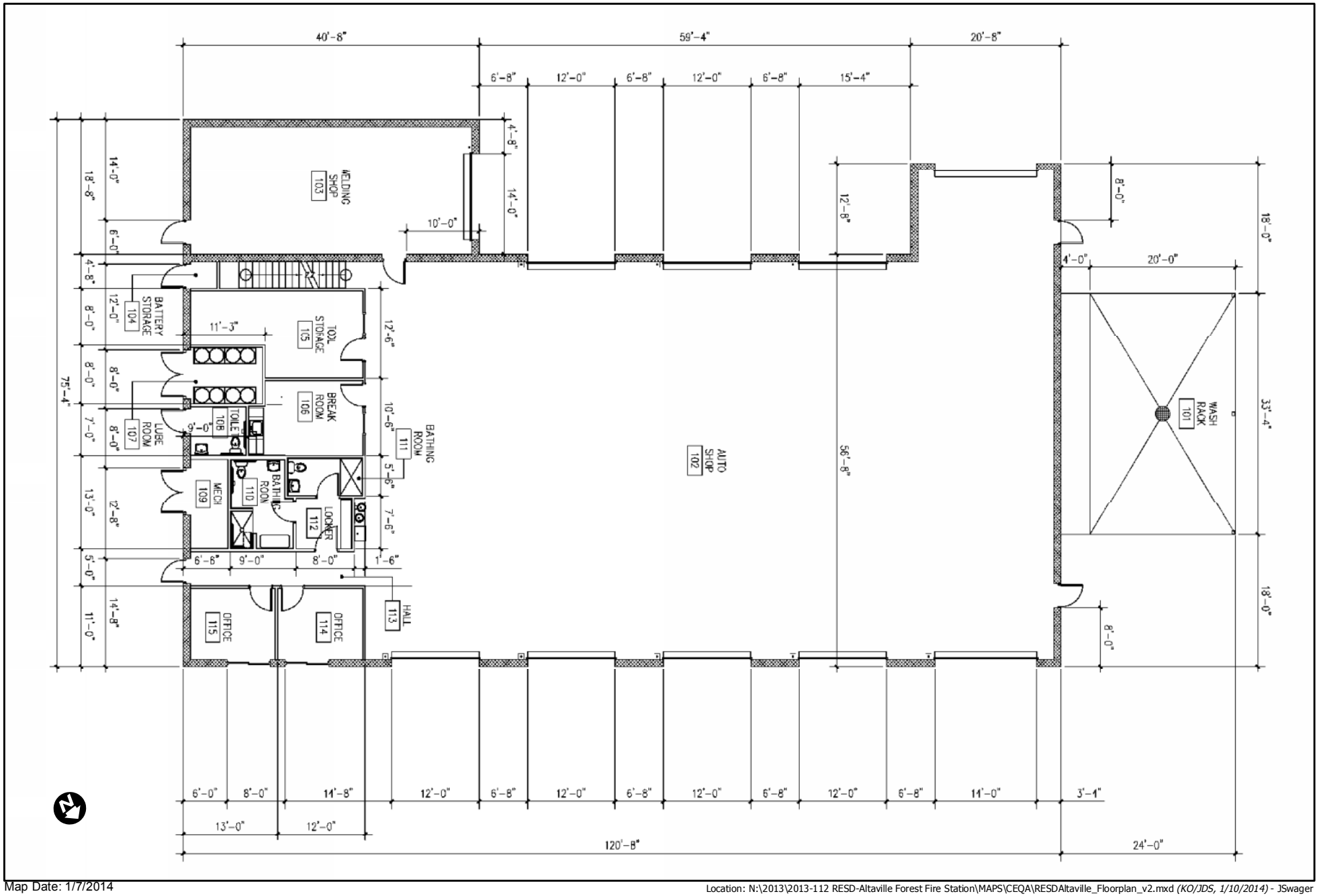

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Figure 4. Auto Shop-Welding Shop Floor Plans

2013-112 RESD Altaville Forest Fire Station

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It is possible that an elevator would be installed for access to a mezzanine storage space above the offices; however, this has yet to be determined. In order to eliminate the need for an elevator to access the mezzanine area that is required according to the State's interpretation of the new California Building Code 2013, the State may eliminate the mezzanine area and locate the equivalent area at ground level. The space will be designated as storage. Entrances and exits to the Auto Shop/Welding Shop would be provided on all four sides of the building (Figure 5. Auto Shop-Welding Shop Elevations).

The Generator/Flammable Storage building would be located along the southeastern property line near the center of the Altaville FFS property and would be approximately 16 feet wide and 44 feet long. The floor plan of the building would consist of the generator room, storage building, and a well/fire sprinkler pump room (Figure 6. Generator-Flammable Storage Building Floor Plan and Exterior Elevations). If the well/fire sprinkler pump room is not required, which will be determined during the preliminary plan phase, the space will be designated as a storage area. The new trash enclosure and new liquefied petroleum gas (LPG) tanks would be located adjacent to the Generator/Flammable Storage building along the southeastern property line. The two new fuel storage tanks will be installed adjacent to the existing fuel tanks which are located at the northeastern boundary of the Project site (see Figure 2. Project Location). An office/utility shed located along the southeastern property line would be retained as part of the Proposed Project.

The Proposed Project would require grading and paving throughout the Project site. A van-accessible parking space and nine standard parking spaces would be paved and striped, and would be located directly adjacent and northeast of the Auto Shop/Welding Shop. The perimeter of the Project site would be paved for vehicle access, consequently requiring the removal of several oak trees located along the western and southwestern boundary of the Project site and adjacent to the proposed vehicle wash rack. The Project site would be graded and paved around the Auto Shop/Welding Shop, with the exception of a landscaped area located on the south and southwestern boundary. A paved area for 17 parking spaces without striping and a turning radius space of approximately 70 feet in diameter would be located on the southwestern boundary of the Project site (Figure 3. Site Plan). Cut and fill would be required along the northwestern boundary to create a level building pad for the vehicle wash rack. A vehicle or partial airplane was reported buried within the Project site and may be required to be excavated prior to construction of the Proposed Project; however, this would be determined pending a soils report and geotechnical survey of the Project site.

Utilities

The electrical systems for the proposed buildings would consist of 600 amp electrical service. There would be 120/208 Three-Phase Four-Wire circuits located in the Generator/Flammable Storage building, with underground feeders to the Auto Shop/Welding Shop. A 100-kilowatt (kW) or less generator would be provided for the Auto Shop/Welding Shop and would be located in the Generator/Flammable Storage building.

The domestic water for the new buildings would be provided from the main Altaville FFS facility system and would be extended to the Auto Shop/Welding Shop and Generator/Flammable Storage building. The waste system for the Auto Shop/Welding Shop would require a lift station and tie into an existing 6-inch sewer line on the site. Waste water generated by the vehicle wash rack, located on the southwestern boundary of the Project site, includes a filtration system to filter water which would then be recycled for reuse. (see above discussion regarding Auto Shop/Welding Shop floor plan).

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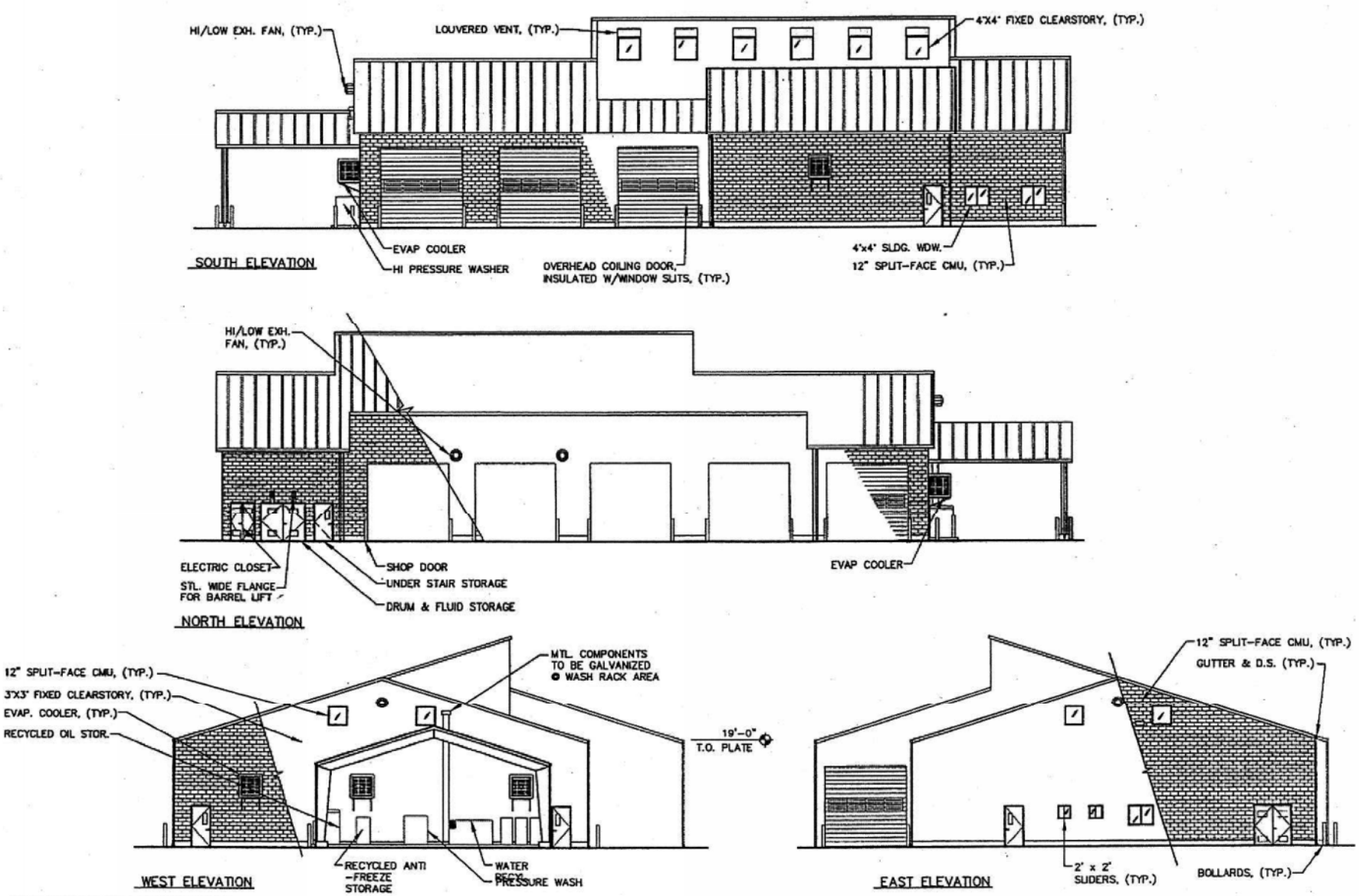

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Figure 5. Auto Shop-Welding Shop Exterior Elevations

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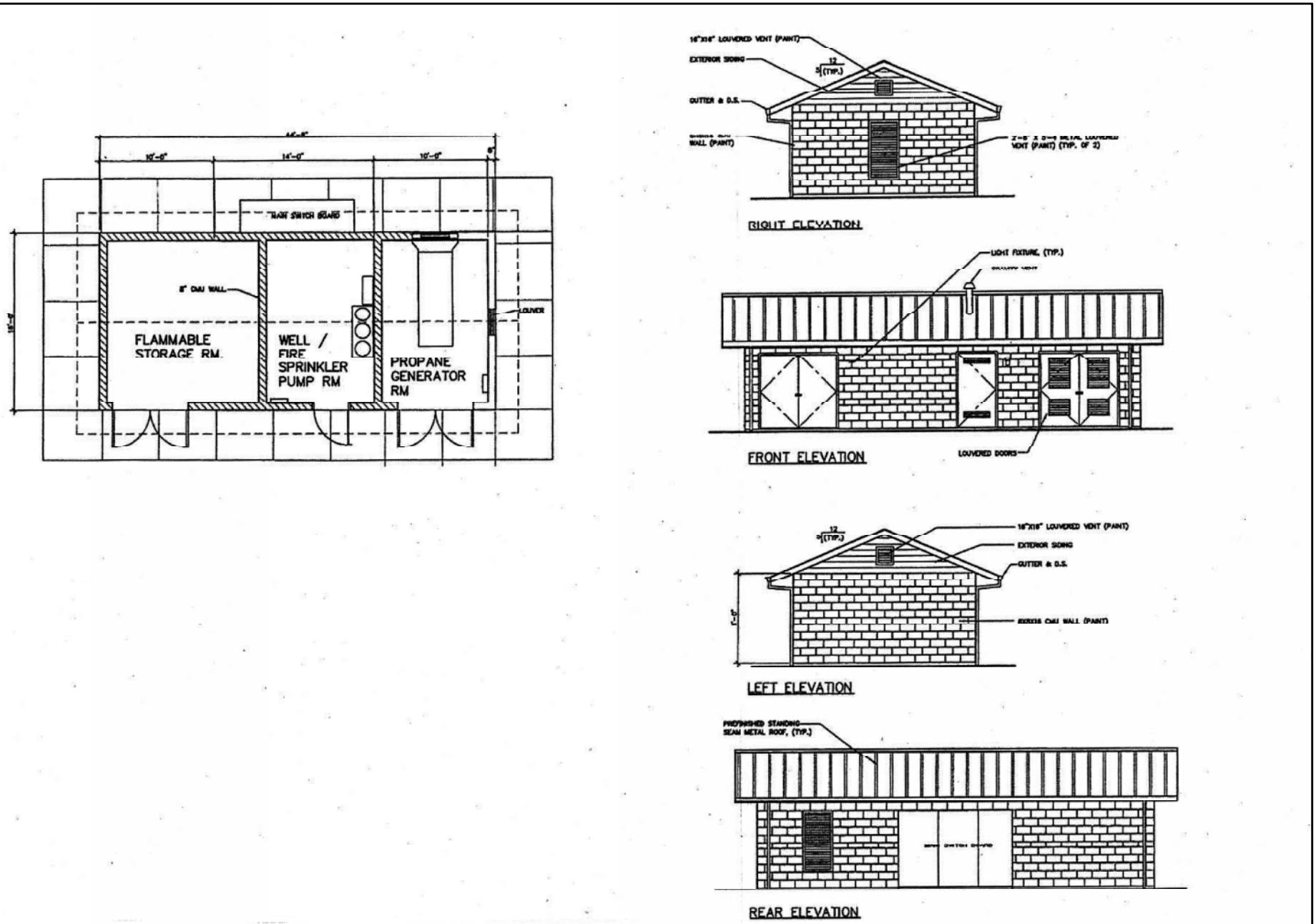

Map Date: 1/10/2014
Base Source: State of California - Department of General Services

Location: N:\2013\2013-112 RESD-Altaville Forest Fire Station\MAPS\CEQA\RESDAltaville_GeneratorElevations_v2.mxd *(KO/JDS, 1/10/2014)* - JSwager

Figure 6. Generator-Flammable Storage Building Floor Plan and Exterior Elevations

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2013-112 RESD Altaville Forest Fire Station

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Runoff from the Project site currently flows to the southwest boundary of the Project area. A retention pond would be located near the southwestern corner of the Project site and is currently estimated to be 50 feet long, 50 feet wide, and 10 feet deep. The actual volume will be determined during the preliminary plan phase (Figure 3. Site Plan). Propane gas service is already provided on-site. However, three new propane tanks would be added for this Project. One propane tank would service the Auto Shop/Welding Shop and two propane tanks would service each of the standby emergency generators. The air conditioning unit and cooling coils condensate drains for the Auto Shop/Welding Shop would be piped to the waste system or storm system. All the plumbing fixtures would be stainless steel and any plumbing systems exposed to freezing conditions would be provided with heat trace freeze protection.

Fire Protection

A hydraulically calculated full dry pipe automatic fire sprinkler system would be installed in all buildings and any overheads and combustible blind spaces. All the flow switches and tamper switches would be monitored by the fire alarm system. Any fire protection piping in locations exposed to freezing conditions would be provided with heat trace to prevent freezing. The fire line for the Auto Shop/Welding Shop would be connected to the existing main fire line, double check backflow valve and post indicator valve located on-site.

A diesel fire pump would be located in the Generator/Flammable Storage building and would be connected to the fire water system serving the site. A diesel day tank would be provided for the fire pump and would be connected to the main fuel tank. The interconnecting fuel piping would be double-contained and monitored where it is routed underground.

2.4 Project Construction and Project Timing

Construction is estimated to begin in February 2016 and last approximately 14 months with an anticipated completion date of April 2017. Construction equipment would include the following:

Site Preparation/Grading Phase:

- (1) Excavators
- (2) Back hoes
- (2) Riding compactors
- (2) Hand held portable compactors
- (1) Grader
- (1) Dump truck
- (1) Water truck

Construction of Structures Phase:

- (2) 15-foot lifts
- (1) 20-ton crane
- (1) Fork lift
- (1) Water truck

2.5 Operations and Maintenance

Day-to-day operations would include an average of eight employees on-site:

- One Forestry Equipment Manager (FEM)
- Three Heavy Equipment Mechanics (HEM)
- Two Heavy Forestry Equipment Operators (HFEO)
- Two Inmate Mechanics

The facility would operate Sunday through Saturday between the hours of 8AM to 5PM. During the off-season (winter months), approximately five to 10 vehicles would be serviced weekly. During peak fire season, one to two vehicles would be serviced daily. In the case of an emergency, the facility would operate 24 hours per day and the number of employees would increase to as many as 20 on the site. On average, there is one emergency situation per year that would require continuous operation of the auto shop facility for 24 hours a day for the duration of approximately one week.

2.6 Regulatory Requirements, Permits, and Approvals

The following approvals and regulatory permits would be required for implementation of the Proposed Project:

- National Pollutant Discharge Elimination System Permit (NPDES)
- Storm Water Pollution Prevention Plan (SWPPP)
- Compliance with California Department of Fish and Wildlife (CDFW) Region 2 *Oak Protection Guidelines*.
- Authority to Construct Permit – issued by Calaveras County Air Pollution Control District (APCD)
- Air permit (for the generator) – issued by Calaveras County APCD
- State Architect Approval for Americans with Disabilities Act (ADA) and structural review by the Department of the State Architect (DSA)
- State Fire Marshal Review Approval

SECTION 3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

Environmental Factors Potentially Affected:

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

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

Determination

On the basis of this initial evaluation:

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

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

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

I find that the Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

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

Duane Shintaku
Deputy Director, Resource Management
CAL FIRE

8/1/14
Date

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SECTION 4. ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

Regional Setting

The Proposed Project is located in the City of Angels Camp in the southeastern portion of Calaveras County, California. Calaveras County is located within the foothills west of the Sierra Nevada Mountain Range, between Sacramento and Yosemite on SR 49. Its proximity to the Sierra Nevada Mountains creates a diverse rural landscape comprised of conifer forest, oak woodland, and oak savanna featuring scenic volcanic slopes, ridges, peaks, and numerous creeks, rivers, and lakes (Calaveras County 2012). Approximately 12 percent of the Calaveras County landscape is comprised of National Forests and approximately 5 percent is managed by the U.S. Bureau of Land Management (BLM), which include portions of well-known recreation areas such as Stanislaus National Forest, Calaveras Big Trees State Park, and the Mokelumne Coast to Crest Trail. In addition, historic mining and ranching have sculpted the rural landscape creating a distinct visual character, including barns, corrals, fences, gates, and rock walls. Dredging and blasting from historical mining operations during the California Gold Rush have dramatically transformed the landscape. Mining ditches built for water conveyance and piles of rock debris left over from mining activities can be found throughout the County (Calaveras County 2012).

<u>Scenic Highways</u>

The Ebbetts Pass National Scenic Byway, the longest and one of the most scenic routes over the Sierra Nevada Mountains, is located within Calaveras and Alpine Counties. Twenty-four miles of the 58-mile stretch of SR 4 and 89 extend between Arnold and Markleeville, California. There are no officially designated scenic highways in proximity to the Project site; however, the 20-mile segment of SR 4 that passes through the City of Angels Camp en route to Arnold and the 21.4-mile segment of SR 49, adjacent to the Altaville FFS on the east, are eligible for designation as Scenic Highways (DOT 2013).

In addition, the California Public Resources Code (Sections 5070-5077.8), the California Recreational Trails Act, designates SR 49 as a heritage corridor because of its identifiable function as an interpretive highway of the Gold Rush. A heritage corridor means:

> *"a regional, state, or nationwide alignment of historical, natural, or conservation education significance, with roads, state and other parks, greenways, or parallel recreational trails, intended to have guidebooks, signs, and other features to enable self-guiding tourism, and environmental conservation education along most of its length and of all or some of the facilities open to the public along its length, with an emphasis on facilities whose physical and interpretive accessibility meet 'whole-access' goals."*

This corridor is officially known as the Golden Chain Highway, linking Sierra, Nevada, Placer, El Dorado, Amador, Calaveras, Tuolumne, Mariposa, and Madera counties (City of Angels Camp 2008).

Visual Setting

The Proposed Project is located at the Altaville FFS in the northwestern portion of the City of Angels Camp, approximately 2 miles northwest of the City of Angels Camp's city center, and approximately 10 miles south of the City of San Andreas. The Altaville FFS is located adjacent to SR 49 on the northeast, the Altaville Historical Schoolhouse and residences on the northwest, private undeveloped land consisting of oak woodland and oak savanna on the south, and a commercial shopping center and SR 4 on the east and southeast. The landscape of the City of Angels Camp is characterized by rolling topography and oak woodland, and oak savanna. Riparian communities are found within drainages, ditches, and creeks such as Cherokee Creek, Six Mile Creek, and Utica Ditch. The *Angels Camp 2020 General Plan, Conservation & Open Space* element requires that the goals, policies, and implementation programs conserve the City of Angels Camp's natural and cultural scenic resources including, but not limited to, heritage trees, hillsides, hilltops, scenic corridors, creeks, cultural resources, and recreational resources (City of Angels Camp 2009).

Visual Character of the Project Site

The Project site is located on the southern half of the Altaville FFS property, oriented northeast to southwest and covering approximately 1.84 acres. The center of the Project site is characterized by a mixed dirt and gravel surface with a paved road circling the perimeter (see Representative Site Photo 1.) The majority of the Project site is relatively flat and used by CAL FIRE for storage, with the exception of the western area, which drops sharply approximately 8 to 10 feet, then gradually flattens towards the western boundary of the property. The western boundary of the Project site is comprised of fallow grasses and scattered mature oak trees. (see Representative Site Photos 4 and 5). See Section 1.3 Surrounding Land Uses/Environmental Setting for a more detailed description of the visual character of the Project site.

Aesthetics (I.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

Land uses surrounding the Project site include SR 49 on the northeast, Altaville Historical Schoolhouse and residences on the northwest, private undeveloped land on the south, and a commercial shopping center and SR 4 on the east and southeast (Figure 2. *Project Location*). The Project site is located adjacent to the Altaville FFS main facilities on the northeast and is screened from SR 49 by intervening structures, topography and vegetation. The Proposed Project would be built in support of the Altaville FFS and would be consistent with *Angels Camp 2020 General Plan* land use designation Public (P). Several residences are located adjacent to the western boundary of the Altaville FFS and have a direct line of sight to the Project area; however, the Project site is currently used for outdoor storage. Implementation of the Proposed Project would improve the visual quality of the Project site by removing debris and establishing a landscaped area along the southern and southwestern boundaries of the Project site. The proposed improvements are visually consistent with the existing Altaville FFS main facilities and would not substantially alter the visual character of the site.

The Proposed Project does not have a substantial adverse effect on a scenic vista. A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

As previously mentioned in Section 4.1.1 Environmental Setting, the Altaville FFS property is located adjacent to SR 49 which is eligible for designation as a state scenic highway and is currently designated as a heritage corridor. However, as previously described in item a), the Proposed Project is located on the southern half of the Altaville FFS property, southwest of the main Altaville FFS facilities and is screened from SR 49 by intervening structures, topography and vegetation. Therefore, the Proposed Project would not substantially damage scenic resources within a state scenic highway. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐

The Proposed Project has the potential to remove and or adversely affect three blue oak trees located along the western boundary of the Project site to allow construction of the proposed vehicle wash rack (see Figure 3. Site Plan). As described in 1.3 Surrounding Land Uses/Environmental Setting, the western boundary of the Project site is comprised of oak woodland and a grassy understory that is regularly disced for fire prevention. The removal of these three blue oak trees would not change the overall visual character of the Altaville FFS property and its immediate surroundings (see Biological Resources (IV.) Environmental Checklist and Discussion item a) for Mitigation Measure B-1). As described above in item a), the Proposed Project would be built in support of the Altaville FFS. The proposed improvements are visually consistent with the existing Altaville FFS main facilities and would not substantially alter the visual character of the site. A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

The Proposed Project is a vehicle repair and maintenance facility that would include exterior and interior lighting. As previously mentioned in 2.3 Project Characteristics, the auto shop would operate between the hours of 8:00 AM to 5:00 PM, except during emergencies, which could require the auto shop to operate 24 hours per day. It is expected that exterior lighting would operate 24 hours per day. The Project site is located adjacent to the main Altaville FFS facilities and would not contribute to a substantial change in current conditions; however, lighting associated with the Proposed Project could change the nighttime views of the Project site. In order to minimize light spillage onto the adjacent residential properties, a lighting plan shall be developed describing specific measures

regarding light shielding. Implementation of Mitigation Measure AES-1 would reduce potentially adverse impacts to a less than significant level.

Mitigation Measure

AES-1 Lighting Plan

Prior to construction, a lighting plan for the Project site specifying the location and type of exterior light sources shall be prepared and submitted to CAL FIRE and DGS for approval. All exterior lighting shall be shielded, directed downward, and have sharp cutoff qualities at property lines, in order to minimize light and glare spillover effects that would affect adjacent residences located on the northwestern boundary of the Altaville FFS property.

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

The Project site is designated Public by the *City of Angels Camp 2020 General Plan* (City of Angels Camp 2009) and zoned Public Service under Angels Camp Municipal Code Title 17: Zoning (City of Angels Camp 2012). The Project site is located at the Altaville FFS, which is owned by the State of California and managed by CAL FIRE. The center of the Project site is characterized by a mixed dirt and gravel surface with a paved road circling the perimeter. The western boundary of the Project site is comprised of fallow grasses and scattered mature oak trees. The east and southeast portions of the Project site are bound by an outdoor storage area comprised of two storage sheds, and one large storage container. An additional outdoor storage space exists on the southwest (see Section 1.3 Surrounding Land Uses/Environmental Setting for Representative Site Photos 1. through 11.).

The Altaville FFS property is surrounded primarily by mixed-use commercial and residential development and private undeveloped land consisting of oak woodland. As previously described in Section 2.1 Project Background, CAL FIRE acquired the land for the Altaville FFS in 1950 and continues to maintain the property as a public facility. The Project site has not been used for agriculture or developed for forestry resources for more than 50 years.

Agriculture and Forestry Resources (II.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project 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?	☐	☐	☒	☐

Calaveras County has not been surveyed by the California Farmland Mapping and Monitoring Program (FMMP), and therefore there are no current data to determine whether or not the Proposed Project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. However, as described previously in Section 4.2.1 Environmental Setting, the Project site is designated Public and is zoned as Public Service (PS). The property has been used as the Altaville

FFS for more than 50 years and the Proposed Project would be built in support of the current use. The Proposed Project would be compliant with the existing land use designation and zoning. A less than significant impact would occur.

b) Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	☐	☐	☐	☒

The Proposed Project is not located within an agricultural use zone. As previously described in Section 4.2.1 Environmental Setting, the Project site is designated as Public and is zoned as Public Service (PS) (City of Angels Camp 2009; City of Angels Camp 2012). The Proposed Project is not under a Williamson Act contract (City of Angels Camp 2009). Therefore, the project would not result in a conflict with an agricultural zoning designation or a Williamson Act contract. No impact would occur.

c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	☐	☐	☐	☒

The Project site is partially developed and is maintained for outdoor storage space for the Altaville FFS. The Project site is designated Public and zoned Public Service (PS) (City of Angels Camp 2009). Several mature oak trees are scattered along the west and southwestern boundary of the Project site. Three trees would be removed to install the vehicle wash rack and potentially an additional three trees located on the southwestern boundary may be removed to create a retention pond (see Figure 3. Site Plan). Although trees would be removed, the Project Site is not zoned for forest land, timberland, or timberland production (City of Angels Camp 2009). As previously described in 4.2.1 Environmental Setting, the Altaville FFS property is surrounded primarily by mixed-use commercial and residential development and private undeveloped land consisting of oak woodland. No impact would occur.

d) Would the Project result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	☐	☐	☐	☒

The Proposed Project is located in a previously disturbed undeveloped area and would not convert forest land to non-forest use. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Would the Project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

The Project site is currently used for outdoor storage space to serve the existing Altaville FFS. The Proposed Project consists of a new five-bay auto shop at the Altaville FFS to replace the existing facility at the San Andreas FFS. The new auto shop facility would consist of new single-story buildings that would include an Auto Shop/Welding Shop with a vehicle wash bay and a Generator/Flammable Storage building. The addition of these new facilities would be consistent with the property's Public Service (PS) zoning designation (City of Angels Camp 2009). There are no agricultural or forest resources on-site. As previously described in Section 4.2.1 Environmental Setting, the property has been used as a public facility since its purchase by CAL FIRE in 1950. Therefore, the Proposed Project would not result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

4.3 Air Quality

4.3.1 Environmental Setting

An air quality study was conducted by KD Anderson & Associates to evaluate construction-related and operational impacts of the Proposed Project on air quality. An Air Quality Study (KD Anderson & Associates 2014a; Appendix A) was prepared and is summarized below.

Regional Climate and Meteorology

Air pollution, especially the dispersion of air pollutants, is directly related to a region's topographic features.

The Project site is located in Calaveras County, which lies within the central portion of the Mountain Counties Air Basin (MCAB). This basin also includes Plumas, Sierra, Nevada, Amador, Tuolumne, and Mariposa counties, as well as a portion of Placer and El Dorado counties. The climate of the MCAB is influenced by the foothill and mountainous terrain in the MCAB. Calaveras County ranges from gently rolling slopes in the west to rugged mountain terrain in the east; elevations range from 100 to 8,000 feet. Calaveras County is bordered by the San Joaquin Valley Air Basin (SJVAB) to the west, and the Great Basin Valleys Air Basin to the east (KD Anderson 2014a).

The general climate of the MCAB varies considerably with elevation and proximity to mountains. The climate of Calaveras County is characterized by hot, dry summers and cool, moist winters. Air quality in the Project area is influenced mostly by pollutant transport from upwind areas, such as the San Joaquin Valley, but also by local emission sources, such as wood burning stoves and fireplaces during the winter months, and vehicles using area roadways such as SR 4, SR 12, and SR 49 (KD Anderson 2014a).

The terrain features of the MCAB make it possible for various climates to exist within the general area. The pattern of mountains and hills of lower elevation is primarily responsible for the wide variations of rainfall, temperatures, and localized winds that occur throughout the region.

Temperature variations have an important influence on wind flow, dispersion along mountain ridges, vertical mixing, and photochemistry (KD Anderson 2014a)

The portion of the MCAB encompassing the Sierra Nevada range receives large amounts of precipitation from storms moving over the continent from the Pacific Ocean. Precipitation in the MCAB is highly variable, depending on elevation and location. Areas in the eastern portion of the MCAB, with relatively high elevations, receive the most precipitation. Precipitation levels decline toward the western areas of the MCAB. Climates vary from alpine in the high elevations of the eastern areas to more arid at the western edge of the basin (KD Anderson 2014a).

Attainment Status and Regional Air Quality Plans

There are three basic designation categories: nonattainment, attainment, and unclassified. A "nonattainment" designation indicates that the air quality violates an ambient air quality standard. Although a number of areas may be designated as nonattainment for a particular pollutant, the severity of the problem can vary greatly. To identify the severity of the problem and the extent of planning required, nonattainment areas are assigned a classification that is commensurate with the severity of their air quality problem (e.g., moderate, serious, severe). In contrast to nonattainment, an "attainment" designation indicates that the air quality does not violate the established standard. Finally, an "unclassified" designation indicates that there are insufficient data for determining attainment or nonattainment. EPA combines unclassified and attainment into one designation for ozone, CO, PM_{10} and $PM_{2.5}$.

The Proposed Project is located within the MCAB. The current air quality attainment designations for Calaveras County are summarized in Table 1. below.

Table 1. Air Quality Attainment Status Designations for Calaveras County

Pollutant	State Standards	National Standards
Ozone	Nonattainment	Nonattainment
Carbon Monoxide	Unclassified	Unclassifiable/Attainment
Nitrogen Dioxide	Attainment	Unclassifiable/Attainment
Sulfur Dioxide	Attainment	Unclassifiable
Inhalable Particulate Matter (PM_{10})	Nonattainment	Unclassifiable
Fine Particulate Matter ($PM_{2.5}$)	Unclassified	Unclassifiable/Attainment
Sulfates	Attainment	N/A
Lead	Attainment	Unclassifiable/Attainment
Hydrogen Sulfide	Unclassified	N/A
Visibility Reducing Particles	Unclassified	N/A

Notes: N/A – not applicable, standard does not exist for the pollutant
Source: (KD Anderson 2014a)

Significance Thresholds

Significance thresholds applied to both construction-related and operational emissions are based on approaches described in the *Angels Camp 2020 General Plan Policy 9.A.q* of the General Plan is to "establish a list of Project thresholds with the potential to generate a significant adverse impact pursuant to CEQA" (KD Anderson 2014a). The policy refers to sample thresholds presented in Appendix 9A of the General Plan. Table 2 shows the threshold amounts for ROG, NO_x, PM_{10}, and CO emissions. Project-related emissions exceeding the values shown in Table 2 will be considered a significant impact; values equal to or less than those shown in Table 2 will be considered a less than significant impact.

Table 2. Air Quality Significance Thresholds for Criteria Pollutants

Type of Pollutant Emissions	Amount of Pollutant Emissions in Pounds per Day
Ozone Precursors (the sum of Reactive Organic Gases [ROG] and Nitrogen Oxides [NO_x])	274
Inhalable Particulate Matter (PM_{10})	383
Carbon Monoxide (CO)	550

Source: (KD Anderson 2014a)

The amount of Project-related criteria pollutant emissions was calculated using the CalEEMod emissions model. CalEEMod is a land use emissions computer model designed to provide a platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use Projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use (KD Anderson 2014a).

Asbestos

Naturally occurring asbestos (NOA) has been identified as a toxic air contaminant (TAC) by the ARB. No quantitative significance thresholds have been set for NOA. However, the California Department of Conservation provides a map that may be used as a screening-level indicator of the likelihood of NOA being present on the Project site. The map, *A General Location Guide For Ultramafic Rocks In California - Areas More Likely To Contain Naturally Occurring Asbestos* is available at the Department website (http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Pages/index.aspx) (KD Anderson 2014a).

According to the site-specific geotechnical survey conducted in January 2014 (GEOCON 2014), the predominant rock type present at the site is metamorphosed mafic volcanic rock, which is one of the rock types in which NOA may occur. Soil samples collected from the site were not reported to contain NOA at or greater than the laboratory reporting limit of 0.25 percent.

Regulatory Framework

Air quality management responsibilities exist at local, state, and federal levels of government. Air quality management planning programs developed during the past few decades have generally been in response to requirements established by the federal Clean Air Act (CAA). However, the enactment of the California Clean Air Act of 1988 (CCAA) has produced additional changes in the structure and administration of air quality management programs in California.

Federal Clean Air Act

The 1970 amendments to the federal CAA established a joint state and federal program to control air pollution. Pursuant to Sections 109 and 110 of the amendments, the EPA established federal air quality standards. The amendments also required that states submit state implementation plans (SIPs) providing for attainment of the federal standards within certain periods of time. The SIP for California is, to a large degree, a compilation of regional air quality plans. Because many of the original SIPs failed to bring about attainment, the CAA was amended in 1977. The federal CAA amendments of 1977 required all states to attain the federal standards

by December 31, 1987. These amendments required states to submit plans that demonstrated attainment of the applicable standards by the statutory deadline.

Again, certain areas of the nation failed to meet the December 1987 deadline. In 1990, new federal CAA amendments were signed into law. Depending on the severity of an area's air pollution problem, the new amendments provided from 5 to 20 years for areas to attain the federal standards. The amendments also set new planning requirements for federal non-attainment areas.

California Clean Air Act

The CCAA substantially added to the authority and responsibilities of the state's air pollution control districts. The CCAA establishes an air quality management process that generally parallels the federal process. The CCAA, however, focuses on attainment of the state ambient air quality standards that for certain pollutants and averaging periods are more stringent than the comparable federal standards.

The CCAA requires that air districts prepare an air quality attainment plan if the district violates state air quality standards for CO, sulfur dioxide (SO_2), NO_x, or ozone. No locally prepared attainment plans are required for areas that violate the state PM_{10} standards. The CCAA requires that the state air quality standards be met as expeditiously as practicable, but it does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards. The least stringent requirements are set for areas expected to achieve air quality standards by the end of 1994. The most stringent requirements are set for areas that cannot achieve the standards until after 1997.

The air quality attainment plan requirements established by the CCAA are based on the severity of air pollution problems caused by locally generated emissions. Upwind air pollution control districts are required to establish and implement emission control programs commensurate with the extent of pollutant transport to downwind districts.

Local Air Quality Management

Local air quality agencies have the primary responsibility to control air pollution from all sources other than those directly emitted from motor vehicles, which are the responsibility of CARB and the EPA. These agencies adopt and enforce rules and regulations to achieve state and federal ambient air quality standards and enforce applicable state and federal law.

The following description of the local air quality agency in Calaveras County is from Calaveras County Air Pollution Control District 2014.

The Calaveras County Air Pollution Control District (APCD) is recognized as a Special District and is governed by the Calaveras County Air Pollution Control Board. The primary goal of the Calaveras County APCD is to protect public health by managing the county's air quality through educating the public and enforcement of Calaveras County APCD rules and CARB - Air Toxic Control Measures that result in the reduction of air pollutants and contaminants. While there are minimal sources that impact air quality within the district, Calaveras County does experience air quality impacts from the Central Valley through transport pollutants. The most visible impacts to air quality within the district is a result of open burning of vegetation as conducted by individual property owners, industry, and state agencies for purposes of reducing wild land fire hazards.

The Calaveras County APCD permits and inspects stationary sources of air pollution. These sources include, but are not limited to gasoline dispensing facilities (gas stations), rock quarries, paint spray booths and diesel generators greater than 50 brake horsepower. The Calaveras County APCD also disseminates burn day information given by the CARB, and issues burn permits for parcels greater than 5 acres.

Air Quality (III.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

The Proposed Project consists of a new five-bay auto shop at the Altaville FFS to replace the existing facility at the San Andreas FFS.

In general, implementation of an air quality plan is based on:

- demographic forecasts and planned land use development,
- planned transportation system improvements or control measures, and
- development and control of stationary sources of air pollutant emissions.

As previously described in Section 4.3.1. Environmental Setting, Calaveras County APCD does not have adopted or recommend significance thresholds for criteria pollutants, and therefore, thresholds used to determine the significance of impacts are from the *Angels Camp 2020 General Plan* (KD Anderson 2014).

Short Term Construction-Related Impacts

As noted above, the Proposed Project would replace the existing facility at the San Andreas FFS. The Proposed Project would generate short-term construction-related employment that would last approximately 14 months. The Proposed Project's construction workforce demand would be fulfilled by the local labor pool and would not result in any changes in population levels. As a result, the Proposed Project would not result in any changes to demographic forecasts or planned land use development.

The Proposed Project would generate short-term construction-related vehicle trips for the 14-month construction period.

The Proposed Project would generate short-term construction activities, which would generate air pollutant emissions. Construction activities such as grading, excavation and travel on unpaved surfaces would generate dust, and can lead to elevated concentrations of particulate matter emissions PM_{10}. The operation of construction equipment results in exhaust emissions, which include ozone precursors ROG and NO_x. Paving and the application of architectural coatings (e.g., paint) results in ROG emissions. The resulting construction-related emissions are shown in Table 3. below. Because the amount of Project-related criteria pollutant emissions listed below would all be below the significance thresholds, the Altaville FFS Project is considered to have a less than significant impact on short-term construction-related air quality, and would not impede the implementation of any control measures. No mitigation measures are required.

Table 3. Construction-Related Criteria Pollutant Emissions

Pollutant	Project-Related Emissions	Project-Level Significance Thresholds	Significant Impact?
Reactive Organic Gases (ROG)	117.40		
Nitrogen Oxides (NO_X)	68.46		
Total for Ozone Precursors	185.86	274	NO
Inhalable Particulate Matter (PM_{10})	13.52	383	NO
Carbon Monoxide (CO)	58.46	550	NO

Notes: All values are expressed in pounds per day. Values shown are the maximum of all construction phases. Values shown are the maximum of summer and winter values.
Source: (KD Anderson 2014a)

Long-Term Operational Impacts

As previously stated above, the Proposed Project would be replacing the existing San Andreas FFS with a new facility at the Altaville FFS. Long-term operations and maintenance-related vehicle trips may add eight to ten trips through the SR 49 access during typical commute hours; however, this represents roughly a 1 percent increase from the current volume on SR 49 in this area. The Proposed Project would result in a minor increase in vehicle traffic; however, the Proposed Project would not impede any current transportation improvements or control measures (see Section Transportation/Traffic (XVI.) Environmental Checklist and Discussion for further details).

The Proposed Project would result in the relocation of the existing FFS Auto Shop from the San Andreas area to the Altaville area. This would result in relocation of emissions associated with operation of the facility. However, the Proposed Project would not change the amount of operational emissions – the generation of emissions would geographically shift between areas within Calaveras County. Because the Proposed Project would not change the amount of operational emissions generated by the FFS Auto Shop, operational emissions have not been quantified for this IS/MND.

Because the Altaville Forest Fire Station Auto Shop Relocation Project would not result in a net increase of long-term operational emissions, the impact of the Proposed Project on long-term operational emissions is considered to be less than significant. No mitigation measures are required.

For the reasons described above, the Project would not conflict with or obstruct implementation of the applicable air quality plan. A less than significant impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the Project violate any air quality standard or contribute substantially to an existing or Projected air quality violation?	☐	☐	☒	☐

The Proposed Project's air quality impacts are mainly attributable to construction-related activities. Emissions of pollutants such as fugitive dust and heavy equipment exhaust generated during construction are generally highest near the construction site. Emissions associated with construction would include the following: emissions of fugitive dust from surface disturbance activities, emissions of combustion pollutants from heavy construction equipment, emissions of combustion pollutants from worker vehicles, and emissions of combustion pollutants from heavy-duty vehicles transporting construction materials and equipment to the site (KD Anderson 2014a).

As previously described in Section 2.4 Project Construction and Project Timing, construction is anticipated to require 14 months. Various types of construction equipment would be required during Project construction and include the following:

Site Preparation/Grading Phase:

- (1) Excavators
- (2) Back hoes
- (2) Riding compactors
- (2) Hand held portable compactors
- (1) Grader
- (1) Dump truck
- (1) Water truck

For the Construction of Structures Phase:

- (2) 15-foot lifts
- (1) 20-ton crane
- (1) Fork lift
- (1) Water truck

The Proposed Project would be considered to result in significant air quality impacts if it would result in emissions greater than the significance thresholds as outlined in Section 4.3.1 Environmental Setting above.

Short-Term Construction Impacts

Implementation of the Proposed Project would result in construction activity, which would generate air pollutant emissions. Construction activities such as grading, excavation and travel on unpaved surfaces would generate dust, and can lead to elevated concentrations of particulate matter emissions PM_{10}. The operation of construction equipment results in exhaust emissions, which include ozone precursors ROG and NO_x. Paving and the application of architectural coatings (e.g., paint) results in ROG emissions (see Table 3 above).

Construction-related ROG, NO_x, PM_{10}, and CO emissions for the Altaville FFS Project are summarized below:

- The maximum daily amount of ozone precursor emissions, which is the sum of ROG and NO_x emissions, during all phases of construction would be 185.86 pounds per day (ppd). The significance threshold is 274 ppd.
- The maximum daily amount of PM_{10} emissions during all phases of construction would be 13.52 ppd. The significance threshold is 383 ppd.
- The maximum daily amount of CO emissions during all phases of construction would be 58.46 ppd. The significance threshold is 550 ppd.

Because the amount of Project-related criteria pollutant emissions listed above would all be below the significance thresholds, the Altaville FFS Project is considered to have a less than significant impact on short-term construction-related air quality. No mitigation measures are required.

Naturally Occurring Asbestos

The map, *A General Location Guide For Ultramafic Rocks In California - Areas More Likely To Contain Naturally Occurring Asbestos (NOA)* (DOC 2000) shows areas more likely to contain NOA. Soil-disturbing construction activity in these areas would result in an elevated risk of entraining NOA.

The asbestos map shows there are no areas more likely to contain NOA in the vicinity of the Altaville FFS Project site. Additionally, a site-specific geotechnical survey conducted for the site in January 2014 (GEOCON 2014) indicated that, although the predominant rock type present at the site is one of the rock types that can contain NOA, laboratory analysis of the soil samples indicated that NOA was not present above the reporting limit. Therefore, mitigation measures for NOA are not required.

Long-Term Operational Impacts

As previously described in item a), The Proposed Project would result in the relocation of the existing FFS Auto Shop from the San Andreas area to the Altaville area. This would result in relocation of emissions associated with operation of the facility. However, the Proposed Project would not change the amount of operational emissions – the generation of emissions would geographically shift between areas within Calaveras County. Because the Proposed Project would not change the amount of operational emissions generated by the FFS Auto Shop, operational emissions have not been quantified for this IS/MND.

Because the Altaville Forest Fire Station Auto Shop Relocation Project would not result in a net increase of long-term operational emissions, the impact of the Proposed Project on long-term operational emissions is considered to be less than significant. No mitigation measures are required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐

As noted previously, the Project site is in an area designated as a nonattainment area for both state and federal ozone standards and designated nonattainment for the state PM_{10} standard, and attainment for the federal PM_{10} standard. As described previously, neither short-term construction of the Proposed Project nor long-term operation of the Proposed Project would exceed significance thresholds for PM_{10} or ozone precursor emissions. Because the Proposed Project is not considered to result in a significant impact, the Project is not considered to result in a cumulatively considerable net increase of PM_{10} or ozone emissions. Therefore, this is considered a less than significant impact.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Air quality regulators typically define sensitive receptors as schools (preschool-12th grade), hospitals, resident care facilities, residences or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. A project would have a significant impact on a sensitive receptor if it would result in an unacceptable health risk due to exposure to toxic air contaminant emissions (TACs) that would be emitted from the project. The IS/MND examined the Proposed Project for emissions of the TAC asbestos (NOA) and emissions from motor vehicles.

The Proposed Project would be located on the southeastern portion of the Altaville FFS. The Altaville FFS consists of 5.95 acres bound by SR 49 on the northeast, Altaville Historical Schoolhouse and residences on the northwest, private undeveloped land on the south, and a commercial shopping center and SR 4 on the east and southeast. The Project site is located approximately 100 feet from the nearest sensitive receptor (residences on the northwest).

Construction activities would result in emissions of diesel particulate matter from heavy construction equipment used on-site and truck traffic to and from the site, as well as minor amounts of TAC emissions from motor vehicles (such as benzene, 1, 3-butadiene, toluene, and xylenes). Health effects attributable to exposure to diesel particulate matter are long-term effects based on chronic (i.e., long-term) exposure to emissions. The Proposed Project would involve locating fuel storage tanks on the Project site. If uncontrolled, the fueling of motor vehicles could potentially result in the release of TAC emissions. However, as previously described in Section 2. Project Description, implementation of the Proposed Project would require an Authority to Construct Permit from the Calaveras County Air Pollution Control District (APCD). The APCD Rule 213, Storage of Petroleum Products, would require installation of emission control devices on the proposed fuel storage tanks. With installation of these emission control devices, the Project would not be considered to expose sensitive receptors to substantial pollutant concentrations.

As noted above, both short-term construction and long-term operation and maintenance of the Proposed Project would result in ROG and particulate matter emissions lower than significance thresholds established by the City of Angel's Camp (KD Anderson 2014a). For the reasons described above, the Project would not expose sensitive receptors to substantial pollutant concentrations, and the impact is considered less than significant.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the Project create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Construction of the Proposed Project could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust. However, construction equipment would be operating at various locations throughout the Project site, and any construction activities near sensitive receptors

would be temporary. Additionally, long-term operations of the new auto shop would not include large amounts of heavy equipment exhaust that could potentially produce odor compounds. Any odor compounds produced by auto shop operations would be minimal and be contained within the auto shop area. Therefore, a less than significant impact would occur.

4.4 Biological Resources

4.4.1 Environmental Setting

A Biological Resource Assessment (BRA) was prepared for the Proposed Project by ECORP Consulting Inc. (ECORP 2013a; Appendix B). The purpose of the assessment was to collect information on the biological resources present on the site, and to determine any potential biological constraints to site construction. The BRA analyzed the Project site and the potential for sensitive vegetation communities, special-status plant and wildlife species, including species listed as endangered or threatened under the California or Federal Endangered Species Act (CESA or FESA), to occur on the site (ECORP 2013a). To estimate the extent and approximate location of potential Waters of the U.S. and Waters of the State, including wetlands on the site, a review was conducted of existing databases including U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) online database, and Natural Resources Conservation Services (NRCS) soil survey data. A general list of potentially occurring special-status plants and wildlife species for the site was developed following review of California Native Plant Society Electronic Inventory, Calflora, CDFW's Natural Diversity Database (CNDDB), and USFWS species lists.

The literature review was supplemented by a field investigation conducted by ECORP on September 04, 2013. Biological Resource information that was collected included:

- Potential Waters of the U.S.;
- Plant and animal species directly observed;
- Characterization of habitats present on-site;
- Animal signs (e.g., scat, tracks);
- Active bird nests;
- Burrows and any other special habitat features; and
- Representative site photographs.

The Biological Resources Assessment is included as Appendix B and the findings are summarized below.

Vegetation Communities

The primary vegetation community within the Proposed Project area is blue oak woodland. The blue oaks present are generally large, with measurements of 20-inch and greater diameter breast height (DBH).The understory was comprised of non-native grasses (wild oats, ripgut brome, rye grass [*Festuca perennis*]) and forbs, including cheeseweed *(Malva parviflora*), turkey mullien (*Croton setigerus*), and puncture vine (*Tribulus terrestris*). The grass understory is regularly mowed/disced for fire prevention. Approximately 40 plantings of small oaks occur in this area as mitigation for the Altaville FFS Replacement Project, which was completed in late summer 2012. As previously described in Section 1.3 Surrounding Land Uses/Environmental Setting, the majority of the Project site is devoid of vegetation. The center of the Project site is characterized by a mixed dirt and gravel surface with a paved road circling the perimeter. The east, south, and southwestern boundaries are

currently occupied by outdoor storage space. The western boundary of the Project site is bound by blue oak woodland and non-native grasses. A list of plants observed during the field survey is included in Appendix B.

Native Oaks and Blue Oak Woodland

Native blue oak woodland is considered a sensitive habitat due to the severe decline in blue oak trees in California. Blue oak woodland occurs on-site, and depending on the final site configuration, blue oaks may be impacted by the Proposed Project (ECORP 2013a). A preliminary estimate determined seven oak trees would be removed by the Proposed Project (two (2) 16 inch Diameter at Breast Height [DBH], four (4) 18 inch DBH and one (1) 20 inch DBH). Oaks may be affected by unavoidable loss due to development of part of the site, or may be encroached upon by construction or development within a space of 1.5 times the distance between the trunk and the drip line of a tree. As previously described in 1.3 Surrounding Land Uses/Environmental Setting, as part of the mitigation for the Altaville FFS Replacement Project (completed in 2012), oak seedlings were planted throughout the property. Although the majority of these seedlings failed, the seedlings were not removed and are contained within white plastic sleeves scattered along the western and southwestern boundary of the Project site (see Representative Site Photo 4). Since the field investigation conducted by ECORP on September 04, 2013, oak seedlings were replanted throughout the property as a second attempt to comply with the mitigation for the Altaville FFS Replacement Project.

Wildlife

Wildlife habitat is found throughout the site. California ground squirrels (*Otospermophilus beecheyi*) and Botta's pocket gopher (*Thomomys bottae*) were documented in the oak woodland, and western fence lizards (*Sceloporus occidentalis*) were observed using the trunks of oaks. A small game trail, probably the result of foraging black-tail jack rabbit (*Lepus californicius*), was observed leading off-site into the surrounding oak grassland to the south. Bird nesting habitat occurs throughout the blue oak woodland. Habitat for ground-nesting birds is limited due to the frequency of disturbance at the site. Birds observed during the field survey included turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), white-breasted nuthatch (*Sitta carolinensis*), and western scrub jay (*Aphelocoma californica*). A list of wildlife observed during the field surveys is included in Appendix B.

Soils

One soil unit, or type, has been mapped within the site: Guenoc-Stonyford association, 5 to 50 percent slopes (Figure 2. Natural Resources Conservation Service Soil Types, Appendix B).

Potential Waters of the U.S.

During the field investigation, no potential Waters of the U.S. were found within the Proposed Project area, and there are no previously mapped NWI features (ECORP 2013a). The Proposed Project area gently slopes to the south and west. NWI features mapped in the Project area include freshwater emergent wetlands, freshwater pond, and other features. Cherokee Creek is a riverine feature that occurs approximately 0.2 mile northwest of the Project boundary (Figure 3. Aerial and Wetland Information, Appendix B).

Special-Status Plants

No special-status plants were observed during the field investigation; however, several special-status plant species have been previously documented to occur within five miles of the Proposed Project site (Table 1. Potentially Occurring Special-Status Species and Figure 4. CNDDB Occurrences of Special Status Species, Appendix B). Special-status plants with nearby occurrences are: Congdon's lomatium (*Lomatium congdonii*), Mariposa cryptantha (*Cryptantha mariposae*), Parry's horkelia (*Horkelia parryi*), Red Hills soaproot (*Chlorogalum grandiflorum*), Tuolumne button-celery (*Eryngium pinnatisectum*), Whipple's *monkeyflower (Mimulus guttatus = M. whipplei),* and yellow-lip pansy monkeyflower *(Mimulus pulchellus*).

The majority of special-status plants in this region are associated with unique soil/geological characteristics, vegetation communities, and/or habitats, such as serpentine soils, chaparral, or vernal pools. The Project site supports none of these characteristics, communities, or habitats, and species with these requirements are unlikely to occur. Additionally, the frequency of maintenance, including mowing and discing of the grassland understory on-site, further reduces the likelihood of any special status plant species occurring.

Special-Status Wildlife

No special-status animals were found during the field investigation. Three special-status species have been documented within five miles of the Project site (Table 1. Potentially Occurring Special-Status Species and Figure 4. CNDDB Occurrences of Special Status Species, Appendix B). These are: foothill yellow-legged frog (*Rana boylii*), tricolored blackbird (*Agelaius tricolor*), and pallid bat (*Antrozous pallidus*). Of these, potential habitat is present only for pallid bat, which could use the trees or structures on-site for roosting. However, this species is very sensitive to human disturbance and given the abundance of habitat in the region, it is considered unlikely that pallid bats would occur on-site. Furthermore, other species of bats only have a low potential to occur on the site given the extent of onsite development and human use. For these reasons, no further studies or mitigation measures are proposed for bat species.

Most of the other species are associated with unique vegetation communities or habitats, such as marshes, vernal pools, creeks, and streams. There is no habitat on-site for special-status invertebrates, amphibians, or reptiles. However, the trees present support potentially suitable nesting habitat for Cooper's hawk (*Accipiter cooperii*) and other nesting birds covered under MBTA.

Wildlife/Movement/Corridors

The Proposed Project is located immediately adjacent to SR 49. This is a commercial zone with abundant human and vehicle traffic present, large parking lots, fences, and significant night-time lighting. All these factors would generally deter wildlife movement in the immediate surroundings.

4.4.3 Regulatory Setting

Federal Regulations

<u>Federal Endangered Species Act</u>

The FESA protects plants and wildlife that are listed as endangered or threatened by the USFWS and the National Marine Fisheries Service (NMFS). Section 9 of FESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture,

collect, or attempt to engage in such conduct" (50CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 USC 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits where no other federal actions are necessary provided a HCP is developed.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

Federal Clean Water Act

The federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "Waters of the United States" without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit.

Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

State or Local Regulatory Requirements

California Endangered Species Act

The CESA generally parallels the main provisions of the FESA, but unlike its federal counterpart, the CESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the Fish and Game Code as "hunt,

pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development Projects. State lead agencies are required to consult with CDFW to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, mammals, amphibians and reptiles, birds and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code Sections 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The CESA of 1984 (California Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

California Streambed Alteration Notification/Agreement

Section 1602 of the California Fish and Game Code requires that a Streambed Alteration Application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement. Often, Projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

Public Resources Code – PRC, Division 13. Environmental Quality [21000-21189.3], Chapter 2.6 General [21080 – 21098], 21083.4

(a) For purposes of this section, "oak" means a native tree species in the genus Quercus, not designated as Group A or Group B commercial species pursuant to regulations adopted by the State Board of Forestry and Fire Protection pursuant to Section 4526, and that is 5 inches or more in diameter at breast height.

(b) As part of the determination made pursuant to Section 21080.1, a county shall determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect

to oak woodlands, the county shall require one or more of the following oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands:

(1) Conserve oak woodlands, through the use of conservation easements.

(2) (A) Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.

(B) The requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted.

(C) Mitigation pursuant to this paragraph shall not fulfill more than one-half of the mitigation requirement for the project.

(D) The requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.

(3) Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board. A project applicant that contributes funds under this paragraph shall not receive a grant from the Oak Woodlands Conservation Fund as part of the mitigation for the project.

(4) Other mitigation measures developed by the county.

(c) Notwithstanding subdivision (d) of Section 1363 of the Fish and Game Code, a county may use a grant awarded pursuant to the Oak Woodlands Conservation Act (Article 3.5 (commencing with Section 1360) of Chapter 4 of Division 2 of the Fish and Game Code) to prepare an oak conservation element for a general plan, an oak protection ordinance, or an oak woodlands management plan, or amendments thereto, that meets the requirements of this section.

(d) The following are exempt from this section:

(1) Projects undertaken pursuant to an approved Natural Community Conservation Plan or approved subarea plan within an approved Natural Community Conservation Plan that includes oaks as a covered species or that conserves oak habitat through natural community conservation preserve designation and implementation and mitigation measures that are consistent with this section.

(2) Affordable housing projects for lower income households, as defined pursuant to Section 50079.5 of the Health and Safety Code, that are located within an urbanized area, or within a sphere of influence as defined pursuant to Section 56076 of the Government Code.

(3) Conversion of oak woodlands on agricultural land that includes land that is used to produce or process plant and animal products for commercial purposes.

(4) Projects undertaken pursuant to Section 21080.5 of the Public Resources Code.

(e) (1) A lead agency that adopts, and a project that incorporates, one or more of the measures specified in this section to mitigate the significant effects to oaks and oak woodlands shall be

deemed to be in compliance with this division only as it applies to effects on oaks and oak woodlands.

(2) The Legislature does not intend this section to modify requirements of this division, other than with regard to effects on oaks and oak woodlands.

(f) This section does not preclude the application of Section 21081 to a project.

(g) This section, and the regulations adopted pursuant to this section, shall not be construed as a limitation on the power of a public agency to comply with this division or any other provision of law (California Legislative Information 2005).

CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by Projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines, which provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the Project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

Oak Protection Guidelines, California Department of Fish and Wildlife

If the proposed project will significantly affect oak trees on the project site, CDFW recommends that the project be designed so that loss of oak trees which results in a loss of wildlife habitat value be avoided. If the loss of oaks is unavoidable then a mitigation plan should be developed which results in the retention of a maximum number of oak trees and the replacement of oaks which are lost.

Calaveras County Voluntary Oak Woodland Management Plan

The purpose of Calaveras County's Oak Woodland Management Plan is to develop a set of voluntary oak protection guidelines for oak conservation planning and use of oak woodland habitats throughout the County. The document is also expected to provide direction to landowners, the Calaveras County Planning Department, and developers regarding activities that have the potential to adversely impact oaks and oak woodland habitat. The adoption of this plan by a resolution of the County Board of Supervisors will also give the County the opportunity to obtain funding through the California Oak Woodlands Conservation Program (California Oak Woodlands Conservation Act – Fish and Game Code, Division 2, Chapter 4, Article 3.5, Section 1360-1372). This program provides funding for oak education, landowner assistance, and projects designed to conserve and restore oak woodlands. In addition, adoption of this plan will allow the county to create a local oak mitigation fund reserve with the purpose of providing monetary support for oak conservation activities specific to Calaveras County. Activities supported by the program also encourage interaction among ranchers, conservationists, educators, and others who share similar values regarding oak woodlands (Calaveras County 2007).

City of Angels Camp General Plan 202 (4.D Biological Resources)

Goal 4.D - Conserve and, where feasible, enhance the city's biological resources.

Policies *4.D.1* Recognize the city's biological resources as a major contributor to the city's scenic quality, visual character, and quality of life.

4.D.2 Facilitate compliance with state and federal natural resource protection laws.

4.D.3 Recognize and maximize the multiple beneficial uses of open spaces.

4.D.4 Encourage retention and expansion of vegetative cover to assist in counteracting the effects of global warming.

Applicable Implementation Programs

4.D.a - Identify Biological Resources. Identify locations of known biological resources including plants, fish, animals, wetlands, wildlife movement corridors and other biological resources that are subject to state and federal agency regulations (e.g., wetlands, etc.) to be used in a comprehensive database, map or similar "one-stop" reference for environmental reviews.

4.D.b - Inventory Potential Biological Resource Mitigation Sites Within the City's Sphere of Influence. Map stands of native oaks, creek corridors, elderberry shrubs, wetlands and similar biological resources located within the city's Sphere of Influence that may serve as mitigation sites for future large-scale public and private development (e.g., State Route 4 North Angels Bypass, planned arterials and collectors). Approach landowners to designate these sites as Resource Management

(RM) or to otherwise develop the sites for potential mitigation banking sites in anticipation of future development.

4.D.f - Provide Guidance to Developers for Assessing/Addressing/Avoiding Adverse Impacts to Biological Resources. Maintain reference materials, contact numbers and a consultants list to assist developers in contacting the appropriate regulatory agency necessary for facilitating environmental reviews for new development in the city and to inform developers of current state and federal regulations pertaining to biological resources. Sample information may include, but is not limited to: websites for wetlands regulations including polices related to no net loss of wetlands and, measures consistent with Section 404 of the federal Clean Water Act addressing filling, removal or hydrological alteration of wetlands and other waters of the United States; regulations pertaining to California Fish and Game Code Section 1600 related to work undertaken in or near a river, stream or lake flowing at least intermittently through a bed or channel and including ephemeral streams and water courses (e.g. diversions, flow changes, extracting materials from, disposal of debris, waste or other materials into any river, stream or lake etc.) and addressing these possible impacts through use of Lake or Streambed Alteration Agreements (LSAA), valley elderberry longhorn beetle guidelines, California Department of Fish and Game (CDFG) wildlife biologist for Calaveras County, representatives from CDFG charged with issuing streambed alteration permits in Calaveras County, and representatives of the United States Army Corps of Engineers issuing wetland permits in Calaveras County.

4.D.j - Consider a Vegetation & Oak Woodlands Management Program. Draft an ordinance to retain significant stands of oak woodlands, clusters of native shrubs and clusters of trees that contribute to defining the city's character. The program should establish thresholds addressing when a city permit is required for vegetation removal and provide guidance for conserving movement corridors for resident wildlife species or those with established migratory wildlife corridors and addressing timing for tree removal to minimize potential impacts to native wildlife nursery and nesting sites. The program should apply to all new development requiring a discretionary entitlement from the city. This program should not apply to vegetation removal required for fire safety as determined by the Angels Camp Fire Department or to vegetation removal required for reasons of public health and safety as determined by city officials.

Biological Resources (IV.) Environmental Checklist and Discussion

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

As previously described in Section 1.3 Surrounding Land Uses/Environmental Setting, the Proposed Project is located on CAL FIRE property and consists of partially-developed lands southwest of the existing Altaville FFS. The majority of the Project site is characterized as a mixed dirt and gravel surface with a paved road circling the perimeter. The western portion of the Project site is comprised of blue oak woodland with a grassy understory that is regularly mowed/disced for fire prevention (ECORP 2013a). The Project site is bound by an outdoor storage area comprised of two storage sheds, one large storage container, and additional outdoor storage space on the southwest.

The Altaville FFS site supports potentially suitable habitat for one special-status bird species (Cooper's hawk) and nesting birds. All native birds, including raptors, are protected under the Fish and Game Code and the Federal MBTA. To ensure that there are no impacts to protected active nests, Mitigation Measure B-1 shall be implemented to reduce potentially adverse effects to nesting birds to a less than significant level.

Mitigation Measure

B-1 Pre-Construction Nesting Bird Survey

Conduct a pre-construction nesting bird survey of all suitable habitat on the Project site within 14 days prior to commencement of construction during the nesting season (February 1 through August 31). If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist. Once the young are independent of the nest, no further measures are necessary. Pre-construction nesting surveys are not required for construction activity outside of the nesting season.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Sensitive habitats include those vegetation communities which are considered rare within the region, are considered sensitive by the State of California, and are listed as sensitive under local conservation plans. Sensitive habitats within the region are associated with unique soil/geological characteristics, vegetation communities, and/or habitats, such as serpentine soils, chaparral, vernal pools, blue oak woodland, marshes, creeks, or streams. As previously described item a), the majority of the Project site is characterized as a mixed dirt and gravel surface with a paved road circling the perimeter. The western portion of the Project site is comprised of blue oak woodland with a grassy understory that is regularly mowed/disced for fire prevention (ECORP 2013a).

The Project site supports native blue oak woodland, and development of the site may require removal or encroachment into the protected area surrounding a tree (1.5 times the distance between the trunk and the drip line) (ECORP 2013a). A preliminary estimate determined seven oak trees would be removed by the Proposed Project: two (2) 16 inch Diameter at Breast Height [DBH], four (4) 18 inch DBH and one (1) 20 inch DBH. Mitigation Measures B-2 and B-3 shall be implemented to reduce potentially adverse effects as a result of the removal of blue oak trees to a less than significant level.

Mitigation Measures

B-2 Blue Oak Protection

A. To protect trees being retained on-site, the following measures shall be implemented:

1. All trees, including blue oaks or groups of trees outside the construction area, shall be protected during and following construction by establishing a root protection zone (RPZ) that is 1.5 times the distance from the trunk to the canopy dripline.
2. Temporary construction fencing shall be used to mark the RPZ and no grading, trenching, or vegetative alteration should be allowed in the RPZ.

B-3 Blue Oak Mitigation and Monitoring Plan

A. To compensate for the of loss blue oak trees, oak tree replacement will be conducted at an off-site location within the City of Angels Camp or Calaveras County. A Blue Oak Mitigation and Monitoring Plan shall be prepared in accordance with specifications outlined below. Oak tree replacement requirements will be based on the final number of trees to be removed once grading plans have been finalized:

1. Blue oaks removed during project construction shall be replaced by planting seedlings or acorns from local genetic stock.
2. A replacement ratio of 1 seedling planted for every tree removed shall be applied (1:1).
3. A Replacement Tree Mitigation Plan shall be prepared. The Plan shall include: the species of trees to be planted, planting locations, the distances between replanted trees, irrigation requirements, success criteria, monitoring and reporting, and corrective actions if success criteria is not met.
4. A success rate (live tree survival defined by pliable, green stems but not leaf retention) of 80% shall be achieved at Year 5.
5. Establishment of planted replacement trees shall be monitored annually for five years after planting. If survivorship objectives are not met, dead or low vigor trees shall be replaced using methods based on an adaptive management approach. A report summarizing survival rates of planted trees and other issues affecting mitigation success shall be prepared annually during the monitoring period.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

As previously stated in 4.4.1 Environmental Setting, no potential Waters of the U.S. were found within the Proposed Project area, and there are no previously mapped NWI features (ECORP 2013a). No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project 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?	☐	☒	☐	☐

As previously stated in above Section 4.4.1 Environmental Setting, the Proposed Project is located immediately adjacent to SR 49. This is a commercial zone with abundant human and vehicle traffic present, large parking lots, fences, and significant night-time lighting. All these factors would generally deter wildlife movement in the immediate surroundings. While some wildlife movement is expected, development of the Project site should not adversely affect wildlife movement in the region.

As previously described in item a), the Project site supports potentially suitable habitat for nesting birds, including one special-status species (Cooper's hawk). To reduce potentially adverse impacts to native birds protected under the MBTA and California Fish and Game Code, a pre-construction bird survey shall be conducted within 14 days prior to commencing ground disturbance activities. Therefore, adverse impacts to native wildlife nursery sites such as nesting birds, would be less than significant with the incorporation of Mitigation Measure B-1.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

The Proposed Project may potentially remove or adversely impact blue oak trees to accommodate the footprint of the proposed vehicle wash rack located along the western boundary and the retention pond in the southwestern corner of the Project site. Currently, there is no local tree preservation policy in place; however, the City of Angels Camp is developing a tree ordinance to protect native species (Hanam 2013). At this time, the Proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. As described previously in item b), the Project site supports native blue oak woodland, and development of the site may require removal or encroachment into the protected area surrounding a tree (1.5 times the distance between the trunk and the drip line) (ECORP 2013a).

As previously described in item b), consistent with the previous *Blue Oak Mitigation and Monitoring Plan* implemented for the Altaville FFS Replacement Project and CDFW recommendations in the *Oak Protection Guidelines* (see Section 4.4.1 Environmental Setting), Mitigation Measure B-2 shall be implemented to reduce potentially adverse effects as a result of the removal of blue oak trees to a less than significant level.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The Proposed Project is not located in an area subject to a habitat conservation plan or natural community conservation plan (CDFW 2013; GPO 2013; USFWS 2013). No impact would occur.

4.5 Cultural Resources

4.5.1 Environmental Setting

Cultural Resources

A Cultural Resources Inventory Report was prepared by ECORP Consulting, Inc. (ECORP 2013b, Appendix C) for the Proposed Project to determine if cultural resources were present in or adjacent to the Project area and assess the sensitivity of the Project area for undiscovered or buried cultural resources. The Project area is situated on a parcel with relatively level terrain. The western edge of the property consists of an undeveloped oak landscape while the remaining portion has been mostly disturbed by grading, paving, landscaping, and construction of fire station facilities (shop, office, and barracks). The cultural context of the Project area including regional and local prehistory, ethnography, and regional and Project area history can be found in Appendix C.

The analysis of cultural resources was based on a records and literature search conducted at the Northwestern Information Center (NWIC) of the California Historical Resources Information System at California State University-Stanislaus on August 22, 2013, a literature review, and a field survey. The records and literature search identified three previous cultural resource investigations conducted within the Project area and an additional 22 investigations within a 0.5-mile (800-meter) radius of the Project location.

The records and literature search results indicated that the previous investigations covered about 15 percent of the Project area. Because the entire Project area had not been surveyed, a pedestrian survey was warranted. Within 0.5 mile of the property, the additional 22 cultural resource investigations covered approximately 35 percent of the total area surrounding the property. These previous studies revealed the presence of resources associated with historical mining activities and homesteading.

One previously recorded resource from the historical period and a National Register of Historic Places-listed property is located adjacent to the Project area. The Altaville Grammar School was originally located within the Project area of the Altaville Forest Fire Station Replacement Project (CAL FIRE 2002). The school was moved to a location adjacent to, but outside of, the previous Project area in 1983. The site record describes the original location as being within the current Project area (even though the school building has since been moved). The original school subsurface footprint was not altered by the previous Project, thus leaving the possibility that subsurface archaeological material could be discovered during construction.

In addition to the Altaville Grammar School, 26 previously recorded historic-era cultural resources are located within 0.5 mile of the Project Area. Of these, 10 are believed to be associated with

historical mining activities in the vicinity, and the remaining sites are associated with early Euro-American ranching, homesteading, and farming activities that influenced the growth of Altaville.

A search of the Sacred Lands File by the Native American Heritage Commission (NAHC) showed no Native American cultural resources in the Project area.

A field survey was carried out on August 30, 2013. The entire Project area was subject to an intensive pedestrian survey using transects at 15-meter intervals. All resources and isolates encountered inside the Project area were recorded. In addition to the previous location of the schoolhouse (site record updated), one newly identified site consisting of a pile of building materials, and one possible isolate, prehistoric in nature, were discovered as a result of ECORP's survey. The pile of building materials is located at the western edge of the graded area within the Project area and the isolate was along the western edge of the property boundary. See Appendix C for further information.

The structures identified on the 1959 aerial photograph and the 1962 Angels Camp, California quadrangle map are no longer present. The only portions of the property which retained the original landscape were located along the southern and western boundaries. This original landscape contained several oak trees with evidence of surface grading from a tractor. Small oak trees were planted in two rows along a possible road segment.

Paleontological Resources

A paleontological assessment was prepared by ECORP Consulting, Inc. (ECORP 2013c, Appendix B) for the Proposed Project to determine if paleontological resources were present in or adjacent to the Project area and assess the sensitivity of the Project area for undiscovered paleontological resources. The University of California Museum of Paleontology (UCMP) database results, more details about the geology, and the probability of finding fossil specimens can be found in the assessment in Appendix B.

A paleontological database search of the paleontology locality and specimen collection records for the Project area and surrounding area (0.5 mile radius) was requested from the UCMP in August 2013. Additional information from a query of the UCMP online catalog records, a review of regional geologic maps from the California Geological Survey, and a review of existing literature on paleontological resources of Calaveras County were used to provide information about paleontological resources.

According to the 2010 Geologic Map of California and the Geologic Map of the Sacramento Quadrangle, the underlying geologic formation for the Proposed Project area consists of the Calaveras Complex of volcanic rocks (ECORP 2013c, Appendix B). This formation is described generally as undivided Mesozoic metavolcanic rocks that include latite, dacite, tuff, and greenstone that is commonly schistose. The soil survey for Calaveras County published by the U.S. Department of Agriculture (USDA) Soil Conservation Service (now called the Natural Resources Conservation Service [NRCS]) indicates that the soil type on-site corresponds to the Guenoc-Stonyford association (USDA-NRCS 1966). This soil type is dominated by moderately deep to deep medium textured soils with finer textured subsoils over greenstone, limestone, andesitic conglomerate and granitic gneiss with the parent material being approximately 12 to 55 inches deep (USDA-NRCS 1966). In general, volcanic rocks very rarely preserve fossil specimens because of the extremely high temperatures associated with their origin (ECORP 2013c, Appendix B).

4.5.2 Regulatory Setting

Cultural Resources Obligations Under CEQA

To meet the regulatory requirements of the Project, a cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within CEQA (Pub. Res. Code § 21000 et seq.). The goal of CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed Project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed Projects that require state or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development Project maps.

CEQA (Title 14, CCR, Article 5, Section 15064.5) applies to cultural resources of the historical and prehistoric periods. Any Project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a Project that may have a significant impact on the environment. As a result, such a Project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California Register of Historical Resources (CRHR) (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) or the National Register of Historic Places (NRHP) (36 CFR 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under 36 CFR Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered to be Historical Resources (significant) under CEQA.

The Lead Agency is responsible for ensuring compliance with mitigation measures for Historical Resources, as defined by CEQA, In order to reduce impacts. Section 15097 of Title 14, Chapter 3, Article 7 of CEQA, Mitigation Monitoring or Reporting, states “the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the Project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.”

Cultural Resources (V.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐

Resources from the historic period were identified on the property as a result of the records search and field survey. The newly recorded site from the historical period is not evaluated as eligible for inclusion in the CRHR under any criteria and no further action is recommended for the site. Ground-disturbing activity or demolition cannot occur until the CEQA lead agency concurs (through certification of this environmental document) that the cultural resources in the Project area are not eligible. Once concurrence is obtained for the cultural resources, the Project would not cause substantial adverse changes in the significance of a Historical Resource, as defined by CEQA.

The Altaville Grammar School was originally located within the current Project area and the previous Project area of the Altaville Forest Fire Station Replacement Project (CAL FIRE 2002). The school has been moved to a location adjacent to, but outside of, both the previous and current Project areas. The subsurface footprint of the original school was not altered by the previous Project, therefore the previous mitigation measures would apply to this Project at this particular location.

Due to the sensitivity of the Project Area, there remains a possibility that unrecorded cultural resources are present beneath the ground surface, and that such resources could be exposed during Project construction. Both CEQA and Section 106 of the National Historic Preservation Act require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Mitigation measures C-1, C-2, and C-3 would reduce potential adverse impacts to less than significant.

Mitigation Measure

C-1 On-Site Awareness and Monitoring

A. All ground-disturbing activities will be monitored by a qualified professional archaeologist, who has the authority to halt construction activity in accordance with the unanticipated discovery procedures discussed in mitigation measure C-3.

B. The State of California Department of General Services requires cultural resources awareness training to be provided to on-site construction personnel associated with the Altaville Forest Fire Station Auto Shop Replacement Project, to contribute to compliance with this mitigation measure. The construction awareness training will be carried out by a qualified Archaeologist with experience in prehistoric and historic-era archaeology in California.

Mitigation Measure

C-2 Altaville Grammar School

A. The Project shall be designed to avoid the footprint of the former schoolhouse.

B. Construction fencing shall be installed around the footprint and no construction vehicles shall enter this area.

C. If the footprint of the former schoolhouse cannot be avoided by construction activities:

1. A qualified archaeologist shall monitor activities as stated in mitigation measure C-1.

2. Any artifacts discovered shall initiate implementation of mitigation measure C-3.

3. A small monument shall be erected to show the location of the former schoolhouse.

Mitigation Measure

C-3 Unanticipated Discovery

If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 100-foot radius of the discovery. A qualified

professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. A Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, will be required if the nature of the unanticipated discovery is prehistoric.

Work cannot continue within the no-work radius until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR.

If a potentially-eligible resource is encountered, then the archaeologist, lead agency, and Project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations to evaluate eligibility and, if eligible, total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the lead agency as verification that the provisions in CEQA/NEPA for managing unanticipated discoveries have been met.

In the event that evidence of human remains is discovered, construction activities within 100 feet of the discovery will be halted or diverted and the requirements of this mitigation measure will be implemented. In addition, the provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and AB 2641 will be implemented. When human remains are discovered, state law requires that the discovery be reported to the County Coroner (Section 7050.5 of the Health and Safety Code) and that reasonable protection measures be taken during construction to protect the discovery from disturbance (AB 2641). If the Coroner determines the remains are Native American, the Coroner notifies the Native American Heritage Commission which then designates a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted, to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).

In the event that fossils are encountered, they shall be analyzed to a point of identification and curated at an established accredited museum repository with permanent retrievable paleontological storage. A technical report of findings shall be prepared with an appended itemized inventory of identified specimens and submitted with the recovered specimens to the curation facility.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐

An archaeological isolate was identified on the property as a result of the records search and field survey. The prehistoric isolate is not evaluated as eligible for inclusion in the CRHR under any criteria. Nonetheless, the presence of the prehistoric isolate could indicate the possibility of other prehistoric activity within the Project area. Ground-disturbing activity or demolition cannot occur until the CEQA lead agency concurs (through certification of this environmental document) that the cultural resources in the Project area are not eligible. Once concurrence is obtained for the cultural resources, the Project would not cause substantial adverse change in the significance of an archaeological resource. A less than significant impact to buried resources, if present, would occur with implementation of mitigation measures C-1 and C-3. See item a) discussion above.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

The paleontological assessment determined that no fossil vertebrate localities or specimens are located within the Project area (ECORP 2013c, Appendix B). Additionally, based on the soil type and geological formation (metavolcanic) present within the Project area, it was determined that the Project area has a low potential for containing nonrenewable paleontological resources (ECORP 2013c, Appendix B). The Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Impacts to paleontological resources would be less than significant with the implementation of mitigation measure C-3.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

A search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources in the Project area (ECORP 2013b, Appendix C). While there is no reason to suspect the presence of human remains in the Project area, it is possible that currently unknown remains may occur. In the event that evidence of human remains is discovered the requirements of mitigation measures C-1 and C-3 would be implemented. The Proposed Project would have less than significant impacts with the incorporation of mitigation measures C-1 and C-3. See item a) discussion above.

4.6 Geology and Soils

4.6.1 Environmental Setting

Geotechnical investigations were conducted for the Project site in 2002 and January 2014 (CAL FIRE 2002; GEOCON 2014) and are summarized in this section.

Geomorphic Setting

The Project site is in the northwest portion of the City of Angels Camp, in Calaveras County in the Sierra Nevada foothills of Central California. The Project site and surrounding area is underlain by the Calaveras Complex formation consisting of volcanic rocks within the Sierra Nevada Geomorphic Province. The geologic complex of the Sierra block consists of a bedrock complex and a series of younger sedimentary and volcanic rocks. The bedrock complex is characterized by highly folded and metamorphosed volcanic and sedimentary rocks of Paleozoic and Mesozoic ages. The Project site is within the Mother Lode, a part of a fissure system located within the Melones Fault zone, where numerous quartz veins and gold ore bodies are known to exist (CAL FIRE 2002).

Regional Seismicity and Fault Zones

An "active fault," according to California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered "inactive." The Project site lies within 5 miles of the Melones Fault system, which is part of the Foothills fault system. This system is a broad band of fault zones extending 200 miles along the Sierra Nevada foothills. However, there are no faults subject to the Alquist-Priolo Earthquake Fault Zone Act (AP Act) within Calaveras County (DOC 2010 and Calaveras County 1996). The *Angels Camp 2020 General* Plan states this fault would be capable of producing an earthquake with a maximum magnitude of 6.5 on the Richter scale with a probability within 25,000 years (City of Angels Camp 2009). The uniform Building Code (UBC) establishes standards for structures to survive earthquakes according to zones based on the likelihood of an earthquake occurring. The UBC classifies all of Calaveras County as being within Seismic Risk Zone 3. All new construction must meet UBC standards for seismic zone 3 (CAL FIRE 2002).

Soils

The 2014 geotechnical investigation determined that the soil at the project site consists of fill and native soil. An area of fill consisting of sandy silt, silt, gravel, and debris was encountered in the center of the site ranging in thickness from 0.5 to 4.5 feet. According to the Report and General Soil Map for Calaveras County, California (USDA-NRCS 1966), the native soils within the Project area consist of one soil map unit called the Guenoc-Stonyford association, 5 to 50 percent slopes. The parent material of this soil type is greenstone and basic sedimentary rock. The soil type is a clay loam varying in depth from shallow to deep and topography is moderately sloping to steep upland. This soil is well drained, rocky, and slightly acid, with a slight to moderate erosion factor and is generally on north facing slopes under cover of annual grasses, oaks, and scattered conifers. This soil occurs at elevations of 1400 to 2800 feet, in a climate with mean annual rainfall of 20 inches, with warm dry summers and cool moist winters. The mean annual temperature is about 60 degrees Fahrenheit and the frost free season is approximately 244 days.

Geology and Soils (VI.) Environmental Checklist and Discussion

a) Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒
ii) Strong seismic ground shaking?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒
iii) Seismic-related ground failure, including liquefaction?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒
iv) Landslides?	Potentially Significant Impact ☐	Less than Significant with Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

i and ii) The Project site is not located in a Fault-Rupture Hazard Zone / Alquist-Priolo Earthquake Fault Zone. The risk of fault rupture within the site is low due to the absence of known active faults in the site or surrounding area (GEOCON 2014; DOC 2010;Calaveras County 1996). No impact would occur.

iii) Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs as a consequence of cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements and differential settlements. Liquefaction generally occurs in areas where the ground water table is less than 50 feet below the surface.

Groundwater resources in Calaveras County are highly variable due to the geology of the foothills. According to the Calaveras County Map Information Service, the Project site is located in an area with a zero to low probability of shallow groundwater (Calaveras County 2013). The 2014 geotechnical investigation determined that the groundwater elevation in the project area is approximately 39 to 41 feet in depth and that liquefaction is not a hazard at the site. No impact would occur.

iv) The California Department of Conservation Landslide Inventory map (DOC 2013) was used to identify possible landslide problem areas. The Project site is located in an area with level topography and is not located in an area with a probability of landslides. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Best Management Practices (BMPs), included as part of the Storm Water Pollution Prevention Plan (SWPPP) prepared for the Proposed Project would be implemented to manage erosion and the loss of topsoil during construction-related activities (see Hydrology and Water Quality (IX.) Environmental Checklist and Discussion). Soil erosion impacts would be reduced to less than significant level.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project 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?	☐	☒	☐	☐

Native soils at the site are stable. However, fill soils were identified in the center portion of the property. A portion of the Proposed Project, including the western third of the auto shop building, a portion of the proposed parking area, and a portion of the proposed generator and storage building, would be located in fill soils, which are not suitable for direct support of structures. Specific removal and re-compaction recommendations are provided in the geotechnical evaluation. Impacts would be less than significant with implementation of Mitigation Measure G-1.

Mitigation Measure

G-1 Site Specific Geotechnical Design Recommendations

The site-specific recommendations from the *Geotechnical Investigation, CAL FIRE Altaville – Auto Shop* prepared for the *Altaville Forest Fire Station Auto Shop Replacement Project Administrative Draft Initial Study and Mitigated Negative Declaration* shall be followed during site design and construction.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐

According to the site-specific geotechnical investigation, site soils are low to moderately expansive. Impacts would be less than significant with implementation of Mitigation Measure G-1.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Septic tanks or alternative wastewater disposal systems are not part of the Proposed Project design. No impact would occur.

4.7 Greenhouse Gas Emissions

As previously noted in Section 4.3.1 Environmental Setting, an Air Quality Study, which includes an analysis of greenhouse gas emissions, was prepared for the Proposed Project by KD Anderson & Associates (KD Anderson 2014a; Appendix A). The findings of the Air Quality Study addressing greenhouse gas emissions associated with the Proposed Project are summarized in this section.

4.7.1 Environmental Setting

The main source of greenhouse gas (GHG) emissions associated with the Proposed Project would be combustion of fossil fuels during short-term construction activities. The generation of GHG emissions has the potential to affect climate on a global scale. Pursuant to Assembly Bill 32 (AB 32), the California Air Resources Board (CARB) prepared and adopted the *Climate Change Scoping Plan*. The *Scoping Plan* outlines the State's strategy to achieve the year 2020 GHG emissions limits specified in AB 32. The *Scoping Plan* includes a comprehensive set of actions designed to reduce overall GHG emissions in California (KD Anderson 2014a).

The average surface temperature of the Earth has risen by about one degree Fahrenheit in the past century, with most of that occurring during the past two decades (World Meteorological Organization, 2005). There is evidence that most of the warming over the last 50 years is due to human activities. Human activities, such as energy production and internal combustion vehicles, have increased the amount of climate-changing gases in the atmosphere, which in turn is causing the Earth's average temperature to rise. Rises in average temperature are leading to changes in climate patterns, shrinking polar ice caps and a rise in sea level, with a host of corresponding impacts to humans and ecosystems.

Gases which affect global climate are referred to as greenhouse gases. Greenhouse gases are atmospheric gases that act as global insulators by reflecting visible light and infrared radiation back to Earth. Some GHG, such as water vapor, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), occur naturally and are emitted to the atmosphere through natural processes. Although CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From 1750 to 2004, concentrations of CO_2, CH_4, and N_2O have increased globally by 35, 143, and 18 percent, respectively. Other greenhouse gases, such as fluorinated gases, are created and emitted solely through human activities (KD Anderson 2014a).

The principal GHG that enter the atmosphere because of human activities are CO_2, CH_4, N_2O, and fluorinated gases. Carbon dioxide is the gas that is most commonly referenced when discussing climate change because it is the most commonly emitted gas. While some of the less common gases do make up less of the total GHG emitted to the atmosphere, some have more effect per molecule than CO_2 (KD Anderson 2014a).

Significance Threshold

This IS/MND applies a quantitative threshold for determining the significance of Project-related impacts on global climate change. The threshold is based on the amount of GHG emissions that would be generated by the Proposed Project.

Neither the Calaveras County APCD nor the City of Angels Camp has adopted quantitative significance thresholds for GHG emissions. Therefore, the threshold used in this IS/MND is based on a threshold developed by the California Air Pollution Control Officers Association (CAPCOA). The CAPCOA document CEQA & Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act presents a 900 metric ton per year (MT/yr) of carbon dioxide equivalent (CO_2e) screening threshold (KD Anderson 2014a). The CAPCOA threshold is considered a conservative threshold set at a level to "capture" or define 90 percent of land use development Projects as significant. The CAPCOA document notes:

> "A single quantitative threshold was developed in order to ensure capture of 90 percent or more of likely future discretionary developments. The objective was to set the emission threshold low enough to capture a substantial fraction of future residential and nonresidential development that will be constructed to accommodate future statewide population and job growth, while setting the emission threshold high enough to exclude small development Projects that will contribute a relatively small fraction of the cumulative statewide GHG emissions."

In this IS/MND, if the Proposed Project would generate more than 900 MT/yr of CO_2e, the Project is considered to have a significant impact on global climate change. If the Project would generate 900 MT/yr of CO_2e or less, the Project is considered to have a less than significant impact on global climate change. The 900 MT/yr of CO_2e threshold is applied in this IS/MND to both construction-related emissions and operational GHG emissions (KD Anderson 2014a).

Regulatory Framework

<u>Global Climate Change and Greenhouse Gas Emissions</u>

Plans, policies, regulations, and laws related to GHG have been developed during the last several years by federal, state, and local agencies. These mechanisms continue to develop. The following is a summary of these mechanisms.

<u>AB 1493 – Greenhouse Gas Emission Standards for Automobiles</u>

California Assembly Bill (AB) 1493 in 2002 required CARB to develop and adopt the nation's first GHG emission standards for automobiles. The legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in the state. It cited several risks that California faces from climate change, including reduction in the state's water supply, increased air pollution creation by higher temperatures, harm to agriculture and increase in wildfires, damage to the coastline, and economic losses caused by higher food, water, energy, and insurance

prices. Further, the legislature stated that technological solutions to reduce GHG emissions would stimulate California economy and provide jobs.

The State of California in 2004 submitted a request for a waiver from federal clean air regulations (as the State is authorized to do under the Clean Air Act) to allow the State to require reduced tailpipe emissions of CO_2. In late 2007, the EPA denied California's waiver request and declined to promulgate adequate federal regulations limiting GHG emissions. In early 2008, the State brought suit against EPA related to this denial.

A CARB study showed that in calendar year 2016, AB 1493 (also referred to as the Pavley standard or the Pavley rules) would reduce California's GHG annual emissions by 16.4 million metric tons (MMT) of CO_2e. This is almost 50 percent more than the 11.1 MMT reduction produced by federal fleet average standards for model years 2011 – 2015.

Further, by 2020, California is committed to implement revised, more stringent GHG emission limits, the Pavley Phase 2 rules. California's requirements would reduce California GHG emissions by 31.7 million tons of CO_2e ($MTCO_2e$) in calendar year 2020, 45 percent more than the 21.9 MMTs reductions under the federal rules in that year. Since the California rules are significantly more effective at reducing GHGs than the federal CAFE (fuel economy) program, they also result in better fuel efficiency – roughly 43 miles per gallon (mpg) in 2020 for the California vehicle fleet as compared to the new CAFE standard of 35 mpg.

Executive Order S-3-05

Executive Order S-3-05 was the precursor to Assembly Bill 32 (AB 32 is described in the next section) and was signed by Governor Schwarzenegger in June 2005. This Executive Order was significant because of its clear declarative statements that climate change poses a threat to the State of California. The Executive Order states that California is "particularly vulnerable" to the impacts of climate change, and that climate change has the potential to reduce Sierra snowpack (a primary source of drinking water), exacerbate existing air quality problems, adversely impact human health, threaten coastal real estate and habitat by causing sea level rise, and impact crop production. The Executive Order also states that "mitigation efforts will be necessary to reduce greenhouse gas emissions."

To address the issues described above, the Executive Order established emission reduction targets for the state: reduce GHG emissions to 2000 levels by 2010, to 1990 levels by 2020 and to 80 percent below 1990 levels by 2050. The Secretary of the California Environmental Protection Agency was named as coordinator for this effort, and the Executive Order required a progress report by January 2006 and biannually thereafter. As a result, the Climate Action Team was created by the California Environmental Protection Agency. The first report from the Climate Act Team was released in March of 2006, which proposed to meet the emissions targets through voluntary compliance and state incentive and regulatory programs.

Currently only the 2020 target has been adopted by the state through legislation (see Assembly Bill 32, below). As a result, all of the impact discussions, mitigation, and strategies are based on meeting the 2020 target, not the longer-term 2050 target.

Assembly Bill 32

In September 2006, AB 32 was signed by Governor Schwarzenegger. AB 32 requires that California GHG emissions be reduced to 1990 levels by the year 2020, just like Executive Order S-3-05.

However, AB 32 is a comprehensive bill that requires the CARB to adopt regulations requiring the reporting and verification of statewide greenhouse gas emissions, and it establishes a schedule of action measures. AB 32 also requires that a list of emission reduction strategies be published to achieve emissions reduction goals.

The following is a list of critical path items incorporated into AB 32 – deadlines that cannot be extended unless the Governor agrees there are "extraordinary circumstances", and then only for one year:

- January 1, 2007: AB 32 goes into effect;
- June 30, 2007: CARB must publish "a list of discrete early action GHG emission reduction measures" (Cal. Health & Safety Code § 38560.5(a)); this list is not just advisory - the measures must be implemented by regulations by 2010;
- January 1, 2008: CARB must establish the 1990 baseline of statewide GHG emissions that will be the cap to be implemented by 2020 (id. at § 38550);
- January 1, 2008: CARB must also adopt regulations requiring the monitoring and annual reporting of GHG emissions from all significant sources (id. at § 38530);
- January 1, 2009: CARB must prepare and approve a "scoping plan" for "achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHG gases by 2020" (id. at § 38561); this scoping plan will be the template for the regulations that will be adopted by 2011;
- January 1, 2010: CARB must "adopt regulations to implement" the list of reduction measures that it publishes by June 30, 2007 (id. at § 38560.5(b));
- January 1, 2011: CARB must adopt regulations establishing "GHG emission limits and emission reduction measures" (id. at § 38562(a)); and
- January 1, 2012: the 2011 regulations must become operative.

The first six critical path items have been completed. AB 32 is in effect and the list of early action measures was adopted by the CARB on June 21, 2007 (Resolution 07-25), and many other measures were added at a hearing on October 25, 2007. The Scoping Plan was adopted on December 11, 2008. On the seventh item, some regulations to establish GHG limits have been adopted, including a cap and trade program adopted in December of 2010.

Senate Bill 375

On September 30, 2008, Senate Bill (SB) 375 was signed by Governor Schwarzenegger. SB 375 combines regional transportation planning with sustainability strategies in order to reduce GHG emissions in California's urbanized areas. Existing law requires each regional transportation planning agency to adopt a Regional Transportation Plan. SB 375 requires that the Regional Transportation Plan must now include a "sustainable communities strategy." To this end, the CARB must provide regional transportation planning agencies with GHG emissions reduction targets by June 30, 2010; these targets were provided and were adopted in September of 2010.

Senate Bill 97 Chapter 185, Statutes of 2007

Senate Bill 97 (SB 97) requires the Office of Planning and Research (OPR) to prepare guidelines to submit to the California Resources Agency regarding feasible mitigation of greenhouse gas emissions or the effects of GHG emissions as required by CEQA. The California Resources Agency is required to

certify and adopt these revisions to the State CEQA Guidelines by January 1, 2010. The Natural Resources Agency adopted the amendments on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

Endangerment Finding

On December 7, 2009, the U.S. EPA made an Endangerment Finding and a Cause or Contribute Finding related to GHG emissions. The U.S. EPA Administrator found that the current and Projected concentrations of CO_2, CH_4, N_2O, HFCs, PFCs, and SF6 in the atmosphere threaten the public health and welfare of current and future generations (Endangerment). The Administrator also found that the combined emissions of these GHG from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare (Cause or Contribute).

State of California Emission Reduction/Adaptation Strategies

Several strategies to reduce vehicle emissions have been identified by the California Environmental Protection Agency's Climate Action Team. These include, but are not limited to, the following:

- **Vehicle Climate Change Standards.** With the passage of AB 1493, Pavley, Chapter 200, Statutes of 2002, California moved to the forefront of reducing vehicle climate change emissions. This bill required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB in September 2004. The CARB analysis of this regulation indicates emissions savings of one $MMTCO_2e$ by 2010 and 30 $MMTCO_2e$ by 2020.

- **Diesel Anti-Idling.** Reduced idling times and the electrification of truck stops can reduce diesel use in trucks by about four percent, with major air quality benefits. In July 2004 the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling. AB 32 analysis indicates that anti-idling measures could reduce climate change emissions by 1.2 $MMTCO_2e$ in 2020.

- **Other New Light Duty Vehicle Technology Improvements.** In September 2004 the CARB approved regulations to reduce climate change emissions from new motor vehicles. The regulations apply to new passenger vehicles and light duty trucks beginning with the 2009 model year. The standards adopted by CARB phase in during the 2009 through 2016 model years. When fully phased in, the near term (2009 – 2012) standards will result in about a 22 percent reduction as compared to the 2002 fleet, and the mid-term (2013 – 2016) standards will result in about a 30 percent reduction. New standards would be adopted to phase in beginning in the 2017 model year (following up on the existing mid-term standards that reach maximum stringency in 2016). Assuming that the new standards call for about a 50 percent reduction, phased in beginning in 2017, this measure would achieve about a four MMT reduction in 2020. The reduction achieved by this measure would significantly increase in subsequent years as clean new vehicles replace older vehicles in the fleet – CARB staff estimate a 2030 reduction of about 27 MMT.

- **Executive Order S-01-07.** This Executive Order was signed by Governor Schwarzenegger on January 18, 2007 and directed the Climate Action Team to determine whether the items in the Order could be established as an early action measure pursuant to AB 32 – which the

Climate Action Team has now done. The Executive Order states that the State of California relies on petroleum-based fuels for 96 percent of its transportation needs, there were more than 24 million motor vehicles registered in California, and statewide gasoline consumption was almost 16 billion gallons in 2005. To address the carbon emitted by this use of fuel, the Executive Order states that a statewide goal must be established to reduce the "Carbon intensity of California's transportation fuels" by at least 10 percent by the year 2020 and that there must be an established Low Carbon Fuel Standard for transportation fuels. The Low Carbon Fuel Standard applies to all "refiners, blenders, producers or importers of transportation fuels in California."

- **California Climate Adaptation Strategy.** In December 2009, the California Resources Agency, in coordination and partnership with multiple other state agencies, released their California Climate Adaptation Strategy. This document summarizes the best known science on climate change impacts in seven specific sectors, including: public health, biodiversity-habitat, ocean & coastal resources, water management, agriculture, forestry, and transportation and energy infrastructure. The strategy provides recommendations on how to manage against threats to these sectors. The strategy is in direct response to Governor Schwarzenegger's November 2008 Executive Order S-13-08 that specifically asked the Natural Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events.

Greenhouse Gas Emissions (VII.) Environmental Checklist and Discussion

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

As previously described in Section 4.7.1 Environmental Setting, the main source of GHG emissions associated with the Proposed Project would be combustion of fossil fuels during construction activities. The construction phase of the Proposed Project is temporary, but would result in GHG emissions from the use of heavy construction equipment and construction-related vehicle trips (KD Anderson 2014a).

Neither the Calaveras County APCD nor the City of Angels Camp has adopted quantitative significance thresholds for GHG emissions. Therefore, the threshold used in this IS/MND is based on a threshold developed by CAPCOA. The CAPCOA document CEQA & Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act presents a 900 metric ton per year (MT/yr) of CO_2e screening threshold. The CAPCOA threshold is considered a conservative threshold set at a level to "capture" or define 90 percent of land use development Projects as significant (KD Anderson 2014a).

The amount of Project-related GHG emissions was calculated using the CalEEMod emissions model. CalEEMod is a land use emissions computer model designed to provide a platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use Projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use (KD Anderson 2014a).

The amount of construction activity and the construction schedule used in the analysis of construction-related emissions has been previously described in Section 2 Project Description. Output files from the CalEEMod model are presented in Appendix A.

Short-Term Construction-Related Impacts

The Proposed Project would result in 293.43 MT/yr of construction-related CO_2e emissions in 2016, and 91.65 MT/yr of CO_2e emissions in 2017. The total for the 14-month long construction period would be 385.08 MT. All of these values are less than the 900 MT/yr of CO_2e significance threshold. Therefore, the impact of the Proposed Project on construction-related GHG emissions is considered less than significant and no mitigation measures are required.

Long-Term Operational Impacts

As previously described in Section 4.3.1 Environmental Setting, the Proposed Project would result in the relocation of the existing FFS Auto Shop from the San Andreas area to the Altaville area. This would result in relocation of GHG emissions associated with operation of the facility. Because the Proposed Project would relocate operational emissions, but not result in a net change in the amount of emissions generated, the impact of the Proposed Project on long-term operational GHG emissions is considered to be less than significant. No mitigation measures are required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

As previously stated in Section 4.7.1 Environmental Setting, pursuant to AB 32, CARB prepared and adopted the Climate Change Scoping Plan. The Climate Change Scoping Plan outlines the State's strategy to achieve the year 2020 GHG emissions limits specified in AB 32. The Climate Change Scoping Plan includes a comprehensive set of actions designed to reduce overall GHG emissions in California. However, CARB has not yet determined what amount of GHG reductions it recommends from local government operations. The Climate Change Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined (KD Anderson 2014a).

As previously described in item a), neither the Calaveras County APCD nor the City of Angels Camp has adopted quantitative significance thresholds for GHG emissions. Therefore, the threshold used in this IS/MND is based on a threshold developed by CAPCOA (KD Anderson 2014a). The Proposed Project would not exceed the 900 MT/yr of CO_2e significance threshold. The Proposed Project would relocate long-term operation GHG emissions and would not result in a net change in the amount of emissions generated.

The Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This impact is considered to be less than significant.

4.8 Hazards and Hazardous Materials

4.8.1 Environmental Setting

A Phase I Environmental Site Assessment (ESA) and a Hazardous Building Materials Survey were prepared by Ninyo & Moore (Ninyo & Moore 2014 and 2013, Appendices G & H) for the Altaville Forest Fire Station Project to identify recognized environmental conditions (REC) associated with the Property. As defined in the American Society of Testing Materials (ASTM) Standard Practice E 1527-05, a REC is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property" (Ninyo & Moore 2014).

The Proposed Project is a new five-bay Auto Shop/Welding Shop with vehicle wash rack and Generator/Pump building for the Altaville FFS to replace the existing facility at the San Andreas FFS. As previously mentioned in Section 4.1.1 Environmental Setting, the Project site is designated as Public (P) by the *Angels Camp 2020 General Plan* (City of Angels Camp 2009).

As previously described in Section 2.1 Project Background, the original Altaville FFS was replaced in order to fix operational constraints, which included outdated buildings that were not compliant with the American's with Disabilities Act (ADA) standards. The Altaville FFS Replacement Project consisted of demolition of the existing FFS facilities and construction of a new one-engine facility with a ten-bed barrack, a two-bay apparatus building, a bulldozer facility, and a storage building with two new 2,000 gallon fuel storage tanks (CAL FIRE 2002).

The state agencies overseeing regulatory controls on hazardous materials are the California Environmental Protection Agency (Cal-EPA) and the Office of Emergency Services (OES). The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) oversee and enforce regulations for hazardous materials transport (CAL FIRE 2002).

The Department of Toxic substances Control (DTSC), a department within Cal-EPA, is the responsible authority for regulating hazardous materials and enforcement (CAL FIRE 2002). According to the DTSC, auto shops generally produce several kinds of potentially hazardous wastes, including waste solvent and coatings; contaminated rags, wipes, and absorbents; empty contains, used oil, waste antifreeze, sanding or grinding dusts, and contaminated wash waters (DTSC 2013). Hazardous wastes, regulated by the federal government under the Resource Conservation and Recovery Act (RCRA), are commonly referred to as RCRA wastes. Hazardous wastes regulated under State of California laws referred to as "non-RCRA" or "California only" wastes, which include certain metals such as copper, nickel, and zinc that are not regulated under RCRA (DTSC 2013). The Proposed Project will comply with federal and state regulations to manage hazardous waste.

During the hazardous building materials survey, two facilities, a permanent storage shed and a fire pump test pit, at the Altaville FFS were sampled for asbestos and lead-based paint, and surveyed for other miscellaneous hazardous building materials. This survey was conducted with the intention of demolishing these two facilities. At the time of this initial study, only demolition of the fire pump test pit would be necessary. Based on analytical results associated with this sampling survey, asbestos-containing materials were not found. However, lead-containing material was found at the fire pump test pit facility. Additionally, this survey did not include a subsurface assessment, potentially resulting in the discovery of asbestos containing material (ACM) beneath the Project area. The results and scope of the survey can be found in the Hazardous Building Materials Survey in Appendix H.

The Phase I ESA for the Altaville FFS Project (Appendix G) site found three RECs associated with the property. They consist of an active leaking underground storage tank (LUST) site with groundwater impacted by MTBE, benzene, and TPHD; buried metallic debris/waste and a burn pile potentially impacting site soil. The Phase I ESA also identified soils that could contain NOA and recommended soil testing. Soil testing during the site-specific geotechnical investigation did not identify a NOA hazard on the site (GECON 2014). This property is included in the State's leaking underground storage tank (LUST) database. In 1998, a leak was discovered during the removal of two 750-gallon USTs containing gasoline and diesel fuel. Soil samples confirmed the contamination. As result, this property has undergone an extensive groundwater monitoring program between 2003 to present day. In October 2013, a work plan to conduct a soil vapor survey and to destroy all six groundwater monitoring wells was submitted. The Central Valley RWQCB approved the soil vapor portion of the work plan but did not approve the request to destroy the groundwater monitoring wells. The soil vapor results are due February 28, 2014 and a formal closure request for the site is due March 30, 2014 to the Central Valley RWQCB. Based on the groundwater monitoring, and cleanup results, there is no significant threat to groundwater resources. However, based on the vapor encroachment screening matrix (VESM) completed in January 2013, there is potential for a vapor encroachment condition (VEC) from the presence of petroleum hydrocarbons in the groundwater within 30 feet of a building. The next VESM will be available in February 2014. (Ninyo & Moore 2014)

Additional site features observed during the Phase I ESA include a combined 500-gallon gasoline and 1000-gallon diesel above ground storage tank (AST), a 15-foot deep fire-pump test pit, a pad mounted transformer, two pole-mounted transformers, and floor drains in the dozer building and apparatus building which drain to a sand/oil separator. Records indicate hazardous materials and waste are temporarily stored on-site, with the waste being removed every 30 days. No leaks, stains, or odors were observed associated with these features, storage, and materials. (Ninyo & Moore 2014)

Hazards and Hazardous Materials (VIII.)Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐

As previously described in 4.8.1 Environmental Setting, auto shops generally use several kinds of potentially hazardous materials (see list above) and generate hazardous waste related to vehicle and equipment maintenance. The Proposed Project would include the transport, short-term storage and use, and disposal of hazardous materials related to construction, demolition, and the operation and maintenance of the new facilities. BMPs stipulating proper storage of hazardous materials and vehicle fueling would be implemented during construction and demolition as part of the Stormwater Pollution Prevention Plan (SWPPP) and general construction permit. CAL FIRE and its contractors shall follow all applicable federal, state, and local regulations, including California Occupational Health and Safety Administration (Cal-OSHA), California Fire Code, and National Fire Protection Association (NFPA) requirements, and manufacturer instructions for the management, storage, and handling of hazardous materials and hazardous waste for the construction, demolition, and operation and maintenance of the Proposed Project. Impacts from the routine transport, use, and disposal of hazardous materials during the Proposed Project demolition, construction, and operation and maintenance would be less than significant with implementation of mitigation measures HM-1, HM-2, HM-3, and HM-4.

Mitigation Measures

HM-1 Hazardous Building Materials

Prior to demolition of the fire pump test pit, all hazardous materials associated with the facility shall be removed by a qualified contractor and disposed of in accordance with federal, state, and local regulations.

HM-2 Phase II ESA

Prior to Project initiation, a Phase II ESA shall be conducted to determine if the buried metal debris/waste and burn pile on the southern portion of the site have resulted in a release of hazardous materials. If the Phase II ESA determines that a release of hazardous materials has occurred, all requirements for remediation shall be implemented.

HM-3 LUST Cleanup Area

A. Prior to grading activities within the LUST cleanup area (contamination north of MW-5):

B. Continue to pursue closure of the site LUST case through monitored natural attenuation.

C. Review the results of the forthcoming soil vapor survey to determine if the potential VEC identified has impacted the site.

D. All monitoring wells associated with the Altaville FFS site shall be protected and avoided until a final closure letter from the Central Valley RWQCB is received.

HM-4 Avoidance and Minimization Measures for Personnel

A. All personnel working on the Project site shall be informed of the possibility that contaminated soil, soil vapor, and/or groundwater may be encountered on the job site.

B. If previously unknown contaminated soils are encountered in the field during demolition or grading, ground disturbance activities in the vicinity of the discovery shall cease until a qualified hazardous materials management specialist can assess the potentially hazardous substances and, if necessary, develop appropriate management measures in coordination with the appropriate regulatory agencies.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project 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?	☐	☒	☐	☐

Hazardous materials, such as diesel fuel and oil, would be used during construction and operation and maintenance at the Project site. The release of any hazardous substance to the environment would be prevented through the implementation of BMPs listed in the SWPPP as required by the NPDES Permit.

As state above in item a), CAL FIRE and contractors would be responsible for disposal of all hazardous waste generated on-site and storage and handling of hazardous substances in accordance with applicable federal, state, and local regulations. Project demolition, construction, and operation and maintenance would be less than significant with implementation of mitigation measures HM-1, HM-2, HM-3, and HM-4.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

Hazardous materials, substances, or waste would be handled consistent with federal, state, and local regulations. Bret Harte High School is the closest school to the Project site, located approximately 0.5 mile southeast of the Project site (Google 2012). No handling of hazardous materials, substances, or waste would occur within 0.25 mile of an existing or proposed school. Therefore, no impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project 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?	☐	☒	☐	☐

As previously described in 4.8.1 Environmental Setting, the Project site includes an active leaking underground storage tank (LUST) site that involved groundwater impacted by MTBE, benzene, and TPHd. This site has undergone the cleanup and monitoring process since 2003 and it is anticipated that the last VESM report will be submitted in February 2014 with a closure request submitted in March 2014. Work within the site would not be conducted until a site closure is received from the Central Valley RWQCB, as stated in the mitigation measures. The Proposed Project would be a less than significant hazard to the public, construction workers, and the environment, due to exposure to hazardous materials at this site, with the implementation of Mitigation Measures HM-1, HM-2, HM-3, and HM-4.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒

The Project site is not located within an airport land use plan or within 2 miles of any public airport (City of Angels Camp 2009). The nearest airport is Calaveras County Airport, located approximately 6.5 miles northwest of the Project site. There are five heliports within proximity to the City of Angles Camp. These heliports are located at the following facilities: Hydrox facility, Angels Murphys Arnold Association fields, County Fairgrounds, Bret Harte High School (field), and the local PG&E facility. These heliports are primarily used for medical evacuation and transport and are not considered major noise generators to the City of Angels Camp. The Project would not result in a safety hazard for people residing and working in the Project area (City of Angels Camp 2009). Therefore, no impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒

There are no private airstrips in the vicinity of the Project area (CAL Fire 2002). No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g)	Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

The Proposed Project is a new five-bay Auto Shop/Welding Shop and is not anticipated to generate substantial long-term traffic and would not result in any permanent road closures or affect existing emergency shelters. The Proposed Project would not interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, this impact is considered less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h)	Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

The center of the Project site is characterized by a mixed dirt and gravel surface with a paved road circling the perimeter. The western and southeastern boundaries of the Project site are characterized as blue oak woodland with grassy understory that is regularly disked to prevent fire. The area surrounding the City of Angels Camp is considered a “Very High” fire hazard; however, no land within City limits is designated as a fire hazard area (CAL FIRE 2002). The Proposed Project is being built in support of the Altaville FFS, which maintains on-site fire suppression equipment, including fire-fighting personnel (CAL FIRE 2002). Implementation of the Proposed Project is

expected to result in an overall reduction of the potential for wildland fires due to the increase in paved surfaces and the addition of landscaped areas along the south and southwestern boundaries of the Project site. Risk of loss, injury, or death involving wildland fires would be less than significant.

4.9 Hydrology and Water Quality

4.9.1 Environmental Setting

Regional Hydrology

Three major tributaries from the San Joaquin River are located within Calaveras County: the Calaveras River, the Stanislaus River, and the Mokelumne River. These rivers carry runoff from the western slope of the Sierra Nevada east to west across Calaveras County (Calaveras County 1996). The City of Angels Camp is located within the Upper Stanislaus River watershed (18040010) and Upper Calaveras River watershed (1804001). These watersheds are regulated by the Central Valley Regional Water Quality Control Board (CVRWQCB). According to the State Water Resources Control Board's *2010 Integrated Report (Clean Water Act Section 303 (d) List/305 (d) Report)* the Upper Stanislaus River watershed and Upper Calaveras River watershed are not designated as impaired (SWRCB 2010). The Lower Stanislaus River is listed as impaired due to pesticides, mercury, temperature, and other toxins (U.S. EPA 2010). The primary waterways within the vicinity of the City include Six Mile Creek, Angels Creek, Indian Creek, Greenhorn Creek, Cherokee Creek, Lone Gulch, Utica Ditch, Jupiter Ditch, San Domingo Creek and New Melones Reservoir. Additionally, the City's Water Treatment Plant (WTP), the City's Wastewater Treatment Plant (WWTP), the Union Public Utility District WTP, Ross Reservoir, and Holman Reservoir are all located within the City of Angels Camp (City of Angels Camp 2009).

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP), the Project area is not within a 100-year flood zone (FEMA 2010; City of Angels Camp 2008). There are also several dams in Calaveras County operated by the Northern California Power Agency (NCPA). According to inundation maps prepared for the reservoirs in compliance with the Federal Energy Regulation Commission (FERC), flooding due to dam failure would only occur within the existing Stanislaus River basin without overtopping the river banks and without impacts to the City of Angels Camp (City of Angels Camp 2008).

Site Hydrology and On-Site Drainage

There are two drainage basins delineated by a ridge that enters the City from the northeast and runs about parallel to Murphy's Grade Road, crosses SR 49 at Dogtown Road, and extends southwest across SR 4. The Project area drainage consists of the French Gulch, Cabbage Gulch and Cherokee Creek, which all drain into the Calaveras River via San Domingo Creek (CAL FIRE 2002).

The Altaville FFS property consists of 5.95 acres bound by SR 49 on the northeast, Altaville Historical Schoolhouse and residences on the northwest, private undeveloped land on the south, and a commercial shopping center and SR 4 on the east and southeast (Figure 2. *Project Location*). The Project site is located on the southern half of the Altaville FFS property, oriented northeast to southwest. The Altaville FFS facilities are located adjacent and northeast of the Project site (see Representative Site Photo 1.). The center of the Project site is characterized by a mixed dirt and gravel surface with a paved road circling the perimeter. The majority of the Project site is relatively flat and utilized by CAL FIRE for storage with the exception of the western boundary, which drops sharply approximately 8 to 10 feet and then gradually flattens towards the western boundary of the

property and is comprised primarily of blue oak woodland and a grassy understory, which is regularly mowed/disced for fire prevention (see Representative Site Photos 4 and 5). There are no natural drainages located on-site. Currently, on-site stormwater runoff is directed to the southwestern corner of the property.

Regulatory Framework

State Water Resources Control Board

In 1972, the CWA was amended to prohibit discharge of pollutants to Waters of the U.S. from any point source unless it is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, further amendments to the CWA added Section 402(p), established a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On 16 November 1990, the EPA finalized regulations establishing storm water permit requirements for specific industries. These regulations provide that storm water discharges to Waters of the U.S. from construction Projects with 5 or more acres of soil disturbance are prohibited unless the discharge is in compliance with an NPDES Permit. Further regulations (titled the Phase II Rule) which became final on December 8, 1999 lowered the permitting threshold from 5 acres to 1 acre. While EPA regulations allow two permitting options for storm water discharges (Individual Permits and General Permits), the California State Water Resources Control Board (SWRCB) has elected to adopt only one statewide General Permit that applies to the majority of storm water discharges associated with construction activities. On August 19, 1999, the State Water Board reissued the General Construction Storm Water Permit (Water Quality Order 99-08-DWQ). On December 8, 1999 the State Water Board amended Order 99-08-DWQ to apply to sites as small as one acre (SWRCB 2010).

The latest General Construction Permit (Order No. 2009-0009-DWQ), which the Proposed Project would comply with, was adopted 2 September 2009. Order No. 2009-0009 DWQ created several new significant changes including, formal training requirements, online permitting/Storm Water Pollution Prevention Plan (SWPPP) documentation upload, minimum BMPs, Numeric Action Levels for pH and turbidity, as well as monitoring based on Project risk to sediment loss and threat to receiving waters (SWRCB 2010).

Hydrology and Water Quality (IX.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

The majority of the precipitation for the area occurs during the winter months; however, adverse storm events can also occur outside of winter. During construction of the Proposed Project, impacts to water resources could occur without proper controls to protect water quality and reduce impacts to soil erosion. Soil can be loosened during fill and grading, paving, and tree removal processes. Loosened soils and spills of fluids or fuels from construction vehicles and equipment or miscellaneous construction materials and debris could degrade surface and ground water quality. A heavy rainfall event could cause pollutants to flow off-site and reach nearby surface water drainages, such as the French Gulch, Cabbage Gulch and Cherokee Creek. The Project site and area impacted would be greater than 1 acre, making the Proposed Project subject to the requirements of

the statewide NPDES stormwater permit for construction (Order 98-08-DWQ). A SWPPP listing BMPs to prevent construction pollutants and products from violating water quality standards or waste discharge requirements, would be prepared for the Proposed Project.

All operational activities of the new auto shop are regulated to protect against water contamination. The vehicle wash rack includes a filtration system to filter water and the water is recycled for reuse. Additionally, CAL FIRE would comply with all federal, state, and local regulations regarding the storage of hazardous waste. All stormwater produced on-site would be collected by an on-site interceptor and piped to the on-site retention basin. The retention basin would be located in the southwestern corner of the property and would be approximately 50 feet long, 50 feet wide, and 10 feet deep. The retention basin would collect and retain all stormwater produced on-site and would prevent release of stormwater into downstream drainages. The Proposed Project's drainage plan would be designed by a registered civil engineer to safely retain, detain, and/or convey stormwater runoff. A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒

Domestic water for the Proposed Project would be provided by the existing Altaville FFS facility system. The existing water system connections would be extended to the Auto Shop/Welding Shop and the Generator/Pump building. The extension of the water connection would use the current water supply from surface water (supplied by the City's WTP) and would not require new wells or water infrastructure. The Proposed Project would slightly increase the amount of impervious surfaces on-site; however, the increase is not substantial and would not interfere with groundwater recharge. On-site drainage would be conveyed to a retention basin, which would allow for percolation of surface runoff to groundwater. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project 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 result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐

The Proposed Project would require grading and paving on-site to accommodate the new auto shop and associated facilities. The majority of the Project site is flat except for a small portion along the western boundary where the slope drops approximately 8 to 10 feet. The western part of the Project

site would require additional fill and grading to make the slope level with the rest of the Project site. The entire Project site would be paved except for a landscaped area along the south and southwestern boundary. The Proposed Project would cause a slight increase in impervious surfaces compared to the existing ground conditions of compacted dirt, gravel and paving. The existing on-site drainage results in excess stormwater runoff being directed to the southwestern corner of the property. The Proposed Project would potentially alter the natural course of drainage on-site due to grading and paving and placement of structures. As described in item a), a retention basin would be constructed in the southwestern corner of the property where stormwater is currently directed. All stormwater produced on-site would be piped to the retention basin and retained with no stormwater being released offsite. In addition, a SWPPP would provide BMPs required during construction to prevent erosion and siltation and also BMPs to be incorporated after Project completion to prevent future erosion and siltation. Implementation of proper temporary and long-term erosion and sediment control BMPs would minimize potential erosion or siltation on or off-site both during and following construction. Thus, a less than significant impact would occur.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐

As mentioned in item c) the Proposed Project would increase the amount of impervious surfaces on-site and would potentially alter the current on-site drainage. As discussed in item a) a drainage plan for the Proposed Project would be designed by a registered civil engineer to safely retain, detain, and/or convey stormwater runoff. In addition, a retention basin would be constructed in the southwestern corner of the property to collect all stormwater runoff produced on-site and prevent it from draining off-site. Implementation of BMPs during construction and the on-site drainage infrastructure, including a retention basin, would prevent the increase of surface runoff from resulting in flooding on- or off-site. A less then significant impact would occur.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the Project 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?	☐	☐	☒	☐

As mentioned in items c) and d), the Proposed Project would slightly increase the amount of impervious surfaces on-site and could increase the amount of runoff from the Project site. Implementation of BMPs and installation of on-site drainage infrastructure, including a retention basin, would increase the site's capacity to control runoff and prevent stormwater runoff from going off-site. Wastewater produced during operation of the vehicle wash rack would be recycled through a filtration system and water would be recycled for reuse. As stated in item a), all stormwater would be piped to the retention basin and retained to prevent release of runoff off-site. Therefore, the

Proposed Project would not exceed the capacity of existing stormwater drainage systems. A less than significant impact would occur.

f) Would the Project otherwise substantially degrade water quality?	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
	☐	☐	☒	☐

Please see the answer to item a) of the Hazards and Hazardous Materials (VIII) Environmental Checklist and Discussion regarding potential hazardous substances used on-site. The Proposed Project would follow all state and federal regulations regarding discharge of effluent and would not discharge any materials or substances that may degrade water quality into any water bodies. Additionally, a retention basin would be constructed on-site to capture and store any stormwater runoff and would prevent stormwater from entering existing surface drainage features. A less than significant impact would occur.

g) Would the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
	☐	☐	☐	☒

As described in Section 4.9.1 Environmental Setting, the Proposed Project is not located within a 100-year flood hazard area (FEMA 2010; City of Angels Camp 2008). There is no housing involved as part of the Proposed Project. No impact would occur.

h) Would the Project place within a 100-year flood hazard area structures that would impede or redirect flood flows?	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	☐	☐	☐	☒

As described in item g), the Proposed Project is not located within a 100-year flood hazard area (FEMA 2010; City of Angels Camp 2008). Therefore, no structures would impede or redirect flood flows. No impact would occur.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
i)	Would the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒

As described in Section 4.9.1 Environmental Setting, inundation maps in compliance with FERC have been prepared for the reservoirs located within Calaveras County. Flooding due to dam failure would only occur within the Stanislaus River Basin and would not affect the City of Angels Camp (City of Angels Camp 2008). Therefore, the Proposed Project would not be at risk to flooding as a result of the failure of a levee or dam. No impact would occur.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
j)	Would the Project be subject to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

The Proposed Project is located inland and not within a seiche, tsunami, or mudflow hazard area. Therefore, the Proposed Project would not be subject to inundation by seiche, tsunami, or mudflow. No impact would occur.

4.10 Land Use and Planning

4.10.1 Environmental Setting

The Proposed Project is located at the Altaville FFS in the City of Angels Camp, Calaveras County, California. The Altaville FFS is located on land owned by CAL FIRE. The State of California and state-owned land are not subject to local land use and zoning regulations; however, the state is subject to the requirement under CEQA to assess Project-related impacts that may occur as a result of conflicts between existing and proposed land uses. The Proposed Project was reviewed to determine consistency with the City of Angels Camp's plans and policies.

The Project site is designated as Public by the *City of Angels Camp 2020 General Plan* (City of Angels Camp 2009) and zoned Public Service under *Angels Camp Municipal Code Title 17: Zoning* (City of Angels Camp 2012). The land use designations surrounding the Project site include Commercial Shopping and High Density Residential to the northeast, Public, Single Family Residential and High Density Residential to the northwest, and Commercial Shopping to the south and southeast (City of Angels Camp 2011). The surrounding land uses are discussed in detail in Section 1.3 *Surrounding Land Uses/Environmental Setting* and are depicted in Figure 2. *Project Location*.

Land Use and Planning (X.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project physically divide an established community?	☐	☐	☐	☒

CAL FIRE's property is comprised of 5.95 acres, including the existing Altaville FFS. The Altaville FFS is approximately 2 miles northwest of the City's center. The Proposed Project would be located southwest of the FFS within CAL FIRE's property boundary. The Project site is designated as Public and the surrounding land use designations consist of Commercial Shopping, High Density Residential, Public, and Single Family Residential. The Proposed Project would occur entirely on CAL FIRE property, which is designated for public use. Therefore, the Proposed Project would not physically divide an established community. No impact would occur.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

As described previously in Section 4.10.1 Environmental Setting, the Altaville FFS is located within the Public land use designation under the *City of Angels Camp 2020 General Plan* (City of Angels Camp 2009) and zoned as Public Service under the *Angels Camp Municipal Code Title 17: Zoning* (City of Angels Camp 2012). The Proposed Project would be located adjacent to the existing Altaville FFS within the CAL FIRE property boundary. The Proposed Project would provide maintenance and repair for CAL FIRE's fire engines and vehicles and is consistent with the Altaville FFS facilities function to provide fire service to the surrounding community.

The Proposed Project would be consistent with the Public land use designation and Public Service zoning designation and would not conflict with any applicable land use plan, policy, or regulation. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

There is no applicable habitat conservation plan (HCP) or natural community conservation plan (NCCP) for the Project area (CDFW 2013; GPO 2013). The Proposed Project would not conflict with any HCP or NCCP. No impact would occur.

4.11 Mineral Resources

4.11.1 Environmental Setting

The Proposed Project is located in the northwest portion of the City of Angels Camp, Calaveras County, California. The Project site is within a general region known as the Mother lode where numerous quartz veins and gold ore bodies are known to exist. Historically, gold was abundantly available within the Angels Camp area, as evidenced by the numerous mines in the area (CAL FIRE 2002). The minerals that have been commercially extracted within the City of Angels Camp area included chromite, talc, gold (lode and placer), sand and gravel, base stone, silica, manganese, and limestone (City of Angels Camp 2009). The Angels Camp area still may possess mineral resources of commercial value. However, mineral rights are owned separately from surface property rights.

According to the *Angels Camp 2020 General Plan*, California Geological Survey anticipates additional evaluations and classifications of mineral resource values within the county, including Angels Camp (City of Angels Camp 2009). The area outside of the city boundary is classified as Mineral Resource Area MRA-2A (lands that are being, or have been, intensively mined, and/or that have promise of further mineral production) (Calaveras County 1996).

The Project site is within the City boundary and mineral resources have not been evaluated, and at this time, no mineral resource extraction is being conducted within the City.

Mineral Resources (XI.) Environmental Checklist and Discussion

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the Project 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?	☐	☐	☐	☒

The Project site has not been mined nor is it zoned for this activity (Calaveras County 1996). The surrounding land uses are residential and commercial and would preclude any resource extraction activities. Therefore, no impact would occur.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project 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?	☐	☐	☐	☒

The Project site is not located within a current locally important mineral resource recovery site and it has not been historically mined (Calaveras County 1996). No impact would occur.

4.12 Noise

4.12.1 Environmental Setting

A Noise Assessment was completed for the Proposed Project by j.c. brennan & associates, Inc. (j.c. brennan 2014; Appendix E). The Noise Assessment evaluated the Proposed Project's potential to produce noise related impacts and the information provided in the assessment is summarized below.

Noise Background

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dBA. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment (j.c. brennan 2014).

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise (j.c. brennan 2014).

The day/night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment. Table 4 lists several examples of maximum noise levels associated with common noise sources.

Table 4. Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: j.c. brennan 2014

Effects of Noise on People

The effects of noise on people can be placed in three categories:

1. Subjective effects of annoyance, nuisance, and dissatisfaction,
2. Interference with activities such as speech, sleep, and learning, and
3. Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it (j.c. brennan 2014).

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise—including stationary mobile sources such as idling vehicles—attenuate (lessen) at a rate of approximately 6 dBA per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate (j.c. brennan 2014).

Determination of a Significant Increase in Noise Levels

Table 5 is based upon recommendations made in August 1992 by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been asserted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the Ldn (j.c. brennan 2014).

Based upon the Table 5 criteria, an increase in the traffic noise level of 1.5 dB or more would be significant where the ambient noise level exceeds 65 dB Ldn. The rationale for the Table 5 criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a Project is sufficient to cause significant annoyance (j.c. brennan 2014).

Table 5. Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, L_{dn} /CNEL	Increase Required for Significant Impact
<60 dBA	+5.0 dB or more
60-65 dBA	+3.0 dB or more
>65 dBA	+1.5 dB or more

Source: j.c. brennan 2014

City of Angels Camp General Plan Noise Element (Goal 5.A)

The Goals and Policies of the Angels Camp General Plan Noise Element establish criteria for new commercial or industrial development. The following are the goals and policies from the Noise Element which are relevant to the Proposed Project:

Goal 5.A Maintain or reduce noise levels throughout the city as necessary to achieve compatibility between differing land uses and to maintain the city's peaceful, rural community atmosphere.

Policies

5.A.1 Develop uniform, cost-effective and feasible standards for consistently and fairly mitigating temporary and permanent noise impacts associated with new development.

5.A.2 Continue to identify and implement solutions for resolving noise complaints received within Angels Camp.

5.A.3 Separate noise-generating and noise-sensitive land uses to maximum extent feasible.

5.A.4 Support alternative transportation routes, alternative transportation methods and other special programs aimed at reducing excessive noise levels.

Angels Camp Nuisance Ordinance (8.24.11)

Angels Camp does not have a specific Noise Ordinance. However, the following section could apply to noise disturbances.

8.24.11 - Annoying, offensive or injurious things.

Every act or thing which necessarily and naturally produces annoyance, offense or injury to the public is a nuisance. (Ord. 12 §1(11), 1912)

Existing Noise Environment

The existing noise environment in the Project vicinity can be described as a rural area with relatively low ambient noise levels. The primary noise source in the Project vicinity is roadway traffic on SR 49, and activities associated with the CVS Drug Store adjacent to the Project site. Noise sources associated with the CVS Drug Store would include loading dock, parking lot activities and general site maintenance (j.c. brennan 2014).

To quantify the existing ambient noise environment in the Project vicinity a continuous noise level measurement was conducted on the Project site on October 17-18, 2013. The noise level measurement survey results are provided in Table 6 below.

Table 6. Summary of Existing Background Noise Measurement Data

Site	Location	CNEL	Average Measured Hourly Noise Levels, dB					
			Daytime (7am-10pm)			Nighttime (10pm-7am)		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
Continuous (24-hour) Noise Level Measurements								
LT-1	Southwest corner of Project site. At single-family residential	49.3	44.4	41.6	62.9	41.5	37.5	55.0

Source: j.c. brennan 2014

The sound level meter was programmed to collect hourly noise level intervals during the survey. The maximum value (Lmax) represents the highest noise level measured during an interval. The average value (Leq) represents the energy average of all of the noise measured during an interval. The median value (L50) represents the sound level exceeded 50 percent of the time during an interval (j.c. brennan 2014).

Noise (XII.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐

During the construction phases of the Proposed Project, noise from construction activities would add to the noise environment in the immediate Project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in Table 7, ranging from 78 to 85 dBA at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant Project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

Table 7. Construction Equipment Noise

Type of Equipment	Maximum Level, dBA at 50 feet
Backhoe	78
Compactor	83
Compactor	80
Dozer	82
Dump Truck	76
Excavator	81
Paver	85
Grader	85
Roller	80
Trencher	81

Source: j.c. brennan 2014

The Federal Highway Administration Construction Noise Model (RCNM) was used to determine the construction noise impacts for the Proposed Project. Based upon the results of the Construction Noise Model, the predicted overall noise levels are shown in Table 8 (j.c. brennan 2014).

Table 8. Predicted Construction Noise Levels (Worst-Case Period)

Phase	Equipment List	Estimated Hourly Sound Levels @ 50 feet L_{eq} / L_{max} (dBA)
Site Preparation / Grading Phase	Excavators (1) Back hoes (2) Riding compactors (2) Hand held portable compactors (2) Grader (1) Dump truck (1) Water truck (1)	**Total: 86.2 dBA L_{eq} - 85.0 dBA L_{max}**
Construction of Structures Phase	15-foot lifts (2) 20-ton crane (1) Fork lift (1) Water truck (1)	**Total: 80. 6dBA L_{eq} – 77.1 dBA L_{max}**

Source: j.c. brennan 2014

Construction of the Proposed Project may generate exterior noise levels exceeding 65 dBA Leq at the adjacent residences located approximately 100 feet west of the Project site. Based upon a typical construction work schedule of 7:00 a.m. to 5:00 p.m., the CNEL for construction activity would be approximately 3 dB less, or 62 dB CNEL. This would exceed the City's 60 dB CNEL exterior noise level standard. Daytime construction activity is typically exempt from local regulation. However, based on the existing low ambient noise measured at the adjacent residential uses, construction noise control measures should be implemented in order to reduce the potential for annoyance to these sensitive receptors. Therefore, temporary construction noise impacts would be less than significant with implementation of Mitigation Measure N-1.

Mitigation Measure

N-1 Sensitive Receptors

A. Limit construction to between the hours of 8:00 a.m. and 8:00 p.m. on weekdays;

B. Allow exceptions to the specified construction hours only for construction emergencies and when requested by the City of Angels Camp;

C. During construction, temporary sound barriers shall be used to shield residences located along the northwestern boundary of the project site from direct line of sight to equipment.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the Project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Vibration criteria developed by Caltrans indicate that the threshold for damage to structures ranges from 2 to 6 in/sec. One-half this minimum threshold or 1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v (j.c. brennan 2014). Table 9 describes the vibration levels for varying construction equipment that would be used during construction.

Table 9. Typical Construction Equipment Vibration Levels

Type of Equipment	Peak Particle Velocity @ 25 feet (inches/second)	Peak Particle Velocity @ 50 feet (inches/second)	Peak Particle Velocity @ 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210	0.074	0.026

Source: j.c. brennan 2014

Table 9 indicates that construction vibration levels anticipated for the Proposed Project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☒	☐	☐

Typical noise sources associated with the new auto shop would include pneumatic air wrenches, compressors, impact tools, grinders, and panel cutters. In addition, the Proposed Project may add eight to ten trips through the SR 49 access during typical commute hours. This represents a roughly 1 percent increase from the current volume on SR 49 in this area. The Proposed Project would not contribute to a substantial increase in traffic noise levels on the adjacent roadways. SR 49 at the Project site carries approximately 8,200 vehicles per day. The Proposed Project would have to contribute more than 3,000 vehicles per day to cause an increase of 1.5 dB in traffic noise from SR 49. The Proposed Project's contribution to traffic on SR 49 would be substantially less than 3,000 vehicles per day. Therefore, the Proposed Project is not predicted to substantially increase traffic noise levels.

The noise levels associated with the new auto shop were evaluating using noise measurement data collected at an existing auto shop in Grass Valley, California. Noise levels for the wash rack were collected at an auto shop in Sacramento, California and included the use of a high pressure spray rig (j.c. brennan 2014; Appendix E). The center of the proposed auto shop bays would be located approximately 180 feet from the nearest residential property line to the north. The center of the proposed wash rack would be located approximately 110 feet from the nearest residential property line to the north. Based on the data collected, Project-related noise levels are predicted to be 59 dBA Leq at the nearest residential property line.

The City of Angels Camp establishes a CNEL noise level standard of 60 dB for noise-sensitive uses. In order to calculate the Project-related CNEL noise level, the proposed hours of operation for the Proposed Project must be accounted for with nighttime and evening penalties applied for activities occurring during these hours. Taking into account proposed hours, typical auto shop operations are predicted to generate exterior noise levels of 54.2 dB CNEL at the nearest residential property line. This level would comply with the City of Angels Camp exterior noise level standard of 60 dB CNEL. Based upon the existing measured ambient noise level of 49.3 dB CNEL, the Proposed Project would result in an increased ambient noise level of 4.9 dB CNEL. This would comply with the FICON substantial increase criteria of 5 dB where existing ambient noise levels are less than 60 dB (see Section 4.12.1 Environmental Setting Table 5).

In the event of an emergency situation, the auto shop could operate 24 hours a day for the duration of the emergency. 24-hour operations are predicted to cause an exceedance of the City of Angels Camp 60 dB CNEL exterior noise level standard. Additionally, the Project-generated noise is predicted to cause an increase in ambient noise levels of 12.8 dB CNEL under the 24-hour operations scenario. This would also exceed the FICON criteria of 5 dB (see section 4.12.1 Environmental Setting Table 5). Implementation of Mitigation Measure N-2 would reduce impacts to ambient noise conditions associated with 24-hour operations to a less than significant level.

Thus, implementation of Mitigation Measure N-2 would reduce impacts to ambient noise conditions to a less than significant level.

Mitigation Measure

N-2 Noise Barrier

An 8-foot tall noise barrier shall be constructed to shield the vehicle wash rack. The location of the barrier shall be the same as recommended in the Noise Assessment prepared for the *Altaville Forest Fire Station Auto Shop Replacement Project Administrative Draft Initial Study and Mitigated Negative Declaration*. The noise barrier shall be constructed of a masonry type material, such as CMU block or concrete panels. Wood is not recommended for use as a noise barrier material.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☒	☐	☐

Construction of the Proposed Project would result in a temporary increase in ambient noise levels in the Project vicinity. However, as discussed under item a), construction would be temporary and only occur during daytime hours. Additionally, the implementation of Mitigation Measure N-1 would reduce impacts associated with a temporary increase in ambient noise levels to be less than significant. A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e)	For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

As described in Section 4.8 Hazards and Hazardous Materials (VIII) Environmental Checklist and Discussion item e), the Project site is not located within an airport land use plan or within 2 miles of a public airport (City of Angels Camp 2009). The nearest airport is Calaveras County Airport, located approximately 6.5 miles northwest of the Project site. There are five heliports within and in proximity to the City of Angles Camp. These heliports are located at the following facilities: Hydrox facility, Angels Murphys Arnold Association fields, County Fairgrounds, Bret Harte High School (field), and the local PG& E facility. The Proposed Project would not expose people residing or working in the Project area to excessive noise levels. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

As described in Section 4.8 Hazardous and Hazardous Materials (VIII) Environmental Checklist and Discussion item f), there are no private airstrips in the vicinity of the Project area (CAL Fire 2002). The Proposed Project would not expose people residing or working in the Project area to excessive noise levels. No impact would occur.

4.13 Population and Housing

4.13.1 Environmental Setting

The Proposed Project is located at the Altaville FFS in the City of Angels Camp in Calaveras County, California. According to the U.S. 2010 Census, the City of Angels Camp and directly adjacent land is represented by Calaveras County Census Track 1.21 which has a population of 4,463 people. There are 2,253 homes within the Census Track 1.21 and 1,908 of them are occupied (U.S. Census Bureau 2010). Population in the City of Angels Camp is also influenced by non-residents which include: weekday workers, shoppers and visitors (City of Angels Camp 2008).

The Altaville FFS is a seasonal operation; however, there are CAL FIRE personnel on-site year round. On average, the number of employees on-site on a daily basis ranges from three to twenty employees. The new auto shop would require eight to nine additional employees to be relocated from the San Andreas FFS to the Altaville FFS.

(XIII.) Environmental Checklist and Discussion

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

The Proposed Project does not involve residential development. The Proposed Project would replace the existing facility at the San Andreas FFS, located 10 miles north of the Altaville FFS, with a five-bay Auto Shop/Welding with a vehicle wash rack and Generator/Pump building located on the southern half of the Altaville FFS property. Upon completion of the Proposed Project, the existing auto shop would be dismantled and used for CAL FIRE storage. There would be eight to nine personnel from San Andreas FFS auto shop relocated to work at the new auto shop; however, no new employees would be hired. The proposed auto shop would be an addition to the Altaville FFS and does not involve the extension of roads or other infrastructure and would not directly or indirectly induce population growth. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

The Proposed Project is located at the existing Altaville FFS within CAL FIRE's property boundary. The Project site would not extend beyond the property boundary and would not displace any existing housing. No impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

As mentioned in item c) the Proposed Project is located at the existing Altaville FFS within CAL FIRE's property boundary. Implementation of the Proposed Project would not displace any people. No impact would occur.

4.14 Public Services

4.14.1 Environmental Setting

Police Services

The Altaville FFS provides its own security through the presence of on-site personnel at all times. Depending on the nature of an incident, the City of Angels Camp Police Department may respond to incidents occurring at the Altaville FFS (Truelock 2013).

Police services for the City are provided by the Angels Camp Police Department. The Angels Camp Police Department is located at 200 Monte Verde Street, Angels Camp, California 95222, approximately 0.25 mile south of the Project site. The police department's service area includes all of the area within the City limits. The police department also has a mutual aid agreement with the Calaveras County Sheriff to provide service to areas within Calaveras County near the City of Angels Camp (City of Angels Camp 2009).

Fire Services

The Proposed Project is located at the Altaville FFS operated by CAL FIRE (CAL FIRE 2012). CAL FIRE maintains facilities within the City limits and works under a mutual aid agreement with the Angels Camp Fire Department to provide fire protection to the City of Angels Camp. The Altaville FFS is a seasonal operation; however, CAL FIRE personnel are on-site year round. On average, the number of employees on-site on a daily basis ranges from 3 to 20 employees (Truelock 2013).

Fire services for the City of Angels Camp are also provided by the Angels Camp Fire Department and the Altaville Melones Fire District. The Angels Camp Fire Department has two fire stations. Fire station 2 is approximately 0.25 miles south of the Project site and is located within the same building as the Angels Camp Police Department at 200 Monte Verde Street, Angels Camp, California 95222. The fire department responds to calls within the City limits and through a mutual aid agreement provides aid to Altaville Melones, Murphys and San Andreas Fire Districts (City of Angels Camp 2009).

Schools

There are several public and private schools located within 1 mile of the Project site. Bret Hart Union High School is located approximately 0.5 mile southeast, Little Angels Preschool is located approximately 0.75 mile south, Mark Twain Elementary School and Calaveras Head Start Preschool are located at the same location approximately 1 mile south, and St. Patrick's Catholic Church has an education program and is located approximately 1 mile southeast of the Project site. There are also several independent schools located at various locations (City of Angels Camp 2009).

Parks

There are three City-owned park and recreation facilities within the City limits. These parks include Gateway Park approximately 1 mile south, Utica Park approximately 1.5 miles southeast, and Tryon Park approximately 1.6 miles southeast. Additional parks and recreational facilities are discussed in Section 4.15 Recreation, Section 4.15.1 Environmental Setting.

Other Public Facilities

There are several other public facilities located within close proximity to the Project site. As discussed in Section 2.1 Project Background, the historic Altaville Schoolhouse was relocated from the CAL FIRE property in 1983, and is now located adjacent to the property on the north. Other public facilities located near the Project site include the Angels Camp Medical Clinic approximately 0.4 mile southeast, the Altaville Post Office approximately 0.60 mile southeast, the Calaveras County Angels Branch Library approximately 0.80 mile southeast, and the Angels Camp Museum Park approximately 1 mile southeast (City of Angels Camp 2009).

Public Services (XIV.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: • Fire Protection? • Police Protection? • Schools? • Parks? • Other Public Facilities?	☐	☐	☐	☒

Fire Protection

The Proposed Project would not require additional fire protection within the City of Angels Camp. The Proposed Project would be located adjacent to the Altaville FFS on the same property, and fire service for the auto shop would be provided by the FFS. Construction, operations, and maintenance

of the Proposed Project would not impact the Altaville FFS's fire service for the City of Angels Camp. No impact would occur.

Police Protection

The Altaville FFS has CAL FIRE personnel on-site 24 hours a day 7 days a week. The on-site personnel would maintain security for the Altaville FFS and the new auto shop. The Proposed Project would be an addition to the Altaville FFS but would not be expected to increase the need for police services within the City of Angels Camp. No impact would occur.

Schools

The Proposed Project includes the construction of a five-bay Auto Shop/Welding Shop with vehicle wash rack and Generator/Pump building for the Altaville FFS to and does not involve residential uses. The Proposed Project would not induce population growth and require an additional need for school expansion. No impact would occur.

Parks

As mentioned above, the Proposed Project does not involve residential uses and would not induce population growth. The Proposed Project would not displace an existing park and would not require the construction of additional park facilities. No impact would occur.

Other Public Facilities

As mentioned above, the Proposed Project does not involve residential uses and would not induce population growth. The Proposed Project would not increase use of existing public facilities in the area because it would not promote an increase in population. No impact would occur.

4.15 Recreation

4.15.1 Environmental Setting

The City of Angels Camp has several park and recreational facilities within the City limits for public use, and there are several parks and recreational facilities located within 2 miles of the Proposed Project. Park and recreational facilities owned and operated by the City of Angels Camp within the vicinity of the Proposed Project include Gateway Park located approximately 1 mile south, Utica Park located approximately 1.5 miles southeast, Tryon Park located approximately 1.6 miles southeast, and Angels Camp Museum Park located approximately 1 mile southeast (City of Angels Camp 2009). Non-city-owned park and recreation facilities within the vicinity of the Proposed Project include Greenhorn Creek located approximately 2 miles south, Worldmark the Club at Angels Camp located approximately 1.2 miles south, Veterans Park located approximately 1.5 miles southeast, and Copello (AMA) Park approximately 0.7 miles northwest. There are two schools located within 1 mile of the Proposed Project which have public accessible recreational facilities. Bret Harte Union High School is approximately 0.5 mile southeast and Mark Twain Elementary School is approximately 1 mile southeast (City of Angels Camp 2009).

There are several regional parks and recreational facilities within Calaveras County open for public use and accessible from the City. These include the Stanislaus National Forest, the Calaveras Big Trees State Park, five reservoirs, and an additional 39,500 acres of land administered by the U.S. BLM (Calaveras County 1996).

Recreation (XV.) Environmental Checklist and Discussion

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

The Proposed Project consists of the construction of a five-bay Auto Shop/Welding Shop with vehicle wash rack and Generator/Pump building for the Altaville FFS. The Proposed Project would replace an existing facility located at the San Andreas FFS and would not require additional employees. The Proposed Project does not involve residential uses and would not generate an increase in population; therefore, it would not increase the use of existing neighborhood or regional parks and recreational facilities. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

As stated above in item a), the Proposed Project consists of the construction of five-bay Auto Shop/Welding Shop with vehicle wash rack and Generator/Pump building for the Altaville FFS. The new facilities would not include recreational facilities, involve residential uses, or generate an increase in population. The Proposed Project occurs on CAL FIRE owned property, and is not located within or adjacent to an existing park or recreational facility. Therefore, the Proposed Project would not require the construction or expansion of recreational facilities. No impact would occur.

4.16 Transportation/Traffic

4.16.1 Environmental Setting

A Traffic Assessment for the Proposed Project was prepared by KD Anderson and Associates (KD Anderson 2014b; Appendix F). The purpose of the assessment was to collect information on potential traffic impacts that could occur with the implementation of the Proposed Project.

Existing Roadway Network

The Proposed Project would be constructed at the Altaville FFS site adjoining SR 49, and both regional and direct access to the site is provided by SR 49, which links the FFS with San Andreas to the north and with the downtown area of the City of Angels Camp to the south. SR 4 intersects SR 49 near the Project site. SR 4 provides access to the mountain communities of Arnold and Murphys, and the SR 4 bypass links the site with SR 49 south of the City of Angels Camp (KD Anderson 2014b).

<u>Roadways</u>

Main Street - State Route 49 (SR 49). SR 49 is the primary north-south route in Calaveras County, and SR 49 links the county to Amador, El Dorado, and Placer Counties to the north and

Tuolumne, Mariposa, and Madera Counties to the south. SR 49 is part of the Inter-regional Roadway System. In the Project vicinity, North Main Street (SR 49) is designated an Arterial in the City of Angels Camp General Plan and is a two-lane conventional highway with auxiliary two-way left turn lanes or left turn lanes at major intersections. The flow of traffic on SR 49 through the City of Angels Camp is generally governed by the operation of signalized intersections, and the SR 49 / SR 4 (North) and SR 49 / Murphys Grade Road / Demarest Street intersections are the two currently signalized locations in the City (KD Anderson 2014b).

The posted speed limit on SR 49 is 45 mph at the Angels Camp city limits north of the Project site. The speed limit drops to 35 mph on North Main Street at Angels Food Market, and that limit remains through the SR 4 intersection. The 35 mph limit also exists on South Main Street, although there is a 25 mph school zone posted on South Main Street in the area of Twain Harte High School (KD Anderson 2014b).

Caltrans provides Annual Average Daily Traffic (AADT) counts for SR 49, and the most recent daily traffic volumes on SR 49 are 14,000 AADT south of Murphys Grade Road and 15,900 AADT north of the Murphys Grade Road intersection. The volume drops to 9,600 AADT approaching the SR 4 (North) intersection and to 8,200 AADT through the Altaville FFS access. Caltrans data indicates that trucks comprise 9 percent of the daily traffic on SR 49 in the study area (KD Anderson 2014b).

The SR 49 *Transportation Concept Report (TCR) June 2010* is a general guide to the long range plan for improving the state highway. The TCR notes that the ultimate concept for SR 49 north of SR 4 is a four lane conventional highway or creation of a new facility on one of the alternative alignments noted in the Calaveras County Regional Transportation Plan (RTP) or the City of Angels Camp General Plan (KD Anderson 2014b).

State Route 4 (SR 4). SR 4 is a primary east-west route across Calaveras County. SR 4 to the west connects the City of Angels Camp with Copperopolis and Stockton. To the east, SR 4 extends to the Calaveras County communities of Arnold and Murphys and ultimately Alpine County. SR 4 is a two-lane facility with limited access near its intersection with SR 49. Auxiliary left turn lanes are provided at intersections. The speed limit on SR 4 is posted at 45 mph east and west of SR 49 (KD Anderson 2014b).

Because the SR 4 Bypass opened recently, Caltrans has not yet published daily traffic volume data for SR 4 in the area near SR 49. Based on the peak hour volumes observed for a recent traffic study the daily volume is estimated to be roughly 4,000 vehicles per day west of SR 49 and 4,800 vehicles per day east of SR 49 (KD Anderson 2014b).

Intersections

There are several intersections in the vicinity of the Altaville FFS site that affect the overall flow of traffic.

The SR 49 / Altaville FFS driveway intersection is a “tee” intersection without formal traffic control devices. There is a continuous Two Way Left Turn (TWLT) lane on SR 49 through the intersection. SR 49 has been widened to its planned ultimate width along the Altaville FFS frontage, and sidewalk has been constructed along the frontage as well. Sight distance in each direction meets minimum Caltrans standards for the posted speed limit (KD Anderson 2014b).

The SR 49 / Frog Jump Plaza North Access intersection is roughly 250 feet south of the Altaville FFS driveway. The intersection is controlled by a stop sign on the shopping center

approach to the intersection. A TWLT lane exists on SR 49 at this location, which allows exiting motorists to make "two-step" left turns onto northbound SR 49. There are no striped crosswalks on SR 49 at this location (KD Anderson 2014b).

The SR 49 / Dogtown Road / Frog Jump Plaza Access intersection is located 450 feet from the Altaville FFS driveway. All turning movements are allowed onto and off of Dogtown Road, but the shopping center access is limited to right turns only. The TWLT lane on SR 49 begins at this intersection. There is a southbound right turn lane on SR 49 at the Frogtown Center access. There are no crosswalks at this intersection (KD Anderson 2014b).

The SR 49 / SR 4 (north junction) intersection is controlled by an actuated traffic signal. Each approach to the intersection features separate left turn, through and right turn lanes. Crosswalks are striped across the SR 4 approaches and across the southern SR 49 approach. The intersection accommodates the turning requirements of full-size trucks (KD Anderson 2014b).

Traffic Impact Analysis Methodology

Quantitative Level of Service (LOS) analysis was performed for study area intersections based on the methodologies contained in the *2010 Highway Capacity Manual* published by the Transportation Research Board. LOS analysis is used to identify the relative delay experienced by motorists traveling on two lane rural highways. A grading scale of LOS "A" to LOS "F" is used to describe the quality of traffic flow, with LOS A representing uncongested operations and LOS F representing stop-and-go operation with appreciable congestion and delay (KD Anderson 2014b).

Existing Traffic Operations

Information regarding current traffic operations has been obtained from a recent traffic impact analysis prepared for another Project proposed in this area of Angels Camp.

Intersection Levels of Service

Traffic counts conducted in May 2013 are the basis for current Levels of Service calculations at study area intersections during the weekday a.m., afternoon, and p.m. peak hours. As shown in Table 10 below, the Levels of Service at the signalized SR 49 / SR 4 intersection is satisfactory during all peak periods (i.e., LOS C or better). While the overall Level of Service for un-signalized intersections on SR 49 may be acceptable, the Levels of Service for individual turning movements that yield the right of way can be poor during peak traffic hours. Motorists waiting to turn from the Dogtown Road intersection onto southbound SR 49 experience long delays that are indicative of LOS F in the p.m. peak hour. While no traffic volume information is available for the FFS driveway, based on the background traffic volume on SR 49 and presence of a continuous TWLT lane, motorists exiting the FFS would experience short delays that are indicative of LOS B or C conditions (KD Anderson 2014b).

Table 10. Existing Conditions: Peak Hour Levels of Service at Intersections

Location	Control	AM Peak Hour		PM Peak Hour	
		LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)
SR 49 / Frog Jump Plaza					
(Overall Delay / LOS)	EB Stop	*(A)*	*(2.8)*	*(A)*	*(2.6)*
NB left turn from SR 49		A	8.5	A	9.2
EB left+right turn onto SR 49		C	15.3	C	19.8
SR 49 / Dogtown Rd / Frog Jump Plaza					
(Overall Delay / LOS)	EB/SB Stop	*(A)*	*(3.3)*	*(A)*	*(5.8)*
SB left turn from SR 49		A	9.1	A	9.9
EB right turn onto SR 49		B	11.0	B	13.1
WB left+right turn onto SR 49		D	29.5	**F**	**91.6**
SR 49 / SR 4	Signal	B	19.0	C	26.8
BOLD values exceed LOS D.					

Source: KD Anderson 2014b

Effects of Queuing on Access

The operation of the intersections on SR 49 is also affected by queuing on SR 49 that occasionally extends north from the SR 4 signal and blocks intersections. Observation of peak hour traffic indicated that the queue of southbound traffic backed up from the SR 4 signal through the Dogtown Road intersection and revealed that the queue of northbound left turns waiting to turn into the Frog Jump Plaza's northern driveway filled the TWLT lane between Dogtown Road and the shopping center access north of the McDonald's restaurant. The TWLT lane has room for five (5) vehicles before a sixth vehicle would block the Dogtown Road intersection, and there were four (4) instances over the two hour period when 5 or more vehicles were waiting to make northbound left turns (KD Anderson 2014b).

The issue of Dogtown Road access to SR 49, as well as access to other properties, has been acknowledged by the City of Angels Camp and Caltrans for some time, and general concepts for improvements have been offered. Theoretically, a traffic signal could be installed, but the short distance between Dogtown Road and SR 4 is much less than the minimum distance typically required by Caltrans and makes this option undesirable. The Dogtown Road intersection could be limited to right-turns-only but alternatives for replacing left turn access to residents and business on Dogtown Road are limited. Southbound left turns at Dogtown Road could be prohibited and this traffic moved to a southbound to northbound u-turn at the SR 4 intersection. U-turns are currently prohibited at this intersection but may be feasible if the east side of SR 49 was widened within the Caltrans right of way in the area north of the existing curb return (KD Anderson 2014b).

Alternatives for southbound traffic leaving Dogtown Road are more problematic, since there is no readily available location for northbound-to-southbound u-turns at public road intersections on SR 49. The concept of creating a new route to another local street where left turn access on SR 49 could be permitted (i.e., Clifton Lane) has been discussed, but this option would require acquisition of private property (KD Anderson 2014b).

Future Traffic Conditions

The Mark Twain Clinic traffic study identified available sources of information regarding future traffic volumes in the study area. The City of Angels Camp recently updated its General Plan and evaluated a revision to its Traffic Impact Fee Program. As part of that process Year 2030 p.m. peak hour traffic forecasts were created for major intersections in the City of Angels Camp. Review of the available forecasts indicates that appreciable traffic volume growth is projected on SR 49. The current p.m. peak hour volume on SR 49 north of SR 4 (i.e., 1,286 vph) is projected to reach 2,190 vph, or an increase of 70 percent (KD Anderson 2014b).

On SR 4 the volume east of SR 49 is projected to increase from 465 vph to 650 vph in the year 2030, or 40 percent increase. The volume on Dogtown Road without the proposed Project is forecast to increase from the current p.m. peak hour volume of 148 vph to 330 vph in the year 2030, or an increase of 120 percent (KD Anderson 2014b).

Regulatory Background

Local agencies adopt minimum Level of Service standards for their facilities. The City of Angels Camp General Plan policy 3A.e indicates that Local roads and Collector streets should operate at LOS C but that the intersection of Collector and Arterial streets are permitted to operate at LOS D.

The City may allow exceptions to these LOS standards subject to findings that improvements or other measures required to achieve the LOS standards established herein are unacceptable. In allowing an exception to the LOS standard, the city shall consider the following:

a. Number of hours per day that the intersection or roadway segment would operate at conditions worse than the adopted standard

b. The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations

c. Right-of-way needs versus the physical impacts on surrounding properties

d. Visual effects of the required improvement on the community's identify and character

e. Environmental impacts including air quality and noise impacts

f. Construction and right-of-way acquisition costs

g. Impacts on general safety

h. Impacts of the required construction phasing and traffic flows

i. Impacts on quality of life as perceived by residents

j. Geographical, environmental, social or economic factors

k. Ability to equitably fund needed improvements

l. Importance of proposed improvements in relation to other road needs given limited resources.

Exceptions to the standards will only be allowed after all reasonable measures and options are explored, including alternative forms of transportation.

General Plan policy 3.A.f expresses the City's intent to continue to support Caltrans goal of LOS C on IRRS roads and intersections. The policy acknowledges that Caltrans may consider LOS D on SR 49 and that the minimum Level of Service shall be no lower than LOS E.

Transportation/Traffic (XVI.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐

As described in Section 4.16.1 Environmental Setting, the Proposed Project would be constructed on the Altaville FFS site adjoining SR 49, and both regional and direct access to the site is provided by SR 49. The most recent daily traffic volumes on SR 49 are 14,000 AADT south of Murphys Grade Road and 15,900 AADT north of the Murphys Grade Road intersection. The volume drops to 9,600 AADT approaching the SR 4 (North) intersection and to 8,200 AADT through the Altaville FFS access. Caltrans data indicates that trucks comprise 9 percent of the daily traffic on SR 49 in the study area (KD Anderson 2014b).

The Proposed Project would be constructed over a fourteen month period, with an anticipated completion date of April 2017. It is anticipated that 10 to 20 construction employees would be on the site at various times. On a daily basis, construction could generate 20 to 40 vehicle trips per day, with most of that activity concentrated into the beginning and ending of the workday (KD Anderson 2014b).

Traffic to and from the FFS would also occur on a regular basis when the Proposed Project is in operation, and the amount of traffic would vary seasonally. Day to day operations would include an average of eight employees on-site. The Auto Shop would operate Sunday through Saturday between the hours of 8:00 a.m. and 5:00 p.m. During the winter off-season the Auto Shop would service 5 to 10 vehicles weekly. During the peak fire season, one or two vehicles could be serviced daily. In an emergency situation the facility could be open 24 hours with 15 to 20 employees on-site. Thus, the regular daily trip generation could range from 20 to 30 daily trips (half inbound, half outbound), and most of this activity would be concentrated into typical morning and evening commute hours (KD Anderson 2014b).

The directional distribution of the trips associated with the Proposed Project would reflect the Project's location in the Tuolumne- Calaveras Unit of CAL FIRE's Southern Region. The Altaville FFS covers an Initial Response Area (IRA), which includes the rural communities of Arnold, Sonora, Murphy's and San Andreas. As a result, most of the Project's trips would be oriented to the north via SR 49 and southeast via SR 4.

The Proposed Project would not result in any changes to the transportation system and would not impede any transportation improvements or control measures. The Proposed Project may add eight to ten trips through the SR 49 access during typical commute hours; however, this represents roughly 1 percent increase from the current volume on SR 49 in this area. This volume would be too slight to have a measureable effect on current operating LOS, and therefore, would not conflict with the City of Angels Camp General Plan policy 3A.e or policy 3A.f (KD Anderson 2014b). A less than significant impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐

See discussion under item a). The Proposed Project may add eight to ten trips through the SR 49 access during typical commute hours; however, this represents roughly 1 percent increase from the current volume on SR 49 in this area. This volume would be too slight to have a measureable effect on current operating LOS. Therefore, the Proposed Project would not affect LOS standards and travel demand measures for designated roads or highways in the Project area. A less than significant impact would occur.

Cumulative Impacts

As described in Section 4.16.1 Environmental Setting, traffic volume growth is projected on SR 49 and SR 4. However, the signalized SR 4 / SR 49 intersection is projected to operate with a Level of Service that satisfies the minimum LOS D standard. Thus, the Proposed Project's cumulative impact to the SR 4 / SR 49 intersection is considered less than significant (KD Anderson 2014b).

If background traffic on SR 49 increases as projected, it would be difficult to access properties along the highway. The SR 49 / Dogtown Road intersection is projected to operate at LOS F during peak hour peak hours, as is the SR 49 / Frog Jump Plaza North Access intersection. These deficiencies would likely occur regardless of whether the Proposed Project proceeds or not. In addition, the length of delays associated with exiting the Altaville FFS Site would become longer in the future, regardless of whether the Proposed Project is built or not. However, because the FFS generates much less traffic than occurs at other intersections, the Level of Service at this location would still satisfy the minimum LOS D standard (KD Anderson 2014b).

While development of the Proposed Project does not, by itself, create the need for long-term improvements, the Proposed Project traffic would incrementally contribute to the need for improvements that have been identified in existing or pending plans and fee programs. In the long term, a feasible access plan for SR 49 would need to be created by Caltrans and the City of Angels Camp that perpetuates access to local properties. The 2012 Calaveras County Regional Transportation Plan (RTP) suggests that the plan could involve creation of a new local street linking Dogtown Road with Clinton Avenue, although other options, roundabout intersections on SR 49, new traffic signals with u-turn capability, and a new SR 49 alignment were identified (KD Anderson 2014b). Therefore, the Proposed Project would contribute to potentially significant cumulative

impacts to traffic conditions on SR 49. Implementation of Mitigation Measure T-1 would reduce cumulative impacts to a less than significant level.

Mitigation Measure

T-1 Traffic Impact Mitigation Fees

Prior to construction, the Project Proponent shall pay the City of Angels Camp Traffic Impact Mitigation (TIM) fees associated with regional improvements. The estimated 30 trips per day shall be used to calculate the TIM fee based on the City of Angels Camp's current dollar amount per trip. The current fee is roughly $274 per daily trip; therefore, based on the Proposed Project's estimated 30 daily trips the estimated fee would equal $8,220.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

As described in Section 4.8 Hazards and Hazardous Materials (VIII) Environmental Checklist and Discussion item e), the Project site is not located within an airport land use plan or within 2 miles of a public airport (City of Angels Camp 2009). The nearest airport is Calaveras County Airport, located approximately 6.5 miles northwest of the Project site. There are five heliports within and in proximity to the City of Angles Camp. These heliports are located at the following facilities: Hydrox facility, Angels Murphys Arnold Association fields, County Fairgrounds, Bret Harte High School (field), and the local PG& E facility. As stated in item a), the Proposed Project is expected to generate 20-40 vehicles trips per day during a short-term construction period. Operations would generate on average 5 to 10 vehicles trips per day with an addition of 8 employees on-site; and emergency situations could increase operations to generate 20 to 30 vehicle trips per day with 15 to 20 employees on-site. Even though there would be an increase in traffic conditions, the increase is not enough to change the LOS on SR 49. No changes to air traffic patterns would occur. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

The Proposed Project would make use of the existing FFS access driveway on SR 49. The existing access is 30 feet wide and is roughly 720 feet north of the SR 49 / SR 4 intersection. SR 4 has been widened to its ultimate width along the FFS frontage. There are no roadway modifications associated with the Proposed Project. All paving and driveway improvements would be limited to the Project site. The Proposed Project does not involve any design features that would be potentially hazardous to vehicle travel. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the Project result in inadequate emergency access?	☐	☐	☐	☒

The Project site is located on the southern half of the Altaville FFS property. All construction-related vehicles and equipment would be located within the Altaville FFS property boundary and there are no roadway improvements associated with the Proposed Project. The Proposed Project would not prohibit or alter emergency access to the Altaville FFS. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Would the Project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

The Proposed Project would not conflict with public transportation programs, plans, or policies. As previously described in item a), traffic could increase during short-term construction-related activities and operation and maintenance of the Proposed Project. Although there will be an overall increase in the daily traffic volume, this would not result in a change to SR 49's current LOS conditions, even during an emergency situation (KD Anderson 2014b). No impact would occur.

4.17 Utilities and Service Systems

4.17.1 Environmental Setting

Water Service

The raw water source for the City of Angels Camp is provided by surface water from the North Fork of the Stanislaus River and multiple tributaries. The City has a series of agreements with the Utica Water and Power Authority (UWPA), which establishes contractual rights for up to 1,600 acre-feet per year (AFY) of water. The raw water delivery system is made up of a flume and canal system. Water on the North Fork Stanislaus River is stored in three upper reservoirs including Alpine, Union, and Utica reservoirs. Water from these reservoirs is released downstream on the North Stanislaus River to McKays Point Diversion Dam. Water is then redirected into the Collierville Tunnel and channeled into the Hunter's Reservoir through the Tunnel Tap. Water is then released into the Lower Utica Canal (flume), which directs water to Angels Creek and then diverts to Angels Ditch. Water from Angels Ditch flows into Ross Reservoir, which has the capacity to hold a 30-day emergency supply (City of Angels 2013).

The City of Angels Camp maintains a water treatment and storage facility north of the city limits near Murphy Grade Road and provides potable water to its residents, which includes water service to Altaville FFS. Once all planned improvements specified in the *City of Angels Water Master Plan* (WMP) have been completed, the City's water treatment and storage facilities are estimated to be able to provide approximately 4 million gallons of water per day. The WMP identifies improvements as necessary to supply the City through 2027 assuming a population growth rate of 2 percent (City of Angels Camp 2009). The current capacity of the City's water treatment and storage facility is a

total of 2 million gallons per day. Presently, water service demand is approximately 43 percent of the total capacity (Myer 2014). It is assumed that domestic water would be stubbed from the Altaville FFS and extended to the serve the Proposed Project.

Wastewater

Wastewater collection and treatment for the Altaville FFS is provided by the City of Angels Camp Public Works Department (Public Works). The wastewater collection system is divided into five sewer basins with pump stations conveying flow between basins. The Altaville FFS is located within Basin #5, the largest of the five basins, which directs effluent flows to the City's wastewater treatment facility located in the southern portion of the City on Centennial Lane. According to the City's Wastewater Master Plan (WWMP), total estimated flows from Public (P) land uses are determined based on an estimated number of students, employees, or visitors for each use and published typical wastewater generation data (City of Angels 2012). As previously described in Section 2.3 Project Characteristics, an existing 6-inch sewer line serves the Altaville FFS and directs effluent flow into the City of Angels Camp wastewater collection system. According to the WWTP, improvements to expand the equalization (EQ) basin and installation of safety equipment in 2006 has increased capacity of the WWTP to 0.6 million gallons per day (mgd) with a peak flow of 1.9 mgd. In addition, further improvements including the installation of UV disinfection and stream discharging facilities in 2010 have increased the facility's capacity to manage a 100-year storm event (City of Angels 2012).

Solid Waste

SEI Solid Waste, Inc. contracts with the City of Angels Camp for solid waste curbside pickup, which includes the Altaville FFS (City of Angels Camp 2008; Truelock 2013). The solid waste is transported to the Rock Creek Facility located off of Hunt Road in Milton, approximately 30 miles southwest of the City of Angels Camp. The Rock Creek Facility is the only active solid waste landfill in Calaveras County (City of Angels Camp 2008). Solid waste generated by the Proposed Project would be disposed of in a curbside dumpster for pickup by SEI Solid Waste, Inc.

Utilities and Service Systems (XVII.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

The Proposed Project is a new five-bay Auto Shop/Welding Shop with a vehicle rack and Generator/Pump building for the Altaville FFS to replace the existing facility at the San Andreas FFS. Utilities would be extended from the Altaville FFS to service the Proposed Project. As previously described in 4.17.1 Environmental Setting, wastewater treatment would be provided by the City of Angels Camp. A minor increase in the volume of wastewater would be generated by the Proposed Project; however, it would not exceed existing wastewater treatment capacity. Existing infrastructure, including a 6-inch sewer line that serves the Altaville FFS, would have sufficient capacity to meet the Proposed Project service demands. Therefore, a less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

As previously stated in item a), the Proposed Project would extend utilities from the existing Altaville FFS to service the Proposed Project. A minor increase in volume of wastewater generated by the Proposed Project is expected; however, it would not exceed wastewater treatment capacity. As previously described in Section 4.17.1 Environmental Setting, water treatment and storage is provided by the City of Angels Camp. The City's water treatment facility currently has a capacity of 2 million gallons per day with present demand only at approximately 43 percent of capacity.

Existing infrastructure, including a 6-inch sewer line and a 4-inch water line that serves the Altaville FFS, would have sufficient capacity to meet the Proposed Project water and wastewater service demands. The construction of new water or wastewater treatment facilities would not be required to serve the Proposed Project. Therefore, a less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the Project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

Implementation of BMPs and installation of on-site drainage infrastructure, such as dry wells and construction of a retention pond, would increase the site's capacity to control runoff and prevent stormwater runoff from going off-site. This would keep the Proposed Project from exceeding the capacity of existing stormwater drainage systems (see Hydrology and Water Quality (IX.) Environmental Checklist and Discussion for further detail). A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the Project have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

As previously described in Section 4.17.1 Environmental Setting, the City of Angels Camp maintains a water treatment and storage facility north of the city limits near Murphy Grade Road and provides potable water to its residents, which includes water service to Altaville FFS. The WMP identifies improvements as necessary to supply the City through 2027 assuming a population growth rate of 2 percent (City of Angels Camp 2009). It is assumed that domestic water would be stubbed from the Altaville FFS and extended to serve the Proposed Project. Water service would be required for the auto shop and associated uses, landscaping irrigation, and the proposed vehicle wash rack. The existing infrastructure would have capacity to serve the Proposed Project. New and expanded water

supply would not be required and, therefore, no new or expanded entitlements are needed. A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the project 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?	☐	☐	☒	☐

As previously stated in item a), the Proposed Project would extend utilities from the existing Altaville FFS to service the Proposed Project. A minor increase in volume of wastewater generated by the Proposed Project is expected; however, it would not exceed the City of Angel's Camp facility wastewater treatment capacity of 2 million gallons per day. A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

Construction waste associated with the new auto shop would be disposed of at the Rock Creek Facility landfill located off Hunt Road in Milton, approximately 30 miles from the City of Angels Camp. A temporary increase in waste would occur during construction-related activities and is not expected to affect the permitted capacity of the Rock Creek Facility. The new auto shop is replacing an existing facility, and solid waste produced from operations and maintenance would be equivalent to the amount currently produced at the existing auto shop. Therefore, the new auto shop would not result in a new long-term source of solid waste production that would affect the permitted capacity of the Rock Creek Facility. A less than significant impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g)	Would the project comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Waste generated by the Proposed Project would comply with statues and regulations related to solid waste. Please see 4.8 Hazardous and Hazardous Materials about disposal of hazardous waste. No impact would occur.

4.18 Mandatory Findings of Significance

Mandatory Findings of Significance (XVIII.) Environmental Checklist and Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

With mitigation measures described in this Initial Study, the Proposed Project would not have a significant impact on fish and wildlife species or their habitat or eliminate important examples of major periods of California history or prehistory.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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)?	☐	☒	☐	☐

A search of the CEQAnet Database and the City of Angels Camp website was completed to compile a list of current and proposed Projects that are located in the vicinity of the Project area within the City of Angels Camp (CEQAnet Database 2013; Hanham 2013). Current and proposed Projects are summarized in Table 11.

Table 11. Current and Proposed Projects in the Project Area

Project Name	Type of Project	Project Size	Location
Collierville to Bellota 230 kV Phase to Ground Clearance Project	Repair of transmission line	40 miles	City of Angels Camp, Calaveras County Located along transmission line from Vallecito to Bellota
Cal 4 Culvert Replacement OX180	Replacement of culverts	Three 18-inch culverts	City of Angels Camp, Calaveras County
Angels Camp Overlay OV940	Overlay of asphalt on SR 49	14 miles	City of Angels Camp, Calaveras County Located along 14 miles of SR 49
State Route 4 Wagon Trail Realignment Project	Highway realignment	6.5 miles	Calaveras County, Located on the SR 4 segment from the City of Copperopolis to the City of Angels Camp
Mark Twain Medical Clinic	Construction of new	50,000 square	City of Angels Camp, Calaveras

Project Name	Type of Project	Project Size	Location
	medical clinic	feet	County, Located at Dogtown Road
Gateway Corridor Traffic Study	Current and anticipated traffic study	N/A	City of Angels Camp, Calaveras County, Located northwest of the intersection of SR 49 ad SR 4

Source: CEQANet 2013

As described in the impact analysis of this Initial Study, potentially significant impacts to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and transportation/traffic have been identified and mitigation measures have been proposed to offset any Project specific contribution to cumulative impacts. Current and proposed Projects in the Project area would also implement mitigation as necessary.

As described in Section 4.16.1 Environmental Setting, traffic volume growth is projected on SR 49 and SR 4. However, the signalized SR 4 / SR 49 intersection is projected to operate with a Level of Service that satisfies the minimum LOS D standard. Thus, the Proposed Project's cumulative impact to the SR 4 / SR 49 intersection is not significant (KD Anderson 2014b).

While development of the Proposed Project does not by itself create the need for long term improvements, the Proposed Project traffic would incrementally contribute to the need for improvements that have been identified in existing or pending plans and fee programs. In the long term, a feasible access plan for SR 49 would need to be created by Caltrans and the City of Angels Camp which perpetuates access to local properties. The 2012 Calaveras County Regional Transportation Plan (RTP) suggests that the plan could involve creation of a new local street linking Dogtown Road with Clinton Avenue, although other options, roundabout intersections on SR 49, new traffic signals with u-turn capability, and a new SR 49 alignment were identified (KD Anderson 2014b). Therefore, the Proposed Project would contribute to potentially significant cumulative impacts to traffic conditions on SR 49. Implementation of Mitigation Measure T-1 would reduce cumulative impacts to a less than significant level (see Transportation/Traffic (XVI.) Environmental Checklist and Discussion).

All other impacts from the Proposed Project are short- term in nature and associated with construction activities on the project site and/or require minimal demand for services (e.g. increasing eight to nine employees on-site) and, therefore, would not be cumulatively considerable. No other cumulative impacts were identified.

c) Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	☐	☒	☐	☐

Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study.

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APPENDIX A

Air Quality Study

AIR QUALITY STUDY
FOR THE
ALTAVILLE FOREST FIRE STATION
AUTO SHOP REPLACEMENT PROJECT

Prepared for:

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Project #2610-09

January 15, 2014

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EXECUTIVE SUMMARY

This *Executive Summary* is a brief overview of the analysis presented in this *Air Quality Study*. It is not intended to be a comprehensive description of the analysis. For more details, the reader is referred to the full description presented in this study.

The proposed Altaville Forest Fire Station Auto Shop Relocation Project (Altaville FFS Project) would involve relocation of a forest fire station (FFS) auto shop from the existing location at the San Andreas FFS to the Altaville FFS. The San Andreas FFS is located in the City of San Andreas. The Altaville FFS is located in the City of Angels Camp. Both San Andreas and Angels Camp are located in Calaveras County, California.

This *Air Quality Study* presents an evaluation of the construction-related and operational impacts of the Proposed Project on the air quality environment.

The project would be located within the Mountain Counties Air Basin (MCAB). The project site is designated a nonattainment area for both state and federal ozone standards. The area is a state nonattainment area for inhalable particulate matter smaller than 10 microns in diameter (designated PM_{10}). The area is designated attainment or unclassified for fine particulate matter smaller than 2.5 microns in diameter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2).

Implementation of the Altaville FFS Project would result in the generation of short-term construction-related air pollutant emissions. The project is considered to have a less than significant impact on construction-related emissions.

Because the Altaville FFS Project would involve relocation of an existing facility, the Proposed Project would have no net impact on long-term operational criteria pollutant emissions. Operation of the project is considered to have a less-than-significant impact on criteria pollutant air quality.

An assessment of the effects of the Altaville FFS Project on global climate change was conducted. The project-related change in emissions of greenhouse gases was quantified. The project is determined to have a less-than-significant impact on global climate change.

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CalEEMod Model Output Files

SECTION 1
INTRODUCTION

This *Air Quality Study* has been prepared to assess the air quality impacts of the Altaville FFS Project. This study contains information that will be used in the preparation of a California Environmental Quality Act (CEQA) environmental compliance document for this project. The State of California Department of Forestry and Fire Protection (CAL FIRE) is the CEQA lead agency for the project environmental review.

The purpose of this *Air Quality Study* is to provide documentation of the air quality resources in the project area, and an assessment of the impacts of the project on the air quality environment.

This *Air Quality Study* presents an assessment of the localized air quality impacts of the Proposed Project, the impacts of the project on regional air quality, construction-related impacts of the project, and the impacts on global climate change.

Following this *Introduction* section, this *Air Quality Study* presents a description of:

- the Proposed Project,
- air quality standards and existing air quality conditions,
- short-term construction-related impacts,
- long-term operational impacts, and
- impacts on global climate change and greenhouse gases.

SECTION 2
PROJECT DESCRIPTION

The following is a description of the Altaville FFS Project.

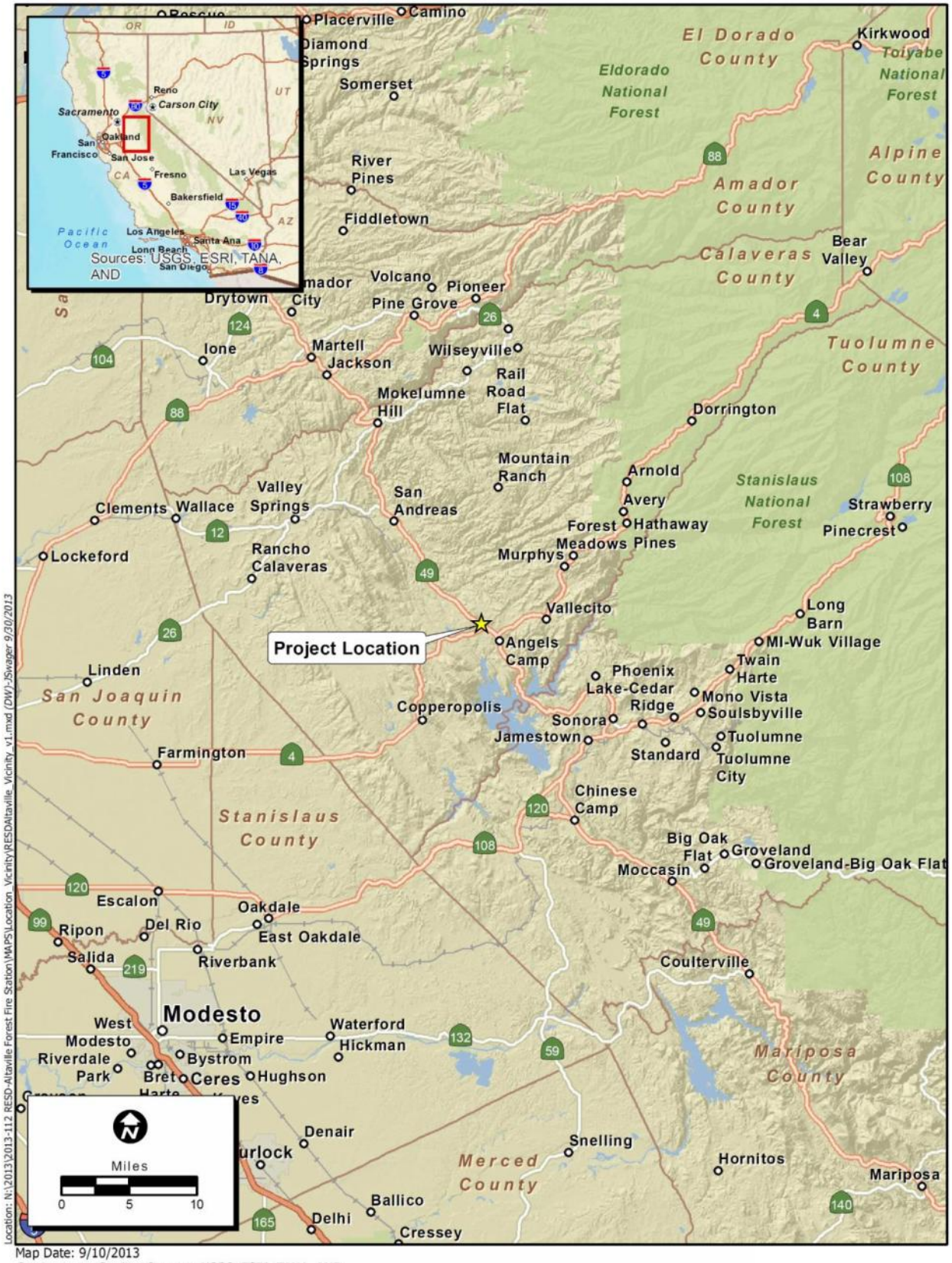
2.1 SURROUNDING LAND USES/ENVIRONMENTAL SETTING

The Proposed Project is located in Altaville, a former unincorporated community in Calaveras County now located in the northwest portion of the City of Angels Camp (**Figure 1**). The project site is located adjacent to State Route (SR) 49 on the northeast, approximately two miles northwest of the City of Angels Camp's city center, and approximately 10 miles south of the City of San Andreas. The project site is located approximately 60 miles southeast of Sacramento.

The Proposed Project would be located at the Altaville FFS at 125 North Main Street. The Altaville FFS consists of 5.95 acres bound by SR 49 on the northeast, Altaville Historical Schoolhouse and residences on the northwest, private undeveloped land on the south, and a commercial shopping center and SR 4 on the east and southeast (**Figure 2**). The Altaville FFS property is surrounded primarily by mixed-use commercial and residential development and private undeveloped land consisting of oak woodland. Access to the project site is provided by SR 49, also known as North Main Street, located on the northeastern boundary of the Altaville FFS property. The project site is located on the southern half of the Altaville FFS property, oriented northeast to southwest and covering approximately 1.84 acres. The Altaville FFS facilities are located adjacent and northeast of the project site.

2.2 PROJECT BACKGROUND

CAL FIRE acquired the land for the Altaville FFS in 1950. The Altaville FFS facility provides fire response and emergency response services to its Initial Response Area (IRA), which includes the rural communities of Arnold, Sonora, Murphy's and San Andreas.



Map Date: 9/10/2013
Service Layer Credits: Sources: USGS, ESRI, TANA, AND

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ENVIRONMENTAL CONSULTANTS

2103-112 RESD-Altaville Forest Fire Station

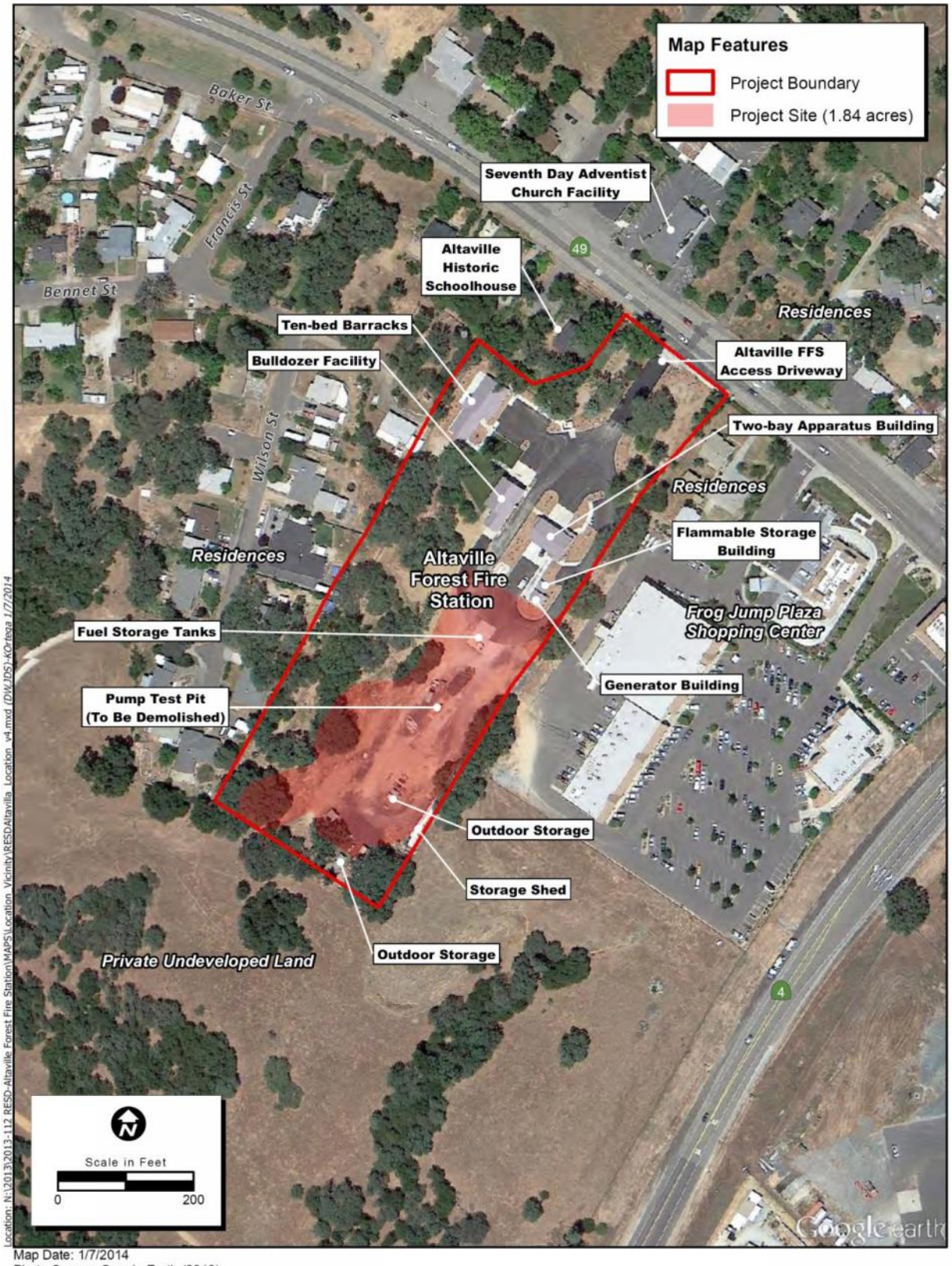
KD Anderson & Associates, Inc.
Transportation Engineers

VICINITY MAP

2610-09 LT 1/15/2014

Altaville Forest Fire Station Auto Shop Replacement Project Air Quality Study

figure 1



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Map Date: 1/7/2014
Photo Source: Google Earth (2013)

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2013-112 RESD-Altaville Forest Fire Station

The San Andreas FFS and the Altaville FFS are seasonal fire stations in the Tuolumne-Calaveras Unit, part of CAL FIRE's Southern Region. The Proposed Project would construct a new five-bay auto shop/welding shop at the Altaville FFS and continue to improve and maintain the existing facilities as part of the Proposed Project. In addition, the auto shop located 10 miles north at the San Andreas FFS in the City of San Andreas would be dismantled and retained for CAL FIRE storage. There would be no environmental impacts associated with the reuse of the San Andreas FFS auto shop building. Use of the San Andreas FFS auto shop building would not generate vehicle trips (Stabenfeldt pers. comm.).

2.3 PROJECT OBJECTIVES

The following are the objectives for the Proposed Project:

- provide a new five-bay auto shop/welding shop with vehicle wash rack and generator/flammable storage building for the Altaville FFS to replace the existing facility at the San Andreas FFS; and

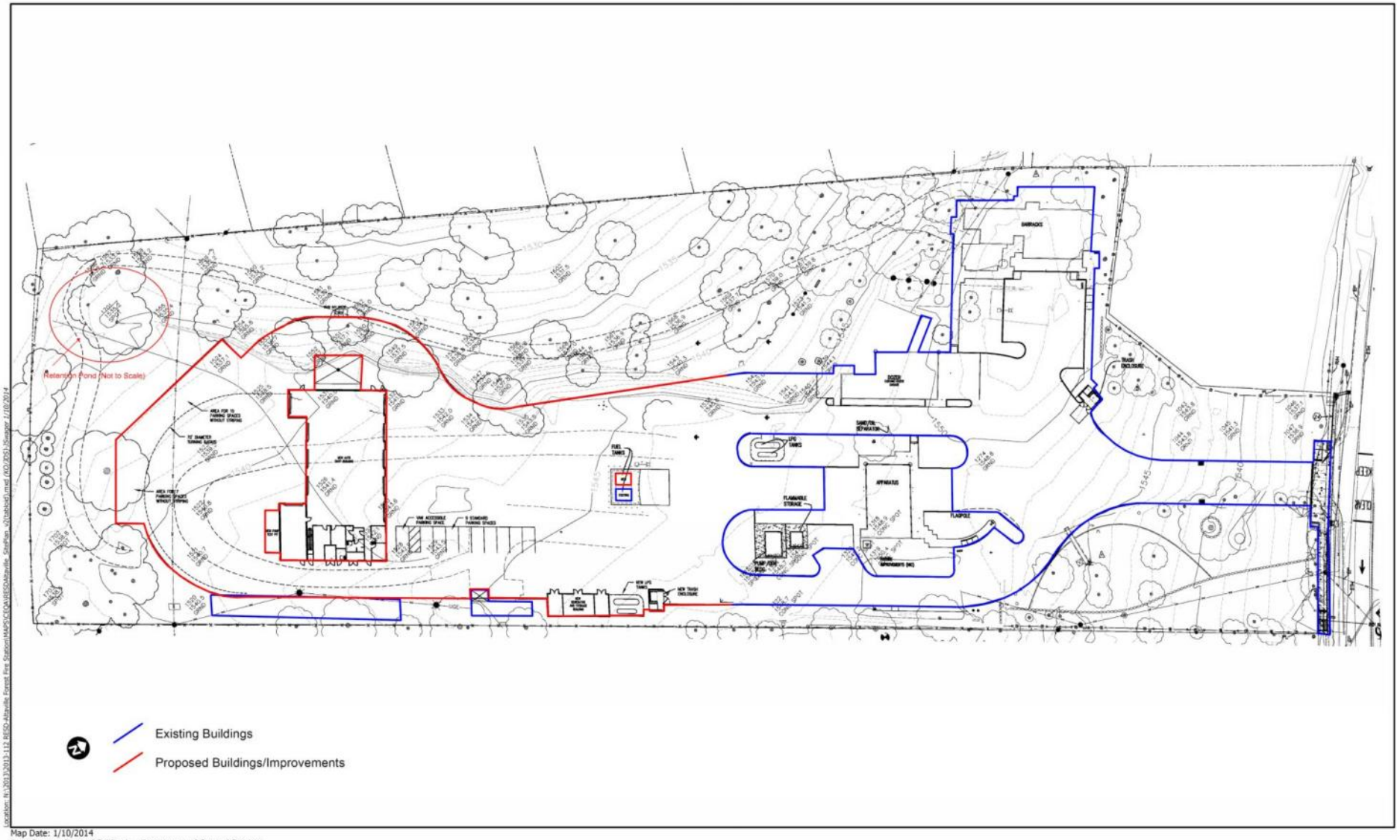
- continue to improve and maintain high quality firefighting equipment, apparatus, and facilities for CAL FIRE's statewide fire protection system.

2.4 PROJECT CHARACTERISTICS

The Proposed Project consists of a new five-bay auto shop at the Altaville FFS to replace the existing facility at the San Andreas FFS. The project site covers approximately 1.84 acres and is located within the 5.95 acres owned by CAL FIRE. The new auto shop facility would consist of new single-story buildings that would include an auto shop/welding shop with a vehicle wash bay and a generator/flammable storage building. In general, the Proposed Project would consist of the following site improvements:

- retaining walls;
- grading and paving;
- utilities extension and fiber optic utility extension;
- landscaping and irrigation;
- site exterior lighting;
- six-foot chain-link fence at the project site boundary on the south, west, and east;
- pump test pit;
- trash enclosure; and
- retention pond.

Figure 3, Figure 4, and **Figure 5** depict the proposed site plan, auto shop/welding shop building floor plan, and generator/flammable storage building floor plan, respectively.



Map Date: 1/10/2014
Base Source: State of California - Department of General Services

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ENVIRONMENTAL CONSULTANTS

2013-112 RESD Altaville Forest Fire Station

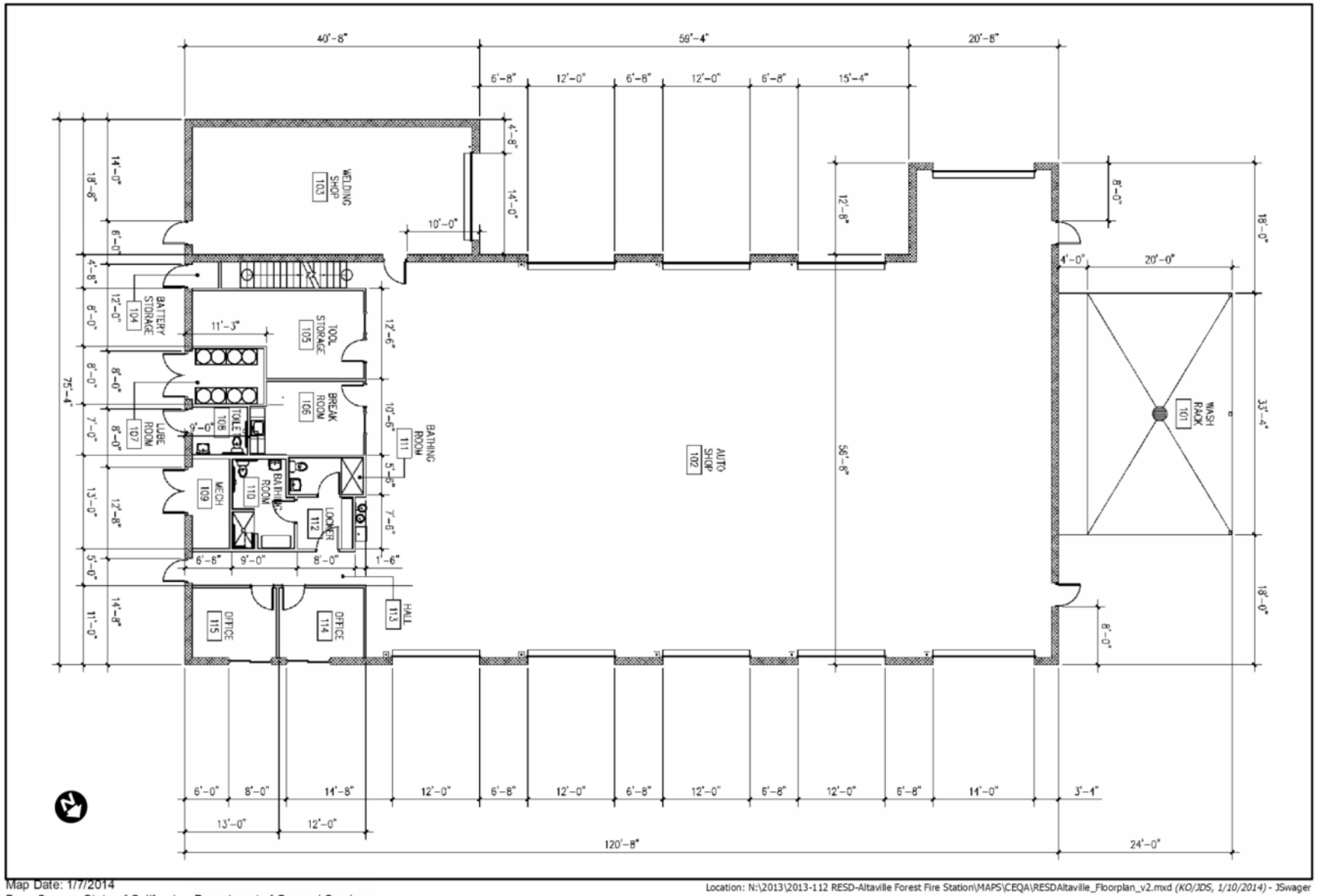
KD Anderson & Associates, Inc.
Transportation Engineers

SITE PLAN

2610-09 LT 1/15/2014

Altaville Forest Fire Station Auto Shop Replacement Project Air Quality Study

figure 3



Map Date: 1/7/2014
Base Source: State of California - Department of General Services

Location: N:\2013\2013-112 RESD-Altaville Forest Fire Station\MAPS\CEQA\RESDAltaville_Floorplan_v2.mxd *(KO/JDS, 1/10/2014)* - JSwager

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2013-112 RESD Altaville Forest Fire Station

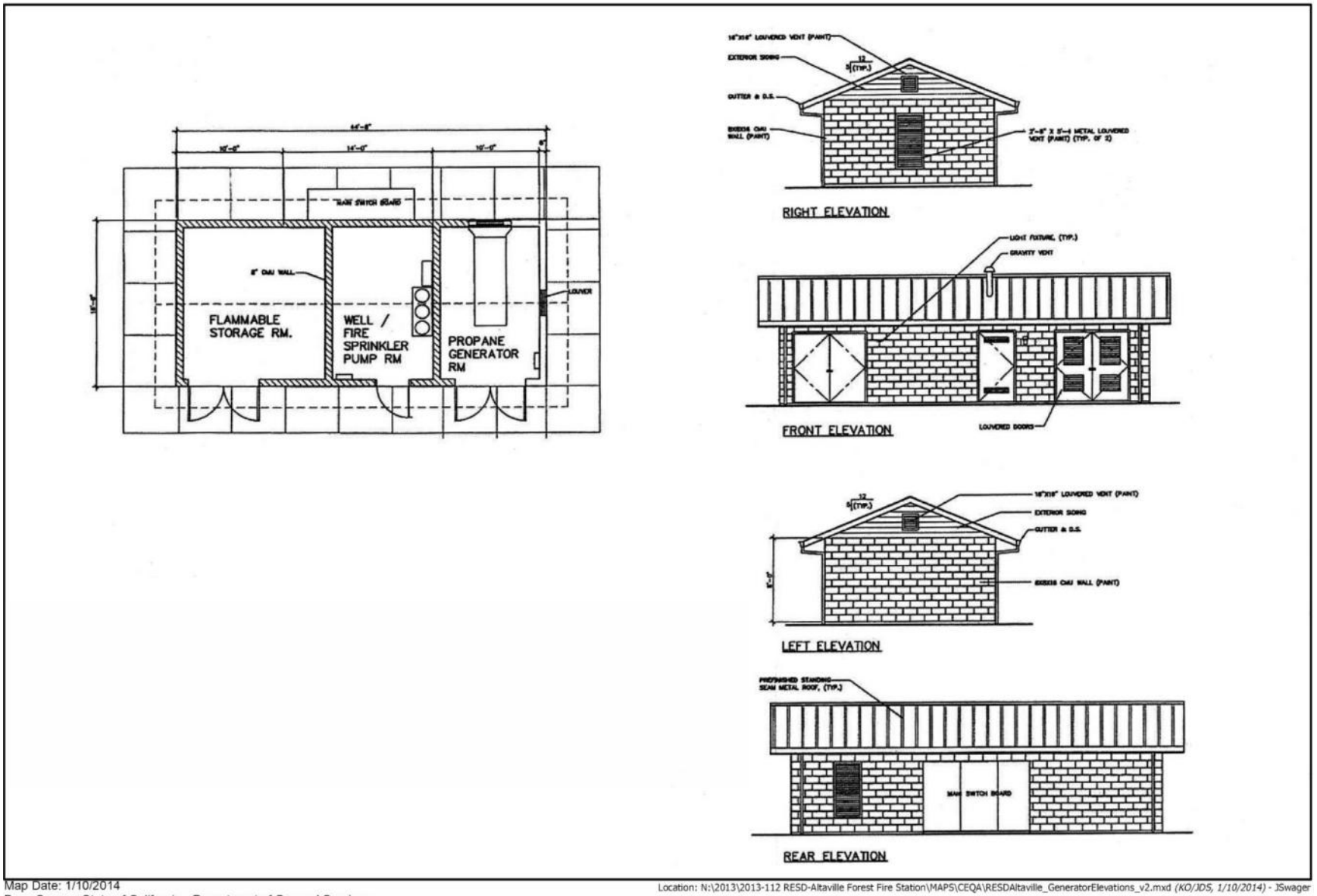
KD Anderson & Associates, Inc.
Transportation Engineers

AUTO SHOP-WELDING SHOP FLOOR PLAN

2610-09 LT 1/15/2014

Altaville Forest Fire Station Auto Shop Replacement Project Air Quality Study

figure 4



Map Date: 1/10/2014
Base Source: State of California - Department of General Services

Location: N:\2013\2013-112 RESD-Altaville Forest Fire Station\MAPS\CEQA\RESDAltaville_GeneratorElevations_v2.mxd *(KO/JDS, 1/10/2014)* - JSwager

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ENVIRONMENTAL CONSULTANTS

2013-112 RESD Altaville Forest Fire Station

GENERATOR-FLAMMABLE STORAGE BUILDING FLOOR PLAN AND EXTERIOR ELEVATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

2610-09 LT 1/15/2014

figure 5

The proposed buildings would be located within the southern portion of the Altaville FFS property, adjacent to the existing FFS buildings. The auto shop/welding shop, including the vehicle wash rack, would be approximately 75 feet wide and 120 feet long and would be located directly southwest of the fuel tanks near the center of the property (**Figure 3**). The vehicle wash rack would be located on the northern edge of the auto shop/welding shop. The wash rack would be approximately four feet from the building and be approximately 33 feet wide and 20 feet long.

The floor plan would consist primarily of the five-bay auto shop (**Figure 4**). The southeastern facing portion of the building would include a tool storage room, a break room, bathrooms, a locker room, and offices. The welding shop would be located adjacent to the auto shop facing the southwestern corner of the project site and would be approximately 19 feet wide and 41 feet long.

The generator/flammable storage building would be located along the southeastern property line near the center of the Altaville FFS property and would be approximately 16 feet wide and 44 feet long. The floor plan of the building would consist of the generator room, storage building, and a well/fire sprinkler pump room (**Figure 5**).

An office/utility shed located along the southeastern property line would be retained as part of the Proposed Project.

The Proposed Project would require grading and paving throughout the project site. A van accessible parking space and nine standard parking spaces would be paved and striped, and would be located directly adjacent to, and northeast of, the auto shop/welding shop. The perimeter of the project site would be paved for vehicle access, consequently requiring the removal of several oak trees located along the western and southwestern boundary of the project site and adjacent to the proposed vehicle wash rack. The project site would be graded and paved around the auto shop/welding shop, with the exception of a landscaped area located on the south and southwestern boundary. A paved area for 17 parking spaces without striping and a turning radius space of approximately 70 feet in diameter would be located on the southwestern boundary of the project site (**Figure 3**).

2.5 PROJECT CONSTRUCTION AND PROJECT TIMING

Construction of the Proposed Project is estimated to begin in February 2016 and last approximately 14 months with an anticipated completion date of April 2017. Construction equipment would include the following during the site preparation/grading phase:

- one excavator,
- two back hoes,
- two riding compactors,
- two hand held portable compactors,
- one grader,
- one dump truck, and
- one water truck.

Equipment would include the following during the construction of structures:

- two 15-foot lifts,
- one 20-ton crane,
- one fork lift, and
- one water truck.

SECTION 3
AIR QUALITY STANDARDS AND EXISTING CONDITIONS

The following is a description of ambient air quality standards and existing air quality conditions in the Altaville FFS Project study area.

3.1 AIR POLLUTANTS AND AMBIENT STANDARDS

Both the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards indicate levels of contaminants that represent safe levels, to avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The federal and state ambient air quality standards are presented in **Table 1**. The federal and state ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent, as is the case for ozone, PM_{10}, and $PM_{2.5}$.

There are three basic designation categories: nonattainment, attainment, and unclassified. A "nonattainment" designation indicates that the air quality violates an ambient air quality standard. Although a number of areas may be designated as nonattainment for a particular pollutant, the severity of the problem can vary greatly. To identify the severity of the problem and the extent of planning required, nonattainment areas are assigned a classification that is commensurate with the severity of their air quality problem (e.g., moderate, serious, severe). In contrast to nonattainment, an "attainment" designation indicates that the air quality does not violate the established standard. Finally, an "unclassified" designation indicates that there are insufficient data for determining attainment or nonattainment. EPA combines unclassified and attainment into one designation for ozone, CO, PM_{10} and $PM_{2.5}$.

3.2 POLLUTANTS OF CONCERN

For projects similar to the Altaville FFS Project, criteria pollutants that are of greatest concern are ozone, particulate matter, and CO. In addition, this *Air Quality Study* presents an analysis of the project-related effects on naturally-occurring asbestos and global climate change.

Table 1. Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM10)[8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[8]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[9]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[10]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[10]	—	
Lead[11,12]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page …

For more information please call ARB-PIO at (916) 322-2990 California Air Resources Board (6/4/13)

Table 1. Ambient Air Quality Standards (Continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and 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.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site 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 $\mu g/m^3$ 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 three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method 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.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. 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 U.S. EPA.

8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

9. 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.

10. On June 2, 2010, a new 1-hour SO_2 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 SO_2 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.

11. 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.

12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ 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.

13. 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.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (6/4/13)**

3.2.1 Ozone

Prior to 2005, both state and federal standards for ozone were set for a one-hour averaging time. The state ozone standard is 0.09 parts per million (ppm), not to be exceeded. The federal one-hour standard was 0.12 ppm and was not to be exceeded more than three times in any three-year period. A federal eight-hour standard for ozone was issued in July 1997 by Executive Order of the President. The eight-hour ozone standard has been set at a concentration of 0.075 ppm ozone measured over eight hours.

As of June 15, 2005, the federal one-hour ozone standard was revoked. In setting the eight-hour ozone standard, EPA concluded that replacing the existing one-hour standard with an eight-hour standard was appropriate to provide adequate and more uniform protection of public health from both short-term (one to three hours) and prolonged (six to eight hours) exposures to ozone.

Ozone is not emitted directly into the air, but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include reactive organic gas (ROG) and nitrogen oxides (NO_x), react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Once formed, ozone remains in the atmosphere for one or two days. It is then eliminated through chemical reaction with plants, and by rainout and washout.

3.2.2 Particulate Matter

State and federal standards for particulate matter are based on micrograms per cubic meter ($\mu g/m^3$) for a 24-hour average and as an annual geometric mean.

PM_{10} is sometimes referred to as “inhalable particulate matter” or “respirable particulate matter”. The state standards for PM_{10} are 50 $\mu g/m^3$ 24-hour average, and 20 $\mu g/m^3$ annual geometric mean. The federal PM_{10} standard is a 24-hour average of 150 $\mu g/m^3$.

A federal standard for particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) was issued in July 1997 by Executive Order of the President. $PM_{2.5}$ is sometimes referred to as “fine particulate matter”. The $PM_{2.5}$ standard has been set at a concentration of 15 $\mu g/m^3$ annually and 35 $\mu g/m^3$ daily. The federal standards for PM_{10} are being maintained so that relatively larger, courser particulate matter continues to be regulated. The state $PM_{2.5}$ standard is an annual average of 12 $\mu g/m^3$.

PM_{10} and $PM_{2.5}$ can reach the lungs when inhaled, resulting in health concerns related to respiratory disease. Suspended particulate matter can also affect vision or contribute to eye irritation. PM_{10} can remain in the atmosphere for up to seven days before removal by gravitational settling, rainout and washout.

3.2.3 Carbon Monoxide

State and federal CO standards have been set for both one-hour and eight-hour averaging times. The state one-hour standard is 20 ppm by volume, while the federal one-hour standard is 35 ppm. Both state and federal standards are 9 ppm for the eight-hour averaging period. CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream.

Motor vehicles are the dominant source of CO emissions in most areas. High CO levels develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures.

3.2.4 Asbestos

In addition to criteria pollutants, a pollutant of concern for the project is asbestos. Asbestos is a term used for several types of naturally occurring fibrous minerals. Naturally occurring asbestos (NOA) is found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California.

When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest and abdominal cavity), and asbestosis (a non-cancerous lung disease which causes scarring of the lungs). Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

3.2.5 Greenhouse Gases

The average surface temperature of the Earth has risen by about one degree Fahrenheit in the past century, with most of that occurring during the past two decades (World Meteorological Organization, 2005). There is evidence that most of the warming over the last 50 years is due to human activities. Human activities, such as energy production and internal combustion vehicles, have increased the amount of climate-changing gases in the atmosphere, which in turn is causing the Earth's average temperature to rise. Rises in average temperature are leading to changes in climate patterns, shrinking polar ice caps and a rise in sea level, with a host of corresponding impacts to humans and ecosystems.

Gases which affect global climate are referred to as greenhouse gases (GHG). Greenhouse gases are atmospheric gases that act as global insulators by reflecting visible light and infrared radiation back to Earth. Some GHG, such as water vapor, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), occur naturally and are emitted to the atmosphere through natural processes. Although CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From 1750 to 2004, concentrations of CO_2,

CH_4, and N_2O have increased globally by 35, 143, and 18 percent, respectively. Other greenhouse gases, such as fluorinated gases, are created and emitted solely through human activities. (U.S. Environmental Protection Agency 2006)

The principal GHG that enter the atmosphere because of human activities are CO_2, CH_4, N_2O, and fluorinated gases. Carbon dioxide is the gas that is most commonly referenced when discussing climate change because it is the most commonly emitted gas. While some of the less common gases do make up less of the total GHG emitted to the atmosphere, some have more effect per molecule than CO_2.

Carbon Dioxide. The natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, each of these activities has increased in scale and distribution. Carbon dioxide was the first GHG demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements being made in the last half of the 20th Century. Prior to the industrial revolution, concentrations were fairly stable at 280 ppm. Today, they are around 370 ppm, an increase of well over 30 percent (U.S. Environmental Protection Agency 2006). Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 535 ppm by 2100 as a direct result of anthropogenic (manmade) sources. This could result in an average global temperature rise of at least two degrees Celsius (Intergovernmental Panel on Climate Change 2007). The California Energy Commission (CEC) estimates that CO_2 emissions account for 84 percent of California's anthropogenic GHG emissions, nearly all of which is associated with fossil fuel combustion (California Energy Commission 2005).

Methane. Methane is an extremely effective absorber of radiation, though its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10 – 12 years), compared to some other GHG (such as CO_2, N_2O, and chlorofluorocarbons). Methane has both natural and anthropogenic sources. Landfills, natural gas distribution systems, agricultural activities, fireplaces and wood stoves, stationary and mobile fuel combustion, and gas and oil production fields categories are the major sources of these emissions (U.S. Environmental Protection Agency 2006). The CEC estimates that CH_4 emissions from various sources represent 6.2 percent of California's total GHG emissions (California Energy Commission 2005).

Nitrous Oxide. Concentrations of N_2O also began to rise at the beginning of the industrial revolution. Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizers that contain nitrogen. Use of these fertilizers has increased over the last century. Global concentration for N_2O in 1998 was 314 parts per billion (ppb), and in addition to agricultural sources for the gas, some industrial processes (fossil fuel fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load (U.S. Environmental Protection Agency 2006). The CEC estimates that N_2O emissions from various sources represent 6.6 percent of California's total GHG emissions (California Energy Commission 2005).

Fluorinated Gases (HFCS, PFCS, and SF_6). Fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6), are powerful GHG emissions

that are emitted from a variety of industrial processes. Fluorinated gases are occasionally used as substitutes for ozone-depleting substances such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons, which have been regulated since the mid-1980s because of their ozone destroying potential. Fluorinated gases are typically emitted in smaller quantities than CO_2, CH_4, and N_2O, but each molecule can have a much greater global warming effect. Therefore, fluorinated gases are sometimes referred to as High Global Warming Potential (GWP) gases (U.S. Environmental Protection Agency 2006). The primary sources of fluorinated gas emissions in the United States include the production of HCFC-22 electrical transmission and distribution systems, semiconductor manufacturing, aluminum production, magnesium production and processing, and substitution for ozone-depleting substances. The CEC estimates that fluorinated gas emissions from various sources represent 3.4 percent of California's total GHG emissions (California Energy Commission 2005).

3.3 AIR QUALITY MONITORING

Table 2 presents air quality monitoring data for ozone and CO. **Table 3** presents monitoring data for PM_{10}, and $PM_{2.5}$. Data for the latest available three-year period (2010 through 2012) are presented for the monitoring stations closest to the project site.

Table 2 shows recent exceedances of the state and federal ozone air quality standards, and shows no recent exceedances of the state or federal CO standards.

3.4 ATTAINMENT DESIGNATIONS

The current air quality attainment designations for Calaveras County are summarized in **Table 4.**

As shown in **Table 4**, Calaveras County is designated nonattainment for the state and federal ozone standards.

Calaveras County is designated nonattainment for the state PM_{10} standard, and attainment for the federal PM_{10} standard.

Calaveras County is designated either attainment or unclassified for the remaining federal and state air quality standards.

3.5 EMISSIONS INVENTORY

Table 5 presents estimates of emissions currently generated in Calaveras County. The information presented in **Table 5** is divided into emission source categories. **Table 6** presents a forecast of emissions expected to be generated in Calaveras County in the year 2020. Like **Table 6**, the information presented in **Table 6** is divided into emission source categories.

For both current emissions shown in **Table 5**, and 2020 emissions shown in **Table 6**, the major source category that generates the largest amount of ROG emissions in Calaveras County is Other Mobile Sources. The largest subcategory within this category is Recreational Boats. The major source category that generates the largest amount of CO emissions is Miscellaneous Processes. The largest subcategory within this category is Residential Fuel Consumption. The major source category that generates the largest amount of NO_x emissions is On-Road Motor Vehicles. The major source category that generates the largest amount of PM_{10} emissions in Calaveras County is Miscellaneous Processes. The largest subcategory within this category is Unpaved Road Dust. The major source category that generates the largest amount of $PM_{2.5}$ emissions in Calaveras County is Miscellaneous Processes. The largest subcategory within this category is Residential Fuel Combustion.

Table 7 presents estimates of GHG emissions generated in California during the years 2000 through 2010. The data are expressed as "million tonnes of CO_2 equivalent" per year. One tonne is sometimes referred to as a "metric ton" and is equal to 2,204.6 pounds.

While CO_2 is the most common component of GHG, several different compounds are components of overall GHG. The different compounds contribute to climate change with varying intensities. The term "CO_2 equivalent" (CO_2e) refers to a weighted composite of these several compounds, expressed as the equivalent amount of CO_2.

Table 7 presents estimates of GHG emissions disaggregated into the following four major source categories:

- Transportation,
- Electric Power,
- Commercial and Residential, and
- Industrial.

Each major source category is further disaggregated into minor source categories.

As shown in **Table 7**, Transportation and Electric Power are the two larger major source categories of GHG emissions in California. Industrial, and Commercial and Residential activities are relatively smaller sources of GHG emissions.

Table 8 presents forecasts of GHG emissions expected to be generated in California during the years 2008 through 2020.

Table 2. Ozone and Carbon Monoxide Air Quality Monitoring Results

Pollutant Type, Station and Measurement	Air Quality Standard	Pollutant Concentration by Year 2010	2011	2012
Ozone at San Andreas - Gold Strike Road				
Highest 1-Hour Average (parts per million)	0.09	0.097	0.103	0.097
Second Highest 1-Hour Average (parts per million)	(State)	0.096	0.094	0.091
Highest 8-Hour Average (parts per million)	0.070	0.087	0.083	0.088
Second Highest 8-Hour Average (parts per million)	(State)	0.084	0.078	0.080
Carbon Monoxide at Modesto - 14th Street				
Highest 8-Hour Average (parts per million)	9.0	1.78	2.71	2.10
Second Highest 8-Hour Average (parts per million)	(State)	1.76	2.15	2.07

Source: California Air Resources Board website: http://www.arb.ca.gov/

Note: Data are not available for carbon monoxide monitoring in Calaveras County.

Table 3. Particulate Matter Air Quality Monitoring Results

Pollutant Type, Station and Measurement	Air Quality Standard	Pollutant Concentration by Year 2010	2011	2012
Inhalable Particulate Matter (PM_{10}) at San Andreas - Gold Strike Road				
Highest 24-Hour Average (micrograms/cubic meter)	50	25.8	34.1	43.8
Second Highest 24-Hour Average (micrograms/cubic meter)	(State)	22.4	31.0	37.1
Annual Average (micrograms/cubic meter)	20 (State)	11.8	13.5	15.7
Fine Particulate Matter ($PM_{2.5}$) at San Andreas - Gold Strike Road				
Highest 24-Hour Average (micrograms/cubic meter)	35	11.4	33.9	26.9
Second Highest 24-Hour Average (micrograms/cubic meter)	(Federal)	9.6	30.2	26.2
Annual Average (micrograms/cubic meter)	12 (State)	- -	9.1	7.0

Source: California Air Resources Board website: http://www.arb.ca.gov/

Note: Dashes (" - - ") indicate insufficient data or no data are available.

Table 4. Air Quality Attainment Status Designations for Calaveras County

Pollutant	State Standards	National Standards
Ozone	Nonattainment	Nonattainment
Carbon Monoxide	Unclassified	Unclassifiable/Attainment
Nitrogen Dioxide	Attainment	Unclassifiable/Attainment
Sulfur Dioxide	Attainment	Unclassifiable
Inhalable Particulate Matter (PM_{10})	Nonattainment	Unclassifiable
Fine Particulate Matter ($PM_{2.5}$)	Unclassified	Unclassifiable/Attainment
Sulfates	Attainment	N/A
Lead	Attainment	Unclassifiable/Attainment
Hydrogen Sulfide	Unclassified	N/A
Visibility Reducing Particles	Unclassified	N/A

Notes: N/A – not applicable, standard does not exist for the pollutant.
Source: California Air Resources Board Internet Website, http://www.arb.ca.gov/

Table 5. Calaveras County Emissions Inventory for 2008

Emission Category	Reactive Organic Gases	Carbon Monoxide	Nitrogen Oxides	Inhalable Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Fuel Combustion					
Manufacturing and Industrial	- -	0.02	0.10	0.01	0.01
Food and Agricultural Processing	0.00	0.00	0.01	0.00	0.00
Service and Commercial	0.00	0.00	0.01	0.00	0.00
Other (Fuel Combustion)	0.00	- -	- -	- -	- -
Subtotal	**0.00**	**0.02**	**0.12**	**0.01**	**0.01**
Cleaning and Surface Coatings					
Degreasing	0.03	- -	- -	- -	- -
Coatings and Related Process Solvents	0.03	- -	- -	- -	- -
Adhesives and Sealants	0.06	- -	- -	- -	- -
Subtotal	**0.12**	**- -**	**- -**	**- -**	**- -**
Petroleum Production and Marketing					
Petroleum Marketing	0.10	- -	- -	- -	- -
Subtotal	**0.10**	**- -**	**- -**	**- -**	**- -**
Industrial Processes					
Food and Agriculture	0.01	- -	- -	- -	- -
Mineral Processes	- -	- -	- -	0.04	0.01
Subtotal	**0.01**	**- -**	**- -**	**0.04**	**0.01**
Solvent Evaporation					
Consumer Products	0.31	- -	- -	- -	- -
Architectural Coatings & Related Process Solvents	0.16	- -	- -	- -	- -
Pesticides/Fertilizers	0.03	- -	- -	- -	- -
Asphalt Paving / Roofing	0.53	- -	- -	- -	- -
Subtotal	**1.03**	**- -**	**- -**	**- -**	**- -**

Table 5. Calaveras County Emissions Inventory for 2008 (Continued)

Emission Category	Reactive Organic Gases	Carbon Monoxide	Nitrogen Oxides	Inhalable Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Miscellaneous Processes					
Residential Fuel Combustion	0.79	11.01	0.22	1.69	1.63
Farming Operations	0.49	- -	- -	0.05	0.01
Construction and Demolition	- -	- -	- -	0.23	0.02
Paved Road Dust	- -	- -	- -	0.92	0.14
Unpaved Road Dust	- -	- -	- -	6.43	0.64
Fugitive Windblown Dust	- -	- -	- -	0.09	0.01
Fires	0.00	0.01	0.00	0.00	0.00
Managed Burning and Disposal	0.93	9.20	- -	1.61	1.52
Cooking	0.01	- -	- -	0.02	0.01
Subtotal	**2.22**	**20.22**	**0.22**	**11.04**	**3.98**
On-Road Motor Vehicles					
Light Duty Vehicles	1.42	12.84	1.28	0.06	0.03
Medium Duty Trucks	0.15	1.62	0.23	0.01	0.01
Heavy Duty Trucks	0.30	2.19	1.15	0.03	0.03
Motorcycles	0.14	1.04	0.04	0.00	0.00
Buses	0.01	0.13	0.06	0.00	0.00
Motor Homes	0.02	0.42	0.06	0.00	0.00
Subtotal	**2.04**	**18.24**	**2.82**	**0.10**	**0.07**
Other Mobile Sources					
Aircraft	0.00	0.12	0.00	- -	- -
Recreational Boats	2.84	8.10	0.43	0.28	0.21
Off-Road Recreational Vehicles	0.67	1.61	0.02	0.01	0.01
Off-Road Equipment	0.30	2.02	0.93	0.05	0.05
Farm Equipment	0.06	0.33	0.30	0.02	0.02
Fuel Storage and Handling	0.03	- -	- -	- -	- -
Subtotal	**3.90**	**12.18**	**1.68**	**0.36**	**0.29**
COUNTY TOTAL	**9.42**	**50.69**	**4.82**	**11.55**	**4.36**

Notes: 2008 is the latest inventory available from the California Air Resources Board (CARB).
All values are in tons per day. Dashes ("- -") indicate no data are available.
The sum of values may not equal total shown due to rounding.
Source: CARB website: http://arb.ca.gov

Table 6. Calaveras County Emissions Forecast for 2020

Emission Category	Reactive Organic Gases	Carbon Monoxide	Nitrogen Oxides	Inhalable Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Fuel Combustion					
Manufacturing and Industrial	- -	0.02	0.13	0.01	0.01
Food and Agricultural Processing	0.00	0.00	0.00	0.00	0.00
Service and Commercial	0.00	0.00	0.01	0.00	0.00
Other (Fuel Combustion)	0.00	- -	- -	- -	- -
Subtotal	**0.00**	**0.02**	**0.14**	**0.01**	**0.01**
Cleaning and Surface Coatings					
Degreasing	0.03	- -	- -	- -	- -
Coatings and Related Process Solvents	0.03	- -	- -	- -	- -
Adhesives and Sealants	0.05	- -	- -	- -	- -
Subtotal	**0.11**	**- -**	**- -**	**- -**	**- -**
Petroleum Production and Marketing					
Petroleum Marketing	0.12	- -	- -	- -	- -
Subtotal	**0.12**	**- -**	**- -**	**- -**	**- -**
Industrial Processes					
Food and Agriculture	0.01	- -	- -	- -	- -
Mineral Processes	- -	- -	- -	0.05	0.01
Subtotal	**0.01**	**- -**	**- -**	**0.05**	**0.01**
Solvent Evaporation					
Consumer Products	0.37	- -	- -	- -	- -
Architectural Coatings & Related Process Solvents	0.18	- -	- -	- -	- -
Pesticides/Fertilizers	0.04	- -	- -	- -	- -
Asphalt Paving / Roofing	0.56	- -	- -	- -	- -
Subtotal	**1.15**	**- -**	**- -**	**- -**	**- -**

Table 6. Calaveras County Emissions Forecast for 2020 (Continued)

Emission Category	Reactive Organic Gases	Carbon Monoxide	Nitrogen Oxides	Inhalable Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Miscellaneous Processes					
Residential Fuel Combustion	0.84	11.73	0.22	1.80	1.73
Farming Operations	0.49	- -	- -	0.05	0.01
Construction and Demolition	- -	- -	- -	0.26	0.03
Paved Road Dust	- -	- -	- -	1.51	0.23
Unpaved Road Dust	- -	- -	- -	6.87	0.69
Fugitive Windblown Dust	- -	- -	- -	0.09	0.01
Fires	0.00	0.01	0.00	0.00	0.00
Managed Burning and Disposal	0.79	7.81	- -	1.36	1.29
Cooking	0.01	- -	- -	0.02	0.01
Subtotal	**2.13**	**19.55**	**0.22**	**11.96**	**4.00**
On-Road Motor Vehicles					
Light Duty Vehicles	0.75	5.82	0.58	0.07	0.05
Medium Duty Trucks	0.10	0.90	0.12	0.01	0.01
Heavy Duty Trucks	0.13	0.78	0.58	0.01	0.01
Motorcycles	0.14	0.89	0.05	0.00	0.00
Buses	0.00	0.09	0.05	0.00	0.00
Motor Homes	0.01	0.09	0.04	0.00	0.00
Subtotal	**1.13**	**8.57**	**1.42**	**0.09**	**0.07**
Other Mobile Sources					
Aircraft	0.00	0.12	0.00	- -	- -
Recreational Boats	2.03	7.12	0.52	0.52	0.39
Off-Road Recreational Vehicles	0.92	2.33	0.03	0.01	0.01
Off-Road Equipment	0.21	2.06	0.46	0.02	0.02
Farm Equipment	0.02	0.29	0.13	0.01	0.01
Fuel Storage and Handling	0.02	- -	- -	- -	- -
Subtotal	**3.20**	**11.92**	**1.14**	**0.56**	**0.43**
COUNTY TOTAL	**7.84**	**40.06**	**2.90**	**12.69**	**4.52**

Notes: 2020 is the furthest horizon year available from the California Air Resources Board (CARB).
All values are in tons per day. Dashes ("- -") indicate no data are available.
The sum of values may not equal total shown due to rounding.
Source: CARB website: http://arb.ca.gov

Table 7. California Greenhouse Gas Inventory for 2000 - 2010

California Environmental Protection Agency
Air Resources Board

California Greenhouse Gas Inventory for 2000-2010
— by Category as Defined in the Scoping Plan

million tonnes of CO2 equivalent - (based upon IPCC Second Assessement Report's Global Warming Potentials)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Transportation	**171.87**	**175.01**	**181.51**	**179.47**	**183.46**	**186.34**	**186.95**	**187.38**	**178.18**	**173.34**	**173.18**
On Road	***159.51***	***162.34***	***168.79***	***166.61***	***169.85***	***171.35***	***171.63***	***172.66***	***164.39***	***160.25***	***159.70***
Passenger Vehicles	126.85	129.29	135.63	133.07	134.66	134.83	134.71	134.93	129.37	127.69	126.99
Heavy Duty Trucks	32.66	33.05	33.16	33.53	35.19	36.52	36.93	37.74	35.02	32.56	32.70
Ships & Commercial Boats	***3.21***	***2.99***	***3.28***	***3.42***	***3.42***	***3.69***	***3.74***	***3.71***	***3.62***	***3.42***	***3.39***
Aviation (Intrastate)	***3.86***	***3.70***	***4.00***	***3.84***	***4.37***	***4.84***	***5.04***	***5.26***	***5.22***	***5.33***	***4.76***
Rail	***1.88***	***1.89***	***2.50***	***2.70***	***2.91***	***3.34***	***3.53***	***3.17***	***2.58***	***1.95***	***2.35***
Unspecified	***3.42***	***4.10***	***2.95***	***2.89***	***2.91***	***3.12***	***3.01***	***2.57***	***2.36***	***2.38***	***2.99***
Electric Power	**105.76**	**122.91**	**109.70**	**113.65**	**116.25**	**108.89**	**105.55**	**114.97**	**121.16**	**103.58**	**93.30**
In-State Generation	***59.85***	***63.88***	***50.73***	***49.09***	***50.20***	***46.08***	***50.87***	***55.15***	***55.34***	***55.53***	***49.70***
Natural Gas	50.92	55.46	42.16	40.91	42.40	38.11	43.07	47.12	48.02	48.90	43.10
Other Fuels	6.85	6.36	6.37	5.99	5.59	5.77	5.64	5.85	5.15	5.28	5.49
Fugitive and Process Emissions	2.08	2.06	2.20	2.19	2.21	2.19	2.16	2.19	2.16	1.36	1.11
Imported Electricity	***45.91***	***59.03***	***58.97***	***64.57***	***66.05***	***62.81***	***54.69***	***59.81***	***65.83***	***48.05***	***43.59***
Unspecified Imports	14.27	25.43	26.92	32.05	32.92	30.02	27.96	32.73	37.93	14.99	13.45
Specified Imports	31.64	33.60	32.05	32.51	33.13	32.80	26.73	27.08	27.90	33.05	30.14
Commercial and Residential	**42.27**	**41.13**	**43.10**	**41.47**	**42.83**	**41.18**	**41.85**	**42.07**	**42.39**	**42.61**	**43.89**
Residential Fuel Use	***29.65***	***28.72***	***28.88***	***28.41***	***29.45***	***28.18***	***28.55***	***28.70***	***29.03***	***28.65***	***29.38***
Natural Gas	28.02	27.42	27.53	26.66	27.37	25.97	26.59	26.72	26.66	26.30	27.03
Other Fuels	1.64	1.30	1.34	1.75	2.07	2.21	1.95	1.98	2.37	2.35	2.36
Commercial Fuel Use	***11.53***	***11.36***	***13.17***	***12.80***	***12.76***	***12.60***	***12.88***	***12.87***	***12.99***	***13.04***	***13.47***
Natural Gas	10.06	10.10	11.90	11.38	11.16	10.93	11.61	11.48	11.16	11.02	11.19
Other Fuels	1.46	1.26	1.27	1.43	1.60	1.67	1.27	1.39	1.83	2.02	2.29
Commercial Cogeneration Heat Output	***1.09***	***1.05***	***1.06***	***0.26***	***0.62***	***0.40***	***0.42***	***0.49***	***0.37***	***0.92***	***1.03***
Industrial	**98.43**	**96.34**	**97.12**	**95.29**	**96.97**	**96.04**	**94.29**	**91.88**	**94.32**	**83.60**	**85.96**
Refineries	***32.13***	***32.82***	***33.00***	***33.69***	***32.74***	***33.95***	***35.04***	***34.74***	***34.08***	***28.13***	***30.80***
General Fuel Use	***22.30***	***21.04***	***22.45***	***18.60***	***19.05***	***18.15***	***18.05***	***17.01***	***18.15***	***17.60***	***20.26***
Natural Gas	16.82	14.62	15.18	11.97	12.80	12.72	12.38	11.56	12.37	11.46	13.46
Other Fuels	5.48	6.41	7.27	6.63	6.25	5.43	5.67	5.45	5.77	6.14	6.80
Oil & Gas Extraction [1]	***17.75***	***17.77***	***16.52***	***18.21***	***17.93***	***16.71***	***14.01***	***14.63***	***17.81***	***16.71***	***15.78***
Fuel Use	17.07	16.94	15.79	17.47	17.56	16.37	13.24	13.83	17.02	15.92	15.00
Fugitive Emissions	0.69	0.83	0.73	0.74	0.37	0.35	0.77	0.80	0.79	0.79	0.78
Cement Plants	***9.39***	***9.50***	***9.60***	***9.70***	***9.80***	***9.90***	***9.73***	***9.13***	***8.62***	***5.72***	***5.55***
Clinker Production	5.43	5.52	5.60	5.68	5.77	5.85	5.80	5.55	5.28	3.60	3.46
Fuel Use	3.96	3.98	4.00	4.01	4.03	4.05	3.93	3.58	3.33	2.12	2.09
Cogeneration Heat Output	***11.69***	***10.47***	***10.65***	***10.59***	***12.91***	***12.40***	***12.15***	***11.14***	***10.39***	***10.26***	***7.72***
Other Fugitive and Process Emissions	***5.17***	***4.73***	***4.90***	***4.51***	***4.56***	***4.93***	***5.30***	***5.23***	***5.27***	***5.18***	***5.84***

Last Updated: Tuesday, February 19, 2013

Table 7. California Greenhouse Gas Inventory for 2000 – 2010 (Continued)

California Environmental Protection Agency
Air Resources Board

California Greenhouse Gas Inventory for 2000-2010
— by Category as Defined in the Scoping Plan

million tonnes of CO2 equivalent - (based upon IPCC Second Assessement Report's Global Warming Potentials)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Recycling and Waste	**6.25**	**6.34**	**6.29**	**6.39**	**6.34**	**6.65**	**6.75**	**6.71**	**6.90**	**6.94**	**6.98**
Landfills [2]	***6.13***	***6.21***	***6.14***	***6.23***	***6.17***	***6.47***	***6.54***	***6.49***	***6.66***	***6.70***	***6.72***
Composting	***0.12***	***0.13***	***0.15***	***0.16***	***0.17***	***0.19***	***0.20***	***0.22***	***0.23***	***0.25***	***0.26***
High GWP	**10.72**	**11.27**	**11.87**	**12.57**	**13.32**	**13.90**	**14.26**	**14.27**	**14.44**	**14.76**	**15.66**
Ozone Depleting Substance (ODS) Substitutes	***8.58***	***9.32***	***10.09***	***10.84***	***11.59***	***12.08***	***12.40***	***12.48***	***12.57***	***12.90***	***13.84***
Electricity Grid SF6 Losses [3]	***1.17***	***1.15***	***1.07***	***1.05***	***1.04***	***1.03***	***0.99***	***0.93***	***0.95***	***0.91***	***0.85***
Semiconductor Manufacturing [2]	***0.97***	***0.80***	***0.71***	***0.68***	***0.68***	***0.78***	***0.87***	***0.86***	***0.92***	***0.95***	***0.96***
Agriculture [4]	**29.75**	**29.93**	**33.07**	**31.48**	**33.24**	**33.48**	**34.59**	**33.44**	**34.34**	**32.81**	**32.45**
Livestock	***16.50***	***17.17***	***17.70***	***16.36***	***17.69***	***18.33***	***18.69***	***19.93***	***20.23***	***20.05***	***19.60***
Enteric Fermentation (Digestive Process)	8.32	8.48	8.72	8.40	8.76	9.05	9.14	9.70	9.67	9.51	9.35
Manure Management	8.18	8.69	8.98	7.96	8.94	9.28	9.55	10.23	10.56	10.53	10.25
Crop Growing & Harvesting	***9.43***	***8.93***	***10.98***	***10.75***	***11.02***	***10.52***	***10.57***	***9.70***	***10.19***	***10.11***	***10.04***
Fertilizers	7.99	7.69	9.59	9.37	9.48	9.08	8.96	8.27	8.81	8.72	8.66
Soil Preparation and Disturbances	1.36	1.18	1.34	1.31	1.47	1.37	1.55	1.36	1.31	1.32	1.30
Crop Residue Burning	0.08	0.06	0.06	0.06	0.06	0.07	0.06	0.07	0.07	0.07	0.07
General Fuel Use	***3.82***	***3.83***	***4.39***	***4.38***	***4.53***	***4.63***	***5.33***	***3.80***	***3.92***	***2.65***	***2.82***
Diesel	2.52	2.69	3.04	3.11	3.17	3.41	3.87	2.68	3.00	1.78	1.99
Natural Gas	0.98	0.75	0.94	0.85	0.82	0.70	0.88	0.79	0.75	0.69	0.65
Gasoline	0.31	0.38	0.41	0.41	0.52	0.52	0.57	0.33	0.17	0.17	0.18
Other Fuels	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Forestry	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**
Wildfire (CH4 & N2O Emissions)	***0.19***	***0.19***	***0.19***	***0.19***	***0.19***	***0.19***	***0.19***	***0.19***	***0.19***	***0.19***	***0.19***
Total Gross Emissions	***465.25***	***483.12***	***482.87***	***480.51***	***492.60***	***486.68***	***484.43***	***490.89***	***491.92***	***457.83***	***451.60***
Forested Lands Net CO2 [5]	***-4.48***	***-4.29***	***-4.16***	***-4.17***	***-4.17***	***-4.03***	***-3.88***	***-3.95***	***-3.85***	***-3.81***	
CO2 Absorbed by Forested Lands	-14.15	-14.14	-14.13	-14.12	-14.11	-14.09	-14.08	-14.07	-14.06	-14.05	
CO2 Emitted by Forested Lands	3.24	3.24	3.23	3.23	3.23	3.23	3.22	3.22	3.22	3.22	see [5]
CO2 Emissions from Wood Products	6.43	6.61	6.74	6.72	6.71	6.83	6.98	6.90	6.99	7.02	
Total Net Emissions	***460.77***	***478.83***	***478.71***	***476.35***	***488.43***	***482.65***	***480.55***	***486.94***	***488.06***	***454.01***	

[1] Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions
[2] These categories are listed in the Industrial sector of ARB's GHG Emission Inventory sectors
[3] This category is listed in the Electric Power sector of ARB's GHG Emission Inventory sectors
[4] Reflects use of updated USEPA models for determining emissions from livestock and fertilizers
[5] Revised methodology under development

Source: California Air Resources Board website http://www.arb.ca.gov

Table 8. California Greenhouse Gas Emissions Forecast (2008 – 2020)

Last Updated: 10/28/2010 — *Million tonnes of CO2 equivalent*

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Grand Total	**474.64**	**457.65**	**462.04**	**463.23**	**470.37**	**480.40**	**487.35**	**492.01**	**494.66**	**497.88**	**500.76**	**503.76**	**506.78**
Total (Capped)	**403.15**	**387.60**	**389.18**	**387.94**	**392.58**	**400.14**	**404.56**	**406.71**	**406.89**	**407.61**	**407.99**	**408.41**	**408.84**
Total Narrow Scope (Capped)	***174.54***	***168.54***	***166.26***	***165.84***	***165.85***	***167.26***	***168.07***	***168.84***	***169.63***	***170.40***	***171.10***	***171.82***	***172.57***
Electricity Generation (Capped)	***43.82***	***40.85***	***39.47***	***38.89***	***38.65***	***39.70***	***40.44***	***41.18***	***41.93***	***42.67***	***43.37***	***44.08***	***44.82***
Electricity Generation (In-State)	43.82	40.85	39.47	38.89	38.65	39.70	40.44	41.18	41.93	42.67	43.37	44.08	44.82
Imported Electricity (Capped)	***55.03***	***53.53***	***53.53***	***53.53***	***53.53***	***53.53***	***53.53***	***53.53***	***53.53***	***53.53***	***53.53***	***53.53***	***53.53***
AZ	6.62	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90
CO	3.20	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85
NM	4.70	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
NV	3.18	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03
UT	13.57	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52	13.52
ID	0.50	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49
MT	1.29	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
OR	3.19	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01
WA	4.74	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58
Tribal	8.80	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07
MEX	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55
CAN	2.69	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
Industrial (Capped)	***75.69***	***74.15***	***73.26***	***73.42***	***73.66***	***74.03***	***74.10***	***74.12***	***74.17***	***74.20***	***74.20***	***74.21***	***74.21***
Cement Plants	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.63	8.63	8.63	8.63	8.63	8.63
Cogeneration Facilities	11.13	10.37	10.02	9.87	9.81	10.08	10.27	10.46	10.65	10.83	11.01	11.19	11.38
Hydrogen Plants	2.22	2.20	2.18	2.18	2.18	2.18	2.18	2.17	2.17	2.17	2.17	2.17	2.17
Petroleum Refining	34.58	34.24	33.89	33.89	33.87	33.85	33.82	33.80	33.77	33.75	33.72	33.69	33.66
Other	0.21	0.20	0.20	0.21	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.25	0.25
General Stationary Combustion	18.91	18.50	18.32	18.63	18.94	19.06	18.97	18.83	18.70	18.57	18.43	18.28	18.13
Added Broad Scope Fuels (Capped)	***228.61***	***219.07***	***222.92***	***222.10***	***226.73***	***232.87***	***236.49***	***237.87***	***237.26***	***237.21***	***236.88***	***236.59***	***236.28***
Gasoline	130.62	128.83	131.88	130.56	133.43	137.41	139.50	138.98	137.51	135.64	133.47	131.48	129.33
Distillate	38.59	36.57	37.95	37.89	38.88	40.07	40.99	42.28	42.48	43.63	44.88	45.99	47.06
Propane	4.29	3.44	3.45	3.46	3.45	3.45	3.45	3.45	3.45	3.45	3.44	3.44	3.44
Natural Gas	55.11	50.23	49.65	50.20	50.97	51.94	52.55	53.16	53.82	54.49	55.09	55.69	56.44
Ethanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (Uncapped)	**71.49**	**70.05**	**72.86**	**75.29**	**77.80**	**80.26**	**82.79**	**85.30**	**87.77**	**90.28**	**92.78**	**95.35**	**97.94**
Electricity Generation & Industrial	25.83	21.22	21.84	22.06	22.24	22.29	22.44	22.59	22.74	22.91	23.10	23.29	23.50
Transportation	5.58	5.27	5.54	5.85	6.02	6.18	6.37	6.61	6.83	7.07	7.28	7.54	7.73
Ag & Forestry	20.44	21.15	21.20	21.41	21.71	22.06	22.43	22.82	23.23	23.67	24.11	24.57	25.11
Commercial	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Residential	0.25	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
High GWP Gases	13.89	16.95	18.69	20.44	22.18	23.92	25.66	27.40	29.15	30.89	32.63	34.37	36.11
Ethanol	5.46	5.15	5.27	5.22	5.34	5.50	5.58	5.56	5.50	5.42	5.34	5.26	5.17

Notes:

The emission factor used for unspecified imported electricity in this forecast is WCI's preliminary factor of 959.7 lbs/MWh. This factor was recently updated and may be obtained from the Western Climate Initiative (WCI) website: http://www.westernclimateinitiative.org/component/remository/Electricity-Team-Documents/Default-Emission-Factor-Calculators/

Because of the difference in emission factors for unspecified imported electricity, the emissions total for 2008 in this forecast differs from the 2008 emissions total in the statewide GHG inventory: http://www.arb.ca.gov/cc/inventory/data/data.htm

Source: California Air Resources Board website http://www.arb.ca.gov

3.6 REGULATORY SETTING

Air quality management responsibilities exist at local, state, and federal levels of government. Air quality management planning programs developed during the past few decades have generally been in response to requirements established by the federal Clean Air Act (CAA). However, the enactment of the California Clean Air Act of 1988 (CCAA) has produced additional changes in the structure and administration of air quality management programs in California.

3.6.1 Federal Clean Air Act

The 1970 amendments to the federal CAA established a joint state and federal program to control air pollution. Pursuant to Sections 109 and 110 of the amendments, the EPA established federal air quality standards (see **Table 1**). The amendments also required that states submit state implementation plans (SIPs) providing for attainment of the federal standards within certain periods of time. The SIP for California is, to a large degree, a compilation of regional air quality plans. Because many of the original SIPs failed to bring about attainment, the CAA was amended in 1977. The federal CAA amendments of 1977 required all states to attain the federal standards by December 31, 1987. These amendments required states to submit plans that demonstrated attainment of the applicable standards by the statutory deadline.

Again, certain areas of the nation failed to meet the December 1987 deadline. In 1990, new federal CAA amendments were signed into law. Depending on the severity of an area's air pollution problem, the new amendments provided from 5 to 20 years for areas to attain the federal standards. The amendments also set new planning requirements for federal non-attainment areas.

3.6.2 California Clean Air Act

The CCAA substantially added to the authority and responsibilities of the state's air pollution control districts. The CCAA establishes an air quality management process that generally parallels the federal process. The CCAA, however, focuses on attainment of the state ambient air quality standards that, for certain pollutants and averaging periods, are more stringent than the comparable federal standards.

The CCAA requires that air districts prepare an air quality attainment plan if the district violates state air quality standards for CO, sulfur dioxide (SO_2), NO_x, or ozone. No locally prepared attainment plans are required for areas that violate the state PM_{10} standards. The CCAA requires that the state air quality standards be met as expeditiously as practicable, but it does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards. The least stringent requirements are set for areas expected to achieve air quality standards by the end of 1994. The most stringent requirements are set for areas that cannot achieve the standards until after 1997.

The air quality attainment plan requirements established by the CCAA are based on the severity of air pollution problems caused by locally generated emissions. Upwind air pollution control

districts are required to establish and implement emission control programs commensurate with the extent of pollutant transport to downwind districts.

3.6.3 Local Air Quality Management

Local air quality agencies have the primary responsibility to control air pollution from all sources other than those directly emitted from motor vehicles, which are the responsibility of CARB and the EPA. These agencies adopt and enforce rules and regulations to achieve state and federal ambient air quality standards and enforce applicable state and federal law.

The following description of the local air quality agency in Calaveras County is from Calaveras County Air Pollution Control District 2014.

The Calaveras County Air Pollution Control District (APCD) is recognized as a Special District and is governed by the Calaveras County Air Pollution Control Board. The primary goal of the Calaveras County APCD is to protect public health by managing the county's air quality through educating the public and enforcement of Calaveras County APCD rules and CARB - Air Toxic Control Measures that result in the reduction of air pollutants and contaminants. While there are minimal sources that impact air quality within the district, Calaveras County does experience air quality impacts from the Central Valley through transport pollutants. The most visible impacts to air quality within the district is a result of open burning of vegetation as conducted by individual property owners, industry, and state agencies for purposes of reducing wild land fire hazards.

The Calaveras County APCD permits and inspects stationary sources of air pollution. These sources include, but are not limited to; gasoline dispensing facilities (gas stations), rock quarries, paint spray booths and diesel generators greater than 50 brake horsepower. The Calaveras County APCD also disseminates burn day information given by the CARB, and issues burn permits for parcels greater than five acres.

3.6.4 Global Climate Change and Greenhouse Gas Emissions

Plans, policies, regulations, and laws related to GHG have been developed during the last several years by federal, state, and local agencies. These mechanisms continue to develop. The following is a summary of these mechanisms.

AB 1493 – Greenhouse Gas Emission Standards for Automobiles. California Assembly Bill (AB) 1493 in 2002 required CARB to develop and adopt the nation's first GHG emission standards for automobiles. The legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in the state. It cited several risks that California faces from climate change, including reduction in the state's water supply, increased air pollution creation by higher temperatures, harm to agriculture and increase in wildfires, damage to the coastline, and economic losses caused by higher food, water, energy, and insurance prices. Further, the legislature stated that technological solutions to reduce GHG emissions would stimulate California economy and provide jobs.

The State of California in 2004 submitted a request for a waiver from federal clean air regulations (as the State is authorized to do under the Clean Air Act) to allow the State to require reduced tailpipe emissions of CO_2. In late 2007, the EPA denied California's waiver request and declined to promulgate adequate federal regulations limiting GHG emissions. In early 2008, the State brought suit against EPA related to this denial.

A CARB study (California Air Resources Board 2008a) showed that in calendar year 2016, AB 1493 (also referred to as the Pavley standard or the Pavley rules) would reduce California's GHG annual emissions by 16.4 million metric tons (MMT) of CO_2e. This is almost 50% more than the 11.1 MMT reduction produced by federal fleet average standards for model years 2011 – 2015.

Further, by 2020, California is committed to implement revised, more stringent GHG emission limits, the Pavley Phase 2 rules. California's requirements would reduce California GHG emissions by 31.7 million tons of CO_2e ($MTCO_2e$) in calendar year 2020, 45 percent more than the 21.9 MMTs reductions under the federal rules in that year. Since the California rules are significantly more effective at reducing GHGs than the federal CAFE (fuel economy) program, they also result in better fuel efficiency – roughly 43 miles per gallon (mpg) in 2020 for the California vehicle fleet as compared to the new CAFE standard of 35 mpg.

Executive Order S-3-05. Executive Order S-3-05 was the precursor to Assembly Bill 32 (AB 32 is described in the next section) and was signed by Governor Schwarzenegger in June 2005. This Executive Order was significant because of its clear declarative statements that climate change poses a threat to the State of California. The Executive Order states that California is "particularly vulnerable" to the impacts of climate change, and that climate change has the potential to reduce Sierra snowpack (a primary source of drinking water), exacerbate existing air quality problems, adversely impact human health, threaten coastal real estate and habitat by causing sea level rise, and impact crop production. The Executive Order also states that "mitigation efforts will be necessary to reduce greenhouse gas emissions".

To address the issues described above, the Executive Order established emission reduction targets for the state: reduce GHG emissions to 2000 levels by 2010, to 1990 levels by 2020 and to 80% below 1990 levels by 2050. The Secretary of the California Environmental Protection Agency was named as coordinator for this effort, and the Executive Order required a progress report by January 2006 and biannually thereafter. As a result, the Climate Action Team was created by the California Environmental Protection Agency. The first report from the Climate Act Team was released in March of 2006, which proposed to meet the emissions targets through voluntary compliance and state incentive and regulatory programs.

Currently only the 2020 target has been adopted by the state through legislation (see Assembly Bill 32, below). As a result, all of the impact discussions, mitigation, and strategies are based on meeting the 2020 target, not the longer-term 2050 target.

Assembly Bill 32. In September 2006, AB 32 was signed by Governor Schwarzenegger. AB 32 requires that California GHG emissions be reduced to 1990 levels by the year 2020, just like Executive Order S-3-05. However, AB 32 is a comprehensive bill that requires the CARB to adopt regulations requiring the reporting and verification of statewide greenhouse gas emissions,

and it establishes a schedule of action measures. AB 32 also requires that a list of emission reduction strategies be published to achieve emissions reduction goals.

The following is a list of critical path items incorporated into AB 32 – deadlines that cannot be extended unless the Governor agrees there are "extraordinary circumstances", and then only for one year:

- January 1, 2007: AB 32 goes into effect;
- June 30, 2007: CARB must publish "a list of discrete early action GHG emission reduction measures" (Cal. Health & Safety Code § 38560.5(a)); this list is not just advisory - the measures must be implemented by regulations by 2010;
- January 1, 2008: CARB must establish the 1990 baseline of statewide GHG emissions that will be the cap to be implemented by 2020 (id. at § 38550);
- January 1, 2008: CARB must also adopt regulations requiring the monitoring and annual reporting of GHG emissions from all significant sources (id. at § 38530);
- January 1, 2009: CARB must prepare and approve a "scoping plan" for "achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHG gases by 2020" (id. at § 38561); this scoping plan will be the template for the regulations that will be adopted by 2011;
- January 1, 2010: CARB must "adopt regulations to implement" the list of reduction measures that it publishes by June 30, 2007 (id. at § 38560.5(b));
- January 1, 2011: CARB must adopt regulations establishing "GHG emission limits and emission reduction measures" (id. at § 38562(a)); and
- January 1, 2012: the 2011 regulations must become operative.

The first six critical path items have been completed. AB 32 is in effect and the list of early action measures was adopted by the CARB on June 21, 2007 (Resolution 07-25), and many other measures were added at a hearing on October 25, 2007. The Scoping Plan was adopted on December 11, 2008. On the seventh item, some regulations to establish GHG limits have been adopted, including a cap and trade program adopted in December of 2010.

Senate Bill 375. On September 30, 2008, Senate Bill (SB) 375 was signed by Governor Schwarzenegger. SB 375 combines regional transportation planning with sustainability strategies in order to reduce GHG emissions in California's urbanized areas. Existing law requires each regional transportation planning agency to adopt a Regional Transportation Plan. SB 375 requires that the Regional Transportation Plan must now include a "sustainable communities strategy". To this end, the CARB must provide regional transportation planning

agencies with GHG emissions reduction targets by June 30, 2010; these targets were provided and were adopted in September of 2010.

Senate Bill 97 Chapter 185, Statutes of 2007. Senate Bill 97 (SB 97) requires the Office of Planning and Research (OPR) to prepare guidelines to submit to the California Resources Agency regarding feasible mitigation of greenhouse gas emissions or the effects of GHG emissions as required by CEQA. The California Resources Agency is required to certify and adopt these revisions to the State CEQA Guidelines by January 1, 2010. The Natural Resources Agency adopted the amendments on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

Endangerment Finding. On December 7, 2009, the U.S. EPA made an Endangerment Finding and a Cause or Contribute Finding related to GHG emissions. The U.S. EPA Administrator found that the current and projected concentrations of CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 in the atmosphere threaten the public health and welfare of current and future generations (Endangerment). The Administrator also found that the combined emissions of these GHG from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare (Cause or Contribute).

State of California Emission Reduction/Adaptation Strategies. Several strategies to reduce vehicle emissions have been identified by the California Environmental Protection Agency's Climate Action Team. These include, but are not limited to, the following:

> **Vehicle Climate Change Standards.** With the passage of AB 1493, Pavley, Chapter 200, Statutes of 2002, California moved to the forefront of reducing vehicle climate change emissions. This bill required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB in September 2004. The CARB analysis of this regulation indicates emissions savings of one $MMTCO_2e$ by 2010 and 30 $MMTCO_2e$ by 2020.
>
> **Diesel Anti-Idling.** Reduced idling times and the electrification of truck stops can reduce diesel use in trucks by about four percent, with major air quality benefits. In July 2004 the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling. AB 32 analysis indicates that anti-idling measures could reduce climate change emissions by 1.2 $MMTCO_2e$ in 2020.
>
> **Other New Light Duty Vehicle Technology Improvements.** In September 2004 the CARB approved regulations to reduce climate change emissions from new motor vehicles. The regulations apply to new passenger vehicles and light duty trucks beginning with the 2009 model year. The standards adopted by CARB phase in during the 2009 through 2016 model years. When fully phased in, the near term (2009 – 2012) standards will result in about a 22 percent

reduction as compared to the 2002 fleet, and the mid-term (2013 – 2016) standards will result in about a 30 percent reduction.

New standards would be adopted to phase in beginning in the 2017 model year (following up on the existing mid-term standards that reach maximum stringency in 2016). Assuming that the new standards call for about a 50 percent reduction, phased in beginning in 2017, this measure would achieve about a four MMT reduction in 2020. The reduction achieved by this measure would significantly increase in subsequent years as clean new vehicles replace older vehicles in the fleet – CARB staff estimate a 2030 reduction of about 27 MMT.

Executive Order S-01-07. This Executive Order was signed by Governor Schwarzenegger on January 18, 2007 and directed the Climate Action Team to determine whether the items in the Order could be established as an early action measure pursuant to AB 32 – which the Climate Action Team has now done. The Executive Order states that the State of California relies on petroleum-based fuels for 96 percent of its transportation needs, there were more than 24 million motor vehicles registered in California, and statewide gasoline consumption was almost 16 billion gallons in 2005. To address the carbon emitted by this use of fuel, the Executive Order states that a statewide goal must be established to reduce the "Carbon intensity of California's transportation fuels" by at least 10% by the year 2020 and that a Low Carbon Fuel Standard for transportation fuels be established. The Low Carbon Fuel Standard applies to all "refiners, blenders, producers or importers of transportation fuels in California".

California Climate Adaptation Strategy. In December 2009, the California Resources Agency, in coordination and partnership with multiple other state agencies, released their California Climate Adaptation Strategy. This document summarizes the best known science on climate change impacts in seven specific sectors, including: public health, biodiversity-habitat, ocean & coastal resources, water management, agriculture, forestry, and transportation and energy infrastructure. The strategy provides recommendations on how to manage against threats to these sectors. The strategy is in direct response to Governor Schwarzenegger's November 2008 Executive Order S-13-08 that specifically asked the Natural Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events.

3.7 REGIONAL CLIMATE AND METEOROLOGY

Air pollution, especially the dispersion of air pollutants, is directly related to a region's topographic features.

The project site is located in Calaveras County, which lies within the central portion of the MCAB. This basin also includes Plumas, Sierra, Nevada, Amador, Tuolumne, and Mariposa

counties, as well as a portion of Placer and El Dorado counties. The climate of the MCAB is influenced by the foothill and mountainous terrain in the MCAB. Calaveras County ranges from gently rolling slopes in the west to rugged mountain terrain in the east; elevations range from 100 to 8,000 feet. Calaveras County is bordered by the San Joaquin Valley Air Basin (SJVAB) to the west, and the Great Basin Valleys Air Basin to the east.

The general climate of the MCAB varies considerably with elevation and proximity to mountains. The climate of Calaveras County is characterized by hot, dry summers and cool, moist winters. Air quality in the project area is influenced mostly by pollutant transport from upwind areas, such as the San Joaquin Valley, but also by local emission sources, such as wood burning stoves and fireplaces during the winter months, and vehicles using area roadways such as SR 4, SR 12, and SR 49.

The terrain features of the MCAB make it possible for various climates to exist within the general area. The pattern of mountains and hills of lower elevation is primarily responsible for the wide variations of rainfall, temperatures, and localized winds that occur throughout the region. Temperature variations have an important influence on wind flow, dispersion along mountain ridges, vertical mixing, and photochemistry.

The portion of the MCAB encompassing the Sierra Nevada mountain range receives large amounts of precipitation from storms moving over the continent from the Pacific Ocean. Precipitation in the MCAB is highly variable, depending on elevation and location. Areas in the eastern portion of the MCAB, with relatively high elevations, receive the most precipitation. Precipitation levels decline toward the western areas of the MCAB. Climates vary from alpine in the high elevations of the eastern areas to more arid at the western edge of the basin.

SECTION 4
SHORT-TERM CONSTRUCTION IMPACTS

Implementation of the Altaville FFS Project would result in construction activity, which would generate air pollutant emissions. Construction activities such as grading, excavation and travel on unpaved surfaces would generate dust, and can lead to elevated concentrations of PM_{10} and $PM_{2.5}$. The operation of construction equipment results in exhaust emissions, which include ROG and NO_x.

4.1 SIGNIFICANCE THRESHOLDS

The following describes significance thresholds applied in this *Air Quality Study*.

4.1.1 Criteria Pollutant Emissions

The Calaveras County APCD does not have adopted or recommend significance thresholds for criteria pollutants. However, criteria pollutant emissions significance threshold are presented in the adopted *Angels Camp 2020 General Plan* (City of Angels Camp 2009). In this *Air Quality Study*, therefore, thresholds used to determine the significance of impacts associated with ozone precursors, PM_{10}, and CO emissions are from the *Angels Camp 2020 General Plan*.

The *Angels Camp 2020 General Plan* policy 9.A.q is to "establish a list of project thresholds with the potential to generate a significant adverse impact pursuant to CEQA." The policy refers to sample thresholds presented in Appendix 9A of the General Plan. City of Angels Camp staff provided clarification on the interpretation and applicability of the thresholds presented in Appendix 9A of the General Plan (Hanham pers. comm.). **Table 9** shows the threshold amounts for ROG, NO_x, PM_{10}, and CO emissions. Project-related emissions exceeding the values shown in **Table 9** will be considered a significant impact; values equal to or less than those shown in **Table 9** will be considered a less-than-significant impact.

4.1.2 Asbestos

Naturally occurring asbestos has been identified as a toxic air contaminant (TAC) by the ARB. No quantitative significance thresholds have been set for NOA. However, the California Department of Conservation provides a map that may be used as a screening-level indicator of the likelihood of NOA being present on the project site. The map, *A General Location Guide For Ultramafic Rocks In California - Areas More Likely To Contain Naturally Occurring Asbestos* (California Department Of Conservation 2000) is available at the Department website (http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Pages/index.aspx).

Table 9. Air Quality Significance Thresholds for Criteria Pollutants

Type of Pollutant Emissions	Amount of Pollutant Emissions in Pounds per Day
Ozone Precursors (the sum of Reactive Organic Gases [ROG] and Nitrogen Oxides [NO_x])	274
Inhalable Particulate Matter (PM_{10})	383
Carbon Monoxide (CO)	550

Note: These thresholds are applied to both construction-related and operational emissions.

Source: City of Angels Camp 2009, and Hanham pers. comm.

The asbestos screening map,

> "shows the areas more likely to contain natural occurrences of asbestos in California. Its purpose is to inform government agencies, private industry and the public of the areas in the State where natural occurrences of asbestos may be an issue. In these areas, consideration of the implications of the presence or absence of asbestos through examination of more detailed maps and site-specific investigations could be warranted as part of public or private decision making." (California Department of Conservation 2000)

If a project site is located outside of all the areas considered to be more likely to contain NOA, it may be considered to have a relatively lower probability of containing NOA and, in this *Air Quality Study*, will be considered to have a less-than-significant impact.

If a project site is located within an area considered more likely to contain NOA, it may be considered to have an elevated probability of containing NOA and, in this *Air Quality Study*, will be considered to have a significant impact. On-site soil sampling, and the implementation of mitigation measures may be required to reduce the impact to a less-than-significant level.

4.2 METHODOLOGY

The amount of project-related criteria pollutant emissions was calculated using the CalEEMod emissions model (South Coast Air Quality Management District 2013). CalEEMod is a land use emissions computer model designed to provide a platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

More detailed information on the CalEEMod model is available at the internet website http://caleemod.com/.

Output files from the CalEEMod model are presented in the *Technical Appendix* of this *Air Quality Study*.

4.3 IMPACTS

The following is a description of construction-related air quality impacts of the Altaville FFS Project.

4.3.1 Criteria Pollutant Emissions

Implementation of the Proposed Project would result in construction activity, which would generate air pollutant emissions. Construction activities such as grading, excavation and travel on unpaved surfaces would generate dust, and can lead to elevated concentrations of particulate matter emissions PM_{10}. The operation of construction equipment results in exhaust emissions, which include ozone precursors ROG and NO_x. Paving and the application of architectural coatings (e.g., paint) results in ROG emissions. **Table 10** presents estimates of construction-related ROG, NO_x, PM_{10}, and CO emissions.

As shown in **Table 10**, during construction of the Altaville FFS Project:

- The maximum daily amount of ozone precursor emissions, which is the sum of ROG and NO_x emissions, during all phases of construction would be 185.86 pounds per day (ppd). The significance threshold is 274 ppd.

- The maximum daily amount of PM_{10} emissions during all phases of construction would be 13.52 ppd. The significance threshold is 383 ppd.

- The maximum daily amount of CO emissions during all phases of construction would be 58.46 ppd. The significance threshold is 550 ppd.

Because the amount of project-related criteria pollutant emissions listed above would all be below the significance thresholds, the Altaville FFS Project is considered to have a less-than-significant impact on short-term construction-related air quality. No mitigation measures are required.

4.3.2 Naturally Occurring Asbestos

The map, *A General Location Guide For Ultramafic Rocks In California - Areas More Likely To Contain Naturally Occurring Asbestos* (California Department Of Conservation 2000) shows areas more likely to contain NOA. Soil-disturbing construction activity in these areas would result in an elevated risk of entraining NOA.

The asbestos map shows there are no areas more likely to contain NOA in the vicinity of the Altaville FFS Project site. The area more likely to contain NOA that is nearest to the Altaville FFS Project site is approximately five miles to the south and southwest. Therefore, the project site is considered to have a low probability of containing NOA, and this impact is considered less-than-significant. No mitigation measures are required.

Table 10. Construction-Related Criteria Pollutant Emissions

Pollutant	Project-Related Emissions	Project-Level Significance Thresholds	Significant Impact?
Reactive Organic Gases (ROG)	117.40		
Nitrogen Oxides (NO_x)	68.46		
Total for Ozone Precursors	185.86	274	No
Inhalable Particulate Matter (PM_{10})	13.52	383	No
Carbon Monoxide (CO)	58.46	550	No

Sources: CalEEMod emissions model.
Thresholds from City of Angels Camp 2009 and Hanham pers. comm.

Notes: All values are expressed in pounds per day.
Values shown are the maximum of all construction phases.
Values shown are the maximum of summer and winter values.

SECTION 5
LONG-TERM OPERATIONAL IMPACTS

This section of this *Air Quality Stud*y presents an assessment of the long-term operational impacts of the Altaville Forest Fire Station Auto Shop Relocation Project.

The Proposed Project would result in the relocation of the existing FFS Auto Shop from the San Andreas area to the Altaville area. This would result in relocation of emissions associated with operation of the facility. However, the Proposed Project would not change the amount of operational emissions – the generation of emissions would geographically shift between areas within Calaveras County. Because the Proposed Project would not change the amount of operational emissions generated by the FFS Auto Shop, operational emissions have not been quantified for this *Air Quality Study*.

Because the Altaville Forest Fire Station Auto Shop Relocation Project would not result in a net increase of long-term operational emissions, the impact of the Proposed Project on long-term operational emissions is considered to be less than significant. No mitigation measures are required.

SECTION 6
GLOBAL CLIMATE CHANGE AND GREENHOUSE GAS IMPACTS

Short-term construction and long-term operation of the Altaville FFS Project would generate emissions which are associated with global climate change. These GHG emissions include CO_2, CH_4, and N_2O. This section of this *Air Quality Study* describes the effects of the Altaville FFS Project on global climate change and GHG emissions.

6.1 SIGNIFICANCE THRESHOLDS

This *Air Quality Study* applies a quantitative threshold for determining the significance of project-related impact on global climate change. The threshold is based on the amount of GHG emissions that would be generated by the Proposed Project.

Neither the Calaveras County APCD nor the City of Angels Camp has adopted quantitative significance thresholds for GHG emissions. Therefore, the threshold used in this *Air Quality Study* is based on a threshold developed by the California Air Pollution Control Officers Association (CAPCOA). The CAPCOA document *CEQA & Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* (California Air Pollution Control Officers Association 2008) presents a 900 metric ton per year (MT/yr) of CO_2e screening threshold. The CAPCOA threshold is considered a conservative threshold set at a level to "capture" or define 90 percent of land use development projects as significant. The CAPCOA document notes,

> "A single quantitative threshold was developed in order to ensure capture of 90 percent or more of likely future discretionary developments. The objective was to set the emission threshold low enough to capture a substantial fraction of future residential and nonresidential development that will be constructed to accommodate future statewide population and job growth, while setting the emission threshold high enough to exclude small development projects that will contribute a relatively small fraction of the cumulative statewide GHG emissions."

In this *Air Quality Study*, if the Proposed Project would generate more than 900 MT/yr of CO_2e, the project is considered to have a significant impact on global climate change. If the project would generate 900 MT/yr of CO_2e or less, the project is considered to have a less-than-significant impact on global climate change. The 900 MT/yr of CO_2e threshold is applied in this *Air Quality Study* to both construction-related emissions and operational GHG emissions. (Hanham pers. comm.)

6.2 METHODOLOGY

The amount of project-related GHG emissions was calculated using the CalEEMod emissions model (South Coast Air Quality Management District 2013). CalEEMod is a land use emissions computer model designed to provide a platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

More detailed information on the CalEEMod model is available at the internet website http://caleemod.com/.

The amount of construction activity and the construction schedule used in the analysis of construction-related emissions has been previously described in the *Project Description* section of this *Air Quality Study*.

Output files from the CalEEMod model are presented in the *Technical Appendix* of this *Air Quality Study*.

6.3 IMPACTS

The following is a description of impacts of the Altaville FFS Project on global climate change and GHG emissions.

6.3.1 Construction-Related Emissions

The Altaville FFS Project would result in 293.43 MT/yr of construction-related CO_2e emissions in 2016, and 91.65 MT/yr of CO_2e emissions in 2017. The total for the 14-month-long construction period would be 385.08 MT. All of these values are less than the 900 MT/yr of CO_2e significance threshold. Therefore, the impact of the Altaville FFS Project on construction-related GHG emissions is considered less-than-significant and no mitigation measures are required.

6.3.2 Operational Emissions

As described earlier in this *Air Quality Study*, the Proposed Project would result in the relocation of the existing FFS Auto Shop from the San Andreas Area to the Altaville area. This would result in relocation of GHG emissions associated with operation of the facility. Because the Altaville FFS Project would relocate operational emissions, but not result in a net change in the amount of emissions generated, the impact of the Proposed Project on long-term operational GHG emissions is considered to be less than significant. No mitigation measures are required.

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World Meteorological Organization. 2005: Statement on the Status of the Global Climate in 2005: Geneva, 15 December 2005. Geneva, Switzerland.

Personal Communications

Hanham, David. Director of Planning & Building. City of Angels Camp. July 8, 2013 E-mail message to Wayne Shijo, KD Anderson & Associates.

Stabenfeldt, Chris. Senior Environmental Planner/Project Manager. ECORP Consulting, Inc. June 7, 2013 E-mail message to and telephone conversation with Wayne Shijo, KD Anderson & Associates.

TECHNICAL APPENDIX

CalEEMod MODEL OUTPUT FILES

The following CalEEMod emissions model output files are presented in this technical appendix:

CalEEMod Model Output File
Construction-Related Emissions
Summer Daily Period

CalEEMod Model Output File
Construction-Related Emissions
Winter Daily Period

CalEEMod Model Output File
Construction-Related Emissions
Annual Period

CalEEMod Model Output File
Construction-Related Emissions
Summer Daily Period

Altaville Forest Fire Station Auto Shop Construction

Calaveras County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	10.02	1000sqft	0.23	10,020.00	0
Other Asphalt Surfaces	63.13	1000sqft	1.45	63,125.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	1			**Operational Year**	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - This file is for short-term construction emissions only. Not valid for long-term operational emissions.

Land Use - Quantities provided by ECORP Consulting 1/9/14.

Construction Phase - Construction schedule per project description. Elapsed time is 150% of default. Per CalEEMod FAQ, use of construction equipment will be factored down - divided by a 1.5 factor.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Equip set per Proj Desc. Replace Rubber Tired Dozer with Excavator. Add 4 Plate Compactors. Hrs adj for constr sched 150% of default.

Off-road Equipment - Equip set per Proj Descr. Generator, Tractor/Loader/Backhoe, Welder deleted. 2 Aerial lifts added. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Grading - Acreage for Site Preparation set to CalEEMod default value.

Trips and VMT - Hauling trips added for trucks per Project Description. 4 for Site Preparation and Grading. 2 for Building Construction.

Vehicle Trips - Construction only. Project is replacement of existing facility. No change in long-term operational emissions.

Consumer Products - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Area Coating - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Landscape Equipment - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Energy Use - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Water And Wastewater - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Solid Waste - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	109718	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	200.00	300.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	3.00
tblConstructionPhase	PhaseEndDate	2/11/2016	2/10/2016

tblConstructionPhase	PhaseEndDate	4/26/2017	4/25/2017
tblConstructionPhase	PhaseStartDate	2/4/2016	2/3/2016
tblConstructionPhase	PhaseStartDate	4/6/2017	4/5/2017
tblConsumerProducts	ROG_EF	2.14E-05	1E-09
tblEnergyUse	LightingElect	2.12	0.00
tblEnergyUse	NT24E	1.85	0.00
tblEnergyUse	NT24NG	0.31	0.00
tblEnergyUse	T24E	0.76	0.00
tblEnergyUse	T24NG	3.37	0.00
tblLandscapeEquipment	NumberSummerDays	180	0.1
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.70
tblOffRoadEquipment	UsageHours	7.00	4.70
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.30

tblOffRoadEquipment	UsageHours	7.00	4.70
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	38.28	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	20.00
tblVehicleTrips	ST_TR	62.00	0.00
tblVehicleTrips	SU_TR	62.00	0.00
tblVehicleTrips	WD_TR	62.00	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	2,117.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	942,692.70	0.00
tblWater	OutdoorWaterUseRate	577,779.39	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	4.1255	41.0255	30.8851	0.0356	9.0620	2.1843	11.2463	4.5982	2.0116	6.6098	0.0000	3,556.4660	3,556.4660	0.9245	0.0000	3,575.8801
2017	113.2752	27.2007	26.8673	0.0407	0.6218	1.6484	2.2702	0.1664	1.5718	1.7381	0.0000	3,765.8942	3,765.8942	0.7435	0.0000	3,781.5071
Total	**117.4007**	**68.2262**	**57.7524**	**0.0763**	**9.6838**	**3.8327**	**13.5165**	**4.7646**	**3.5834**	**8.3480**	**0.0000**	**7,322.3602**	**7,322.3602**	**1.6680**	**0.0000**	**7,357.3872**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	4.1255	41.0255	30.8851	0.0356	9.0620	2.1843	11.2463	4.5982	2.0116	6.6098	0.0000	3,556.4660	3,556.4660	0.9245	0.0000	3,575.8801
2017	113.2752	27.2007	26.8673	0.0407	0.6218	1.6484	2.2702	0.1664	1.5718	1.7381	0.0000	3,765.8942	3,765.8942	0.7435	0.0000	3,781.5071
Total	**117.4007**	**68.2262**	**57.7524**	**0.0763**	**9.6838**	**3.8327**	**13.5165**	**4.7646**	**3.5834**	**8.3480**	**0.0000**	**7,322.3602**	**7,322.3602**	**1.6680**	**0.0000**	**7,357.3871**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.1000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**8.1000e-004**	**7.0000e-005**	**7.6100e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**		**0.0160**	**0.0160**	**4.0000e-005**	**0.0000**	**0.0169**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.1000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**8.1000e-004**	**7.0000e-005**	**7.6100e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**		**0.0160**	**0.0160**	**4.0000e-005**	**0.0000**	**0.0169**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2016	2/3/2016	5	3	
2	Grading	Grading	2/3/2016	2/10/2016	5	6	
3	Building Construction	Building Construction	2/11/2016	4/5/2017	5	300	
4	Paving	Paving	4/5/2017	4/25/2017	5	15	
5	Architectural Coating	Architectural Coating	4/26/2017	5/16/2017	5	15	

Acres of Grading (Site Preparation Phase): 0.99

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 109,718; Non-Residential Outdoor: 36,573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	4.00	78	0.48
Paving	Cement and Mortar Mixers	1	4.00	9	0.56
Grading	Excavators	1	5.30	162	0.38
Building Construction	Aerial Lifts	2	5.30	62	0.31
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	1	4.00	89	0.20
Site Preparation	Graders	1	5.30	174	0.41
Paving	Pavers	1	4.00	125	0.42
Paving	Rollers	1	4.70	80	0.38
Grading	Plate Compactors	4	5.30	8	0.43
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	4.70	97	0.37
Paving	Tractors/Loaders/Backhoes	1	5.30	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	5.30	97	0.37
Grading	Graders	1	4.00	174	0.41
Paving	Paving Equipment	1	5.30	130	0.36
Site Preparation	Rubber Tired Dozers	1	4.70	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	20.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	30.00	12.00	2.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.8879	0.0000	3.8879	1.9826	0.0000	1.9826			0.0000			0.0000
Off-Road	1.6280	17.1822	11.0227	0.0114		0.9315	0.9315		0.8570	0.8570		1,187.1846	1,187.1846	0.3581		1,194.7047
Total	**1.6280**	**17.1822**	**11.0227**	**0.0114**	**3.8879**	**0.9315**	**4.8195**	**1.9826**	**0.8570**	**2.8396**		**1,187.1846**	**1,187.1846**	**0.3581**		**1,194.7047**

3.2 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0408	0.3619	0.4328	9.8000e-004	0.0232	5.5500e-003	0.0287	6.3300e-003	5.1000e-003	0.0114		98.8195	98.8195	7.1000e-004		98.8345
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0667	0.0762	0.9173	1.2800e-003	0.1022	9.5000e-004	0.1031	0.0271	8.7000e-004	0.0280		104.5546	104.5546	6.8100e-003		104.6975
Total	**0.1075**	**0.4381**	**1.3501**	**2.2600e-003**	**0.1253**	**6.5000e-003**	**0.1318**	**0.0334**	**5.9700e-003**	**0.0394**		**203.3741**	**203.3741**	**7.5200e-003**		**203.5320**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.8879	0.0000	3.8879	1.9826	0.0000	1.9826			0.0000			0.0000
Off-Road	1.6280	17.1822	11.0227	0.0114		0.9315	0.9315		0.8570	0.8570	0.0000	1,187.1846	1,187.1846	0.3581		1,194.7046
Total	**1.6280**	**17.1822**	**11.0227**	**0.0114**	**3.8879**	**0.9315**	**4.8195**	**1.9826**	**0.8570**	**2.8396**	**0.0000**	**1,187.1846**	**1,187.1846**	**0.3581**		**1,194.7046**

3.2 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0408	0.3619	0.4328	9.8000e-004	0.0232	5.5500e-003	0.0287	6.3300e-003	5.1000e-003	0.0114		98.8195	98.8195	7.1000e-004		98.8345
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0667	0.0762	0.9173	1.2800e-003	0.1022	9.5000e-004	0.1031	0.0271	8.7000e-004	0.0280		104.5546	104.5546	6.8100e-003		104.6975
Total	**0.1075**	**0.4381**	**1.3501**	**2.2600e-003**	**0.1253**	**6.5000e-003**	**0.1318**	**0.0334**	**5.9700e-003**	**0.0394**		**203.3741**	**203.3741**	**7.5200e-003**		**203.5320**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	2.2030	23.0337	16.0027	0.0183		1.2411	1.2411		1.1439	1.1439		1,855.1110	1,855.1110	0.5415		1,866.4824
Total	**2.2030**	**23.0337**	**16.0027**	**0.0183**	**4.7817**	**1.2411**	**6.0228**	**2.5113**	**1.1439**	**3.6552**		**1,855.1110**	**1,855.1110**	**0.5415**		**1,866.4824**

3.3 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0204	0.1809	0.2164	4.9000e-004	0.0116	2.7700e-003	0.0144	3.1700e-003	2.5500e-003	5.7200e-003		49.4098	49.4098	3.6000e-004		49.4172
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1666	0.1906	2.2932	3.2100e-003	0.2555	2.3800e-003	0.2579	0.0678	2.1800e-003	0.0699		261.3865	261.3865	0.0170		261.7438
Total	**0.1870**	**0.3715**	**2.5096**	**3.7000e-003**	**0.2670**	**5.1500e-003**	**0.2722**	**0.0709**	**4.7300e-003**	**0.0756**		**310.7962**	**310.7962**	**0.0174**		**311.1610**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	2.2030	23.0337	16.0027	0.0183		1.2411	1.2411		1.1439	1.1439	0.0000	1,855.1110	1,855.1110	0.5415		1,866.4824
Total	**2.2030**	**23.0337**	**16.0027**	**0.0183**	**4.7817**	**1.2411**	**6.0228**	**2.5113**	**1.1439**	**3.6552**	**0.0000**	**1,855.1110**	**1,855.1110**	**0.5415**		**1,866.4824**

3.3 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0204	0.1809	0.2164	4.9000e-004	0.0116	2.7700e-003	0.0144	3.1700e-003	2.5500e-003	5.7200e-003		49.4098	49.4098	3.6000e-004		49.4172
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1666	0.1906	2.2932	3.2100e-003	0.2555	2.3800e-003	0.2579	0.0678	2.1800e-003	0.0699		261.3865	261.3865	0.0170		261.7438
Total	**0.1870**	**0.3715**	**2.5096**	**3.7000e-003**	**0.2670**	**5.1500e-003**	**0.2722**	**0.0709**	**4.7300e-003**	**0.0756**		**310.7962**	**310.7962**	**0.0174**		**311.1610**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1287	19.1402	15.0748	0.0223		1.2780	1.2780		1.2369	1.2369		2,086.7498	2,086.7498	0.4619		2,096.4500
Total	**3.1287**	**19.1402**	**15.0748**	**0.0223**		**1.2780**	**1.2780**		**1.2369**	**1.2369**		**2,086.7498**	**2,086.7498**	**0.4619**		**2,096.4500**

3.4 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-004	1.8100e-003	2.1600e-003	0.0000	1.4000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	6.0000e-005		0.4941	0.4941	0.0000		0.4942
Vendor	0.2047	1.0988	1.8816	2.6000e-003	0.0721	0.0187	0.0908	0.0206	0.0171	0.0377		259.5544	259.5544	2.2300e-003		259.6012
Worker	0.2500	0.2859	3.4397	4.8100e-003	0.3832	3.5800e-003	0.3868	0.1016	3.2700e-003	0.1049		392.0797	392.0797	0.0255		392.6157
Total	**0.4549**	**1.3865**	**5.3235**	**7.4100e-003**	**0.4555**	**0.0223**	**0.4777**	**0.1223**	**0.0204**	**0.1427**		**652.1283**	**652.1283**	**0.0278**		**652.7110**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1287	19.1402	15.0748	0.0223		1.2780	1.2780		1.2369	1.2369	0.0000	2,086.7498	2,086.7498	0.4619		2,096.4500
Total	**3.1287**	**19.1402**	**15.0748**	**0.0223**		**1.2780**	**1.2780**		**1.2369**	**1.2369**	**0.0000**	**2,086.7498**	**2,086.7498**	**0.4619**		**2,096.4500**

3.4 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-004	1.8100e-003	2.1600e-003	0.0000	1.4000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	6.0000e-005		0.4941	0.4941	0.0000		0.4942
Vendor	0.2047	1.0988	1.8816	2.6000e-003	0.0721	0.0187	0.0908	0.0206	0.0171	0.0377		259.5544	259.5544	2.2300e-003		259.6012
Worker	0.2500	0.2859	3.4397	4.8100e-003	0.3832	3.5800e-003	0.3868	0.1016	3.2700e-003	0.1049		392.0797	392.0797	0.0255		392.6157
Total	**0.4549**	**1.3865**	**5.3235**	**7.4100e-003**	**0.4555**	**0.0223**	**0.4777**	**0.1223**	**0.0204**	**0.1427**		**652.1283**	**652.1283**	**0.0278**		**652.7110**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8035	17.7845	14.7316	0.0223		1.1395	1.1395		1.1030	1.1030		2,073.4449	2,073.4449	0.4388		2,082.6605
Total	**2.8035**	**17.7845**	**14.7316**	**0.0223**		**1.1395**	**1.1395**		**1.1030**	**1.1030**		**2,073.4449**	**2,073.4449**	**0.4388**		**2,082.6605**

3.4 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-004	1.6300e-003	2.0600e-003	0.0000	4.2000e-004	2.0000e-005	4.4000e-004	1.1000e-004	2.0000e-005	1.3000e-004		0.4876	0.4876	0.0000		0.4877
Vendor	0.1894	1.0006	1.7732	2.6000e-003	0.0722	0.0160	0.0881	0.0206	0.0147	0.0353		255.7920	255.7920	2.0700e-003		255.8355
Worker	0.2191	0.2530	3.0365	4.8000e-003	0.3832	3.3600e-003	0.3866	0.1016	3.0800e-003	0.1047		376.4999	376.4999	0.0230		376.9831
Total	**0.4088**	**1.2552**	**4.8117**	**7.4000e-003**	**0.4558**	**0.0193**	**0.4751**	**0.1223**	**0.0178**	**0.1401**		**632.7795**	**632.7795**	**0.0251**		**633.3063**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8035	17.7845	14.7316	0.0223		1.1395	1.1395		1.1030	1.1030	0.0000	2,073.4449	2,073.4449	0.4388		2,082.6605
Total	**2.8035**	**17.7845**	**14.7316**	**0.0223**		**1.1395**	**1.1395**		**1.1030**	**1.1030**	**0.0000**	**2,073.4449**	**2,073.4449**	**0.4388**		**2,082.6605**

3.4 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-004	1.6300e-003	2.0600e-003	0.0000	4.2000e-004	2.0000e-005	4.4000e-004	1.1000e-004	2.0000e-005	1.3000e-004		0.4876	0.4876	0.0000		0.4877
Vendor	0.1894	1.0006	1.7732	2.6000e-003	0.0722	0.0160	0.0881	0.0206	0.0147	0.0353		255.7920	255.7920	2.0700e-003		255.8355
Worker	0.2191	0.2530	3.0365	4.8000e-003	0.3832	3.3600e-003	0.3866	0.1016	3.0800e-003	0.1047		376.4999	376.4999	0.0230		376.9831
Total	**0.4088**	**1.2552**	**4.8117**	**7.4000e-003**	**0.4558**	**0.0193**	**0.4751**	**0.1223**	**0.0178**	**0.1401**		**632.7795**	**632.7795**	**0.0251**		**633.3063**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7892	8.0514	6.0083	8.8700e-003		0.4881	0.4881		0.4496	0.4496		896.5198	896.5198	0.2696		902.1809
Paving	0.2533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0425**	**8.0514**	**6.0083**	**8.8700e-003**		**0.4881**	**0.4881**		**0.4496**	**0.4496**		**896.5198**	**896.5198**	**0.2696**		**902.1809**

3.5 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0950	0.1096	1.3158	2.0800e-003	0.1661	1.4500e-003	0.1675	0.0440	1.3300e-003	0.0454		163.1500	163.1500	9.9700e-003		163.3594
Total	**0.0950**	**0.1096**	**1.3158**	**2.0800e-003**	**0.1661**	**1.4500e-003**	**0.1675**	**0.0440**	**1.3300e-003**	**0.0454**		**163.1500**	**163.1500**	**9.9700e-003**		**163.3594**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7892	8.0514	6.0083	8.8700e-003		0.4881	0.4881		0.4496	0.4496	0.0000	896.5198	896.5198	0.2696		902.1809
Paving	0.2533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0425**	**8.0514**	**6.0083**	**8.8700e-003**		**0.4881**	**0.4881**		**0.4496**	**0.4496**	**0.0000**	**896.5198**	**896.5198**	**0.2696**		**902.1809**

3.5 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0950	0.1096	1.3158	2.0800e-003	0.1661	1.4500e-003	0.1675	0.0440	1.3300e-003	0.0454		163.1500	163.1500	9.9700e-003		163.3594
Total	**0.0950**	**0.1096**	**1.3158**	**2.0800e-003**	**0.1661**	**1.4500e-003**	**0.1675**	**0.0440**	**1.3300e-003**	**0.0454**		**163.1500**	**163.1500**	**9.9700e-003**		**163.3594**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	113.0098					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2215	1.4567	1.2454	1.9800e-003		0.1156	0.1156		0.1156	0.1156		187.6320	187.6320	0.0198		188.0480
Total	**113.2313**	**1.4567**	**1.2454**	**1.9800e-003**		**0.1156**	**0.1156**		**0.1156**	**0.1156**		**187.6320**	**187.6320**	**0.0198**		**188.0480**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0506	0.6073	9.6000e-004	0.0766	6.7000e-004	0.0773	0.0203	6.2000e-004	0.0209		75.3000	75.3000	4.6000e-003		75.3966
Total	**0.0438**	**0.0506**	**0.6073**	**9.6000e-004**	**0.0766**	**6.7000e-004**	**0.0773**	**0.0203**	**6.2000e-004**	**0.0209**		**75.3000**	**75.3000**	**4.6000e-003**		**75.3966**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	113.0098					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2215	1.4567	1.2454	1.9800e-003		0.1156	0.1156		0.1156	0.1156	0.0000	187.6320	187.6320	0.0198		188.0480
Total	**113.2313**	**1.4567**	**1.2454**	**1.9800e-003**		**0.1156**	**0.1156**		**0.1156**	**0.1156**	**0.0000**	**187.6320**	**187.6320**	**0.0198**		**188.0480**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0506	0.6073	9.6000e-004	0.0766	6.7000e-004	0.0773	0.0203	6.2000e-004	0.0209		75.3000	75.3000	4.6000e-003		75.3966
Total	**0.0438**	**0.0506**	**0.6073**	**9.6000e-004**	**0.0766**	**6.7000e-004**	**0.0773**	**0.0203**	**6.2000e-004**	**0.0209**		**75.3000**	**75.3000**	**4.6000e-003**		**75.3966**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.378463	0.110094	0.166130	0.176574	0.101508	0.012590	0.019002	0.015908	0.002011	0.000198	0.009330	0.001253	0.006940

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.1000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Unmitigated	8.1000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Total	**8.0000e-004**	**7.0000e-005**	**7.6100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0160**	**0.0160**	**4.0000e-005**		**0.0169**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Total	**8.0000e-004**	**7.0000e-005**	**7.6100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0160**	**0.0160**	**4.0000e-005**		**0.0169**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

CalEEMod Model Output File
Construction-Related Emissions
Winter Daily Period

Altaville Forest Fire Station Auto Shop Construction

Calaveras County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	10.02	1000sqft	0.23	10,020.00	0
Other Asphalt Surfaces	63.13	1000sqft	1.45	63,125.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	1			**Operational Year**	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - This file is for short-term construction emissions only. Not valid for long-term operational emissions.

Land Use - Quantities provided by ECORP Consulting 1/9/14.

Construction Phase - Construction schedule per project description. Elapsed time is 150% of default. Per CalEEMod FAQ, use of construction equipment will be factored down - divided by a 1.5 factor.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Equip set per Proj Desc. Replace Rubber Tired Dozer with Excavator. Add 4 Plate Compactors. Hrs adj for constr sched 150% of default.

Off-road Equipment - Equip set per Proj Descr. Generator, Tractor/Loader/Backhoe, Welder deleted. 2 Aerial lifts added. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Grading - Acreage for Site Preparation set to CalEEMod default value.

Trips and VMT - Hauling trips added for trucks per Project Description. 4 for Site Preparation and Grading. 2 for Building Construction.

Vehicle Trips - Construction only. Project is replacement of existing facility. No change in long-term operational emissions.

Consumer Products - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Area Coating - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Landscape Equipment - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Energy Use - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Water And Wastewater - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Solid Waste - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	109718	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	200.00	300.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	3.00
tblConstructionPhase	PhaseEndDate	2/11/2016	2/10/2016

tblConstructionPhase	PhaseEndDate	4/26/2017	4/25/2017
tblConstructionPhase	PhaseStartDate	2/4/2016	2/3/2016
tblConstructionPhase	PhaseStartDate	4/6/2017	4/5/2017
tblConsumerProducts	ROG_EF	2.14E-05	1E-09
tblEnergyUse	LightingElect	2.12	0.00
tblEnergyUse	NT24E	1.85	0.00
tblEnergyUse	NT24NG	0.31	0.00
tblEnergyUse	T24E	0.76	0.00
tblEnergyUse	T24NG	3.37	0.00
tblLandscapeEquipment	NumberSummerDays	180	0.1
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.70
tblOffRoadEquipment	UsageHours	7.00	4.70
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.30

tblOffRoadEquipment	UsageHours	7.00	4.70
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	38.28	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	20.00
tblVehicleTrips	ST_TR	62.00	0.00
tblVehicleTrips	SU_TR	62.00	0.00
tblVehicleTrips	WD_TR	62.00	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	2,117.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	942,692.70	0.00
tblWater	OutdoorWaterUseRate	577,779.39	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	4.1229	41.1229	30.8811	0.0351	9.0620	2.1844	11.2464	4.5982	2.0117	6.6098	0.0000	3,515.7498	3,515.7498	0.9245	0.0000	3,535.1642
2017	113.2712	27.3394	27.5807	0.0399	0.6218	1.6487	2.2705	0.1664	1.5720	1.7384	0.0000	3,704.0534	3,704.0534	0.7435	0.0000	3,719.6676
Total	**117.3941**	**68.4622**	**58.4618**	**0.0751**	**9.6838**	**3.8330**	**13.5168**	**4.7646**	**3.5837**	**8.3482**	**0.0000**	**7,219.8032**	**7,219.8032**	**1.6680**	**0.0000**	**7,254.8318**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	4.1229	41.1229	30.8811	0.0351	9.0620	2.1844	11.2464	4.5982	2.0117	6.6098	0.0000	3,515.7498	3,515.7498	0.9245	0.0000	3,535.1642
2017	113.2712	27.3394	27.5807	0.0399	0.6218	1.6487	2.2705	0.1664	1.5720	1.7384	0.0000	3,704.0534	3,704.0534	0.7435	0.0000	3,719.6676
Total	**117.3941**	**68.4622**	**58.4618**	**0.0751**	**9.6838**	**3.8330**	**13.5168**	**4.7646**	**3.5837**	**8.3482**	**0.0000**	**7,219.8032**	**7,219.8032**	**1.6680**	**0.0000**	**7,254.8318**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.1000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**8.1000e-004**	**7.0000e-005**	**7.6100e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**		**0.0160**	**0.0160**	**4.0000e-005**	**0.0000**	**0.0169**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.1000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**8.1000e-004**	**7.0000e-005**	**7.6100e-003**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**3.0000e-005**		**0.0160**	**0.0160**	**4.0000e-005**	**0.0000**	**0.0169**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2016	2/3/2016	5	3	
2	Grading	Grading	2/3/2016	2/10/2016	5	6	
3	Building Construction	Building Construction	2/11/2016	4/5/2017	5	300	
4	Paving	Paving	4/5/2017	4/25/2017	5	15	
5	Architectural Coating	Architectural Coating	4/26/2017	5/16/2017	5	15	

Acres of Grading (Site Preparation Phase): 0.99

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 109,718; Non-Residential Outdoor: 36,573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	4.00	78	0.48
Paving	Cement and Mortar Mixers	1	4.00	9	0.56
Grading	Excavators	1	5.30	162	0.38
Building Construction	Aerial Lifts	2	5.30	62	0.31
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	1	4.00	89	0.20
Site Preparation	Graders	1	5.30	174	0.41
Paving	Pavers	1	4.00	125	0.42
Paving	Rollers	1	4.70	80	0.38
Grading	Plate Compactors	4	5.30	8	0.43
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	4.70	97	0.37
Paving	Tractors/Loaders/Backhoes	1	5.30	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	5.30	97	0.37
Grading	Graders	1	4.00	174	0.41
Paving	Paving Equipment	1	5.30	130	0.36
Site Preparation	Rubber Tired Dozers	1	4.70	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	20.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	30.00	12.00	2.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.8879	0.0000	3.8879	1.9826	0.0000	1.9826			0.0000			0.0000
Off-Road	1.6280	17.1822	11.0227	0.0114		0.9315	0.9315		0.8570	0.8570		1,187.1846	1,187.1846	0.3581		1,194.7047
Total	**1.6280**	**17.1822**	**11.0227**	**0.0114**	**3.8879**	**0.9315**	**4.8195**	**1.9826**	**0.8570**	**2.8396**		**1,187.1846**	**1,187.1846**	**0.3581**		**1,194.7047**

3.2 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0518	0.3871	0.6479	9.9000e-004	0.0232	5.5700e-003	0.0287	6.3300e-003	5.1200e-003	0.0115		98.5841	98.5841	7.2000e-004		98.5993
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0612	0.0932	0.8240	1.1400e-003	0.1022	9.5000e-004	0.1031	0.0271	8.7000e-004	0.0280		93.0223	93.0223	6.8100e-003		93.1652
Total	**0.1130**	**0.4803**	**1.4719**	**2.1300e-003**	**0.1253**	**6.5200e-003**	**0.1319**	**0.0334**	**5.9900e-003**	**0.0394**		**191.6064**	**191.6064**	**7.5300e-003**		**191.7645**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.8879	0.0000	3.8879	1.9826	0.0000	1.9826			0.0000			0.0000
Off-Road	1.6280	17.1822	11.0227	0.0114		0.9315	0.9315		0.8570	0.8570	0.0000	1,187.1846	1,187.1846	0.3581		1,194.7046
Total	**1.6280**	**17.1822**	**11.0227**	**0.0114**	**3.8879**	**0.9315**	**4.8195**	**1.9826**	**0.8570**	**2.8396**	**0.0000**	**1,187.1846**	**1,187.1846**	**0.3581**		**1,194.7046**

3.2 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0518	0.3871	0.6479	9.9000e-004	0.0232	5.5700e-003	0.0287	6.3300e-003	5.1200e-003	0.0115		98.5841	98.5841	7.2000e-004		98.5993
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0612	0.0932	0.8240	1.1400e-003	0.1022	9.5000e-004	0.1031	0.0271	8.7000e-004	0.0280		93.0223	93.0223	6.8100e-003		93.1652
Total	**0.1130**	**0.4803**	**1.4719**	**2.1300e-003**	**0.1253**	**6.5200e-003**	**0.1319**	**0.0334**	**5.9900e-003**	**0.0394**		**191.6064**	**191.6064**	**7.5300e-003**		**191.7645**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	2.2030	23.0337	16.0027	0.0183		1.2411	1.2411		1.1439	1.1439		1,855.1110	1,855.1110	0.5415		1,866.4824
Total	**2.2030**	**23.0337**	**16.0027**	**0.0183**	**4.7817**	**1.2411**	**6.0228**	**2.5113**	**1.1439**	**3.6552**		**1,855.1110**	**1,855.1110**	**0.5415**		**1,866.4824**

3.3 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0259	0.1935	0.3240	4.9000e-004	0.0116	2.7800e-003	0.0144	3.1700e-003	2.5600e-003	5.7300e-003		49.2921	49.2921	3.6000e-004		49.2997
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1530	0.2331	2.0599	2.8500e-003	0.2555	2.3800e-003	0.2579	0.0678	2.1800e-003	0.0699		232.5557	232.5557	0.0170		232.9130
Total	**0.1789**	**0.4266**	**2.3838**	**3.3400e-003**	**0.2670**	**5.1600e-003**	**0.2722**	**0.0709**	**4.7400e-003**	**0.0757**		**281.8478**	**281.8478**	**0.0174**		**282.2127**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7817	0.0000	4.7817	2.5113	0.0000	2.5113			0.0000			0.0000
Off-Road	2.2030	23.0337	16.0027	0.0183		1.2411	1.2411		1.1439	1.1439	0.0000	1,855.1110	1,855.1110	0.5415		1,866.4824
Total	**2.2030**	**23.0337**	**16.0027**	**0.0183**	**4.7817**	**1.2411**	**6.0228**	**2.5113**	**1.1439**	**3.6552**	**0.0000**	**1,855.1110**	**1,855.1110**	**0.5415**		**1,866.4824**

3.3 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0259	0.1935	0.3240	4.9000e-004	0.0116	2.7800e-003	0.0144	3.1700e-003	2.5600e-003	5.7300e-003		49.2921	49.2921	3.6000e-004		49.2997
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1530	0.2331	2.0599	2.8500e-003	0.2555	2.3800e-003	0.2579	0.0678	2.1800e-003	0.0699		232.5557	232.5557	0.0170		232.9130
Total	**0.1789**	**0.4266**	**2.3838**	**3.3400e-003**	**0.2670**	**5.1600e-003**	**0.2722**	**0.0709**	**4.7400e-003**	**0.0757**		**281.8478**	**281.8478**	**0.0174**		**282.2127**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1287	19.1402	15.0748	0.0223		1.2780	1.2780		1.2369	1.2369		2,086.7498	2,086.7498	0.4619		2,096.4500
Total	**3.1287**	**19.1402**	**15.0748**	**0.0223**		**1.2780**	**1.2780**		**1.2369**	**1.2369**		**2,086.7498**	**2,086.7498**	**0.4619**		**2,096.4500**

3.4 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.6000e-004	1.9400e-003	3.2400e-003	0.0000	1.4000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	6.0000e-005		0.4929	0.4929	0.0000		0.4930
Vendor	0.2694	1.1632	3.0874	2.6000e-003	0.0721	0.0190	0.0911	0.0206	0.0174	0.0380		257.3776	257.3776	2.2900e-003		257.4256
Worker	0.2295	0.3497	3.0898	4.2700e-003	0.3832	3.5800e-003	0.3868	0.1016	3.2700e-003	0.1049		348.8335	348.8335	0.0255		349.3695
Total	**0.4991**	**1.5148**	**6.1805**	**6.8700e-003**	**0.4555**	**0.0226**	**0.4780**	**0.1223**	**0.0207**	**0.1430**		**606.7040**	**606.7040**	**0.0278**		**607.2881**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1287	19.1402	15.0748	0.0223		1.2780	1.2780		1.2369	1.2369	0.0000	2,086.7498	2,086.7498	0.4619		2,096.4500
Total	**3.1287**	**19.1402**	**15.0748**	**0.0223**		**1.2780**	**1.2780**		**1.2369**	**1.2369**	**0.0000**	**2,086.7498**	**2,086.7498**	**0.4619**		**2,096.4500**

3.4 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.6000e-004	1.9400e-003	3.2400e-003	0.0000	1.4000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	6.0000e-005		0.4929	0.4929	0.0000		0.4930
Vendor	0.2694	1.1632	3.0874	2.6000e-003	0.0721	0.0190	0.0911	0.0206	0.0174	0.0380		257.3776	257.3776	2.2900e-003		257.4256
Worker	0.2295	0.3497	3.0898	4.2700e-003	0.3832	3.5800e-003	0.3868	0.1016	3.2700e-003	0.1049		348.8335	348.8335	0.0255		349.3695
Total	**0.4991**	**1.5148**	**6.1805**	**6.8700e-003**	**0.4555**	**0.0226**	**0.4780**	**0.1223**	**0.0207**	**0.1430**		**606.7040**	**606.7040**	**0.0278**		**607.2881**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8035	17.7845	14.7316	0.0223		1.1395	1.1395		1.1030	1.1030		2,073.4449	2,073.4449	0.4388		2,082.6605
Total	**2.8035**	**17.7845**	**14.7316**	**0.0223**		**1.1395**	**1.1395**		**1.1030**	**1.1030**		**2,073.4449**	**2,073.4449**	**0.4388**		**2,082.6605**

3.4 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5000e-004	1.7400e-003	3.1200e-003	0.0000	4.2000e-004	2.0000e-005	4.4000e-004	1.1000e-004	2.0000e-005	1.3000e-004		0.4865	0.4865	0.0000		0.4865
Vendor	0.2495	1.0585	2.9565	2.6000e-003	0.0722	0.0162	0.0884	0.0206	0.0149	0.0355		253.6433	253.6433	2.1400e-003		253.6881
Worker	0.1993	0.3093	2.7078	4.2700e-003	0.3832	3.3600e-003	0.3866	0.1016	3.0800e-003	0.1047		334.8551	334.8551	0.0230		335.3383
Total	**0.4491**	**1.3695**	**5.6675**	**6.8700e-003**	**0.4558**	**0.0196**	**0.4754**	**0.1223**	**0.0180**	**0.1404**		**588.9848**	**588.9848**	**0.0252**		**589.5129**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8035	17.7845	14.7316	0.0223		1.1395	1.1395		1.1030	1.1030	0.0000	2,073.4449	2,073.4449	0.4388		2,082.6605
Total	**2.8035**	**17.7845**	**14.7316**	**0.0223**		**1.1395**	**1.1395**		**1.1030**	**1.1030**	**0.0000**	**2,073.4449**	**2,073.4449**	**0.4388**		**2,082.6605**

3.4 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5000e-004	1.7400e-003	3.1200e-003	0.0000	4.2000e-004	2.0000e-005	4.4000e-004	1.1000e-004	2.0000e-005	1.3000e-004		0.4865	0.4865	0.0000		0.4865
Vendor	0.2495	1.0585	2.9565	2.6000e-003	0.0722	0.0162	0.0884	0.0206	0.0149	0.0355		253.6433	253.6433	2.1400e-003		253.6881
Worker	0.1993	0.3093	2.7078	4.2700e-003	0.3832	3.3600e-003	0.3866	0.1016	3.0800e-003	0.1047		334.8551	334.8551	0.0230		335.3383
Total	**0.4491**	**1.3695**	**5.6675**	**6.8700e-003**	**0.4558**	**0.0196**	**0.4754**	**0.1223**	**0.0180**	**0.1404**		**588.9848**	**588.9848**	**0.0252**		**589.5129**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7892	8.0514	6.0083	8.8700e-003		0.4881	0.4881		0.4496	0.4496		896.5198	896.5198	0.2696		902.1809
Paving	0.2533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0425**	**8.0514**	**6.0083**	**8.8700e-003**		**0.4881**	**0.4881**		**0.4496**	**0.4496**		**896.5198**	**896.5198**	**0.2696**		**902.1809**

3.5 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.1340	1.1734	1.8500e-003	0.1661	1.4500e-003	0.1675	0.0440	1.3300e-003	0.0454		145.1039	145.1039	9.9700e-003		145.3133
Total	**0.0864**	**0.1340**	**1.1734**	**1.8500e-003**	**0.1661**	**1.4500e-003**	**0.1675**	**0.0440**	**1.3300e-003**	**0.0454**		**145.1039**	**145.1039**	**9.9700e-003**		**145.3133**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7892	8.0514	6.0083	8.8700e-003		0.4881	0.4881		0.4496	0.4496	0.0000	896.5198	896.5198	0.2696		902.1809
Paving	0.2533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0425**	**8.0514**	**6.0083**	**8.8700e-003**		**0.4881**	**0.4881**		**0.4496**	**0.4496**	**0.0000**	**896.5198**	**896.5198**	**0.2696**		**902.1809**

3.5 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.1340	1.1734	1.8500e-003	0.1661	1.4500e-003	0.1675	0.0440	1.3300e-003	0.0454		145.1039	145.1039	9.9700e-003		145.3133
Total	**0.0864**	**0.1340**	**1.1734**	**1.8500e-003**	**0.1661**	**1.4500e-003**	**0.1675**	**0.0440**	**1.3300e-003**	**0.0454**		**145.1039**	**145.1039**	**9.9700e-003**		**145.3133**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	113.0098					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2215	1.4567	1.2454	1.9800e-003		0.1156	0.1156		0.1156	0.1156		187.6320	187.6320	0.0198		188.0480
Total	**113.2313**	**1.4567**	**1.2454**	**1.9800e-003**		**0.1156**	**0.1156**		**0.1156**	**0.1156**		**187.6320**	**187.6320**	**0.0198**		**188.0480**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0619	0.5416	8.5000e-004	0.0766	6.7000e-004	0.0773	0.0203	6.2000e-004	0.0209		66.9710	66.9710	4.6000e-003		67.0677
Total	**0.0399**	**0.0619**	**0.5416**	**8.5000e-004**	**0.0766**	**6.7000e-004**	**0.0773**	**0.0203**	**6.2000e-004**	**0.0209**		**66.9710**	**66.9710**	**4.6000e-003**		**67.0677**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	113.0098					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2215	1.4567	1.2454	1.9800e-003		0.1156	0.1156		0.1156	0.1156	0.0000	187.6320	187.6320	0.0198		188.0480
Total	**113.2313**	**1.4567**	**1.2454**	**1.9800e-003**		**0.1156**	**0.1156**		**0.1156**	**0.1156**	**0.0000**	**187.6320**	**187.6320**	**0.0198**		**188.0480**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0399	0.0619	0.5416	8.5000e-004	0.0766	6.7000e-004	0.0773	0.0203	6.2000e-004	0.0209		66.9710	66.9710	4.6000e-003		67.0677
Total	**0.0399**	**0.0619**	**0.5416**	**8.5000e-004**	**0.0766**	**6.7000e-004**	**0.0773**	**0.0203**	**6.2000e-004**	**0.0209**		**66.9710**	**66.9710**	**4.6000e-003**		**67.0677**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.378463	0.110094	0.166130	0.176574	0.101508	0.012590	0.019002	0.015908	0.002011	0.000198	0.009330	0.001253	0.006940

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.1000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Unmitigated	8.1000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Total	**8.0000e-004**	**7.0000e-005**	**7.6100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0160**	**0.0160**	**4.0000e-005**		**0.0169**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.3000e-004	7.0000e-005	7.6100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0169
Total	**8.0000e-004**	**7.0000e-005**	**7.6100e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0160**	**0.0160**	**4.0000e-005**		**0.0169**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

CalEEMod Model Output File
Construction-Related Emissions
Annual Period

Altaville Forest Fire Station Auto Shop Construction

Calaveras County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	10.02	1000sqft	0.23	10,020.00	0
Other Asphalt Surfaces	63.13	1000sqft	1.45	63,125.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	61
Climate Zone	1			**Operational Year**	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - This file is for short-term construction emissions only. Not valid for long-term operational emissions.

Land Use - Quantities provided by ECORP Consulting 1/9/14.

Construction Phase - Construction schedule per project description. Elapsed time is 150% of default. Per CalEEMod FAQ, use of construction equipment will be factored down - divided by a 1.5 factor.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Equip set per Proj Desc. Replace Rubber Tired Dozer with Excavator. Add 4 Plate Compactors. Hrs adj for constr sched 150% of default.

Off-road Equipment - Equip set per Proj Descr. Generator, Tractor/Loader/Backhoe, Welder deleted. 2 Aerial lifts added. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Off-road Equipment - Default equipment set. Hours adjusted for construction schedule being 150% of default.

Grading - Acreage for Site Preparation set to CalEEMod default value.

Trips and VMT - Hauling trips added for trucks per Project Description. 4 for Site Preparation and Grading. 2 for Building Construction.

Vehicle Trips - Construction only. Project is replacement of existing facility. No change in long-term operational emissions.

Consumer Products - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Area Coating - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Landscape Equipment - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Energy Use - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Water And Wastewater - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Solid Waste - Project is replacement of existing facility. Construction only. No change in long-term operational emissions.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	109718	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	200.00	300.00
tblConstructionPhase	NumDays	4.00	6.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	3.00
tblConstructionPhase	PhaseEndDate	2/11/2016	2/10/2016

tblConstructionPhase	PhaseEndDate	4/26/2017	4/25/2017
tblConstructionPhase	PhaseStartDate	2/4/2016	2/3/2016
tblConstructionPhase	PhaseStartDate	4/6/2017	4/5/2017
tblConsumerProducts	ROG_EF	2.14E-05	1E-09
tblEnergyUse	LightingElect	2.12	0.00
tblEnergyUse	NT24E	1.85	0.00
tblEnergyUse	NT24NG	0.31	0.00
tblEnergyUse	T24E	0.76	0.00
tblEnergyUse	T24NG	3.37	0.00
tblLandscapeEquipment	NumberSummerDays	180	0.1
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.70
tblOffRoadEquipment	UsageHours	7.00	4.70
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	8.00	5.30
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.30

tblOffRoadEquipment	UsageHours	7.00	4.70
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	38.28	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	23.00	20.00
tblVehicleTrips	ST_TR	62.00	0.00
tblVehicleTrips	SU_TR	62.00	0.00
tblVehicleTrips	WD_TR	62.00	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	2,117.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	942,692.70	0.00
tblWater	OutdoorWaterUseRate	577,779.39	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.4254	2.4886	2.4732	3.4900e-003	0.0721	0.1560	0.2281	0.0245	0.1506	0.1751	0.0000	292.3035	292.3035	0.0536	0.0000	293.4280
2017	0.9672	0.7228	0.7422	1.1000e-003	0.0167	0.0440	0.0607	4.4900e-003	0.0424	0.0469	0.0000	91.3053	91.3053	0.0164	0.0000	91.6492
Total	**1.3925**	**3.2114**	**3.2154**	**4.5900e-003**	**0.0888**	**0.1999**	**0.2887**	**0.0290**	**0.1930**	**0.2220**	**0.0000**	**383.6088**	**383.6088**	**0.0699**	**0.0000**	**385.0773**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.4254	2.4886	2.4732	3.4900e-003	0.0721	0.1560	0.2281	0.0245	0.1506	0.1751	0.0000	292.3032	292.3032	0.0536	0.0000	293.4278
2017	0.9672	0.7228	0.7422	1.1000e-003	0.0167	0.0440	0.0607	4.4900e-003	0.0424	0.0469	0.0000	91.3052	91.3052	0.0164	0.0000	91.6492
Total	**1.3925**	**3.2114**	**3.2154**	**4.5900e-003**	**0.0888**	**0.1999**	**0.2887**	**0.0290**	**0.1930**	**0.2220**	**0.0000**	**383.6084**	**383.6084**	**0.0699**	**0.0000**	**385.0769**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0000e-005	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2016	2/3/2016	5	3	
2	Grading	Grading	2/3/2016	2/10/2016	5	6	
3	Building Construction	Building Construction	2/11/2016	4/5/2017	5	300	
4	Paving	Paving	4/5/2017	4/25/2017	5	15	
5	Architectural Coating	Architectural Coating	4/26/2017	5/16/2017	5	15	

Acres of Grading (Site Preparation Phase): 0.99

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 109,718; Non-Residential Outdoor: 36,573 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	4.00	78	0.48
Paving	Cement and Mortar Mixers	1	4.00	9	0.56
Grading	Excavators	1	5.30	162	0.38
Building Construction	Aerial Lifts	2	5.30	62	0.31
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	1	4.00	89	0.20
Site Preparation	Graders	1	5.30	174	0.41
Paving	Pavers	1	4.00	125	0.42
Paving	Rollers	1	4.70	80	0.38
Grading	Plate Compactors	4	5.30	8	0.43
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	4.70	97	0.37
Paving	Tractors/Loaders/Backhoes	1	5.30	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	5.30	97	0.37
Grading	Graders	1	4.00	174	0.41
Paving	Paving Equipment	1	5.30	130	0.36
Site Preparation	Rubber Tired Dozers	1	4.70	255	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	20.00	0.00	4.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	30.00	12.00	2.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8300e-003	0.0000	5.8300e-003	2.9700e-003	0.0000	2.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4400e-003	0.0258	0.0165	2.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	1.6155	1.6155	4.9000e-004	0.0000	1.6257
Total	**2.4400e-003**	**0.0258**	**0.0165**	**2.0000e-005**	**5.8300e-003**	**1.4000e-003**	**7.2300e-003**	**2.9700e-003**	**1.2900e-003**	**4.2600e-003**	**0.0000**	**1.6155**	**1.6155**	**4.9000e-004**	**0.0000**	**1.6257**

3.2 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	5.7000e-004	8.2000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1344
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	1.3000e-004	1.2300e-003	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1301	0.1301	1.0000e-005	0.0000	0.1303
Total	**1.6000e-004**	**7.0000e-004**	**2.0500e-003**	**0.0000**	**1.8000e-004**	**1.0000e-005**	**1.9000e-004**	**5.0000e-005**	**1.0000e-005**	**6.0000e-005**	**0.0000**	**0.2644**	**0.2644**	**1.0000e-005**	**0.0000**	**0.2646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8300e-003	0.0000	5.8300e-003	2.9700e-003	0.0000	2.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4400e-003	0.0258	0.0165	2.0000e-005		1.4000e-003	1.4000e-003		1.2900e-003	1.2900e-003	0.0000	1.6155	1.6155	4.9000e-004	0.0000	1.6257
Total	**2.4400e-003**	**0.0258**	**0.0165**	**2.0000e-005**	**5.8300e-003**	**1.4000e-003**	**7.2300e-003**	**2.9700e-003**	**1.2900e-003**	**4.2600e-003**	**0.0000**	**1.6155**	**1.6155**	**4.9000e-004**	**0.0000**	**1.6257**

3.2 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	5.7000e-004	8.2000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1344
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	1.3000e-004	1.2300e-003	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1301	0.1301	1.0000e-005	0.0000	0.1303
Total	**1.6000e-004**	**7.0000e-004**	**2.0500e-003**	**0.0000**	**1.8000e-004**	**1.0000e-005**	**1.9000e-004**	**5.0000e-005**	**1.0000e-005**	**6.0000e-005**	**0.0000**	**0.2644**	**0.2644**	**1.0000e-005**	**0.0000**	**0.2646**

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0144	0.0000	0.0144	7.5300e-003	0.0000	7.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6100e-003	0.0691	0.0480	5.0000e-005		3.7200e-003	3.7200e-003		3.4300e-003	3.4300e-003	0.0000	5.0488	5.0488	1.4700e-003	0.0000	5.0797
Total	**6.6100e-003**	**0.0691**	**0.0480**	**5.0000e-005**	**0.0144**	**3.7200e-003**	**0.0181**	**7.5300e-003**	**3.4300e-003**	**0.0110**	**0.0000**	**5.0488**	**5.0488**	**1.4700e-003**	**0.0000**	**5.0797**

3.3 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	5.7000e-004	8.2000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1344
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.5000e-004	6.1400e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6504	0.6504	5.0000e-005	0.0000	0.6514
Total	**5.1000e-004**	**1.2200e-003**	**6.9600e-003**	**1.0000e-005**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**	**2.1000e-004**	**2.0000e-005**	**2.2000e-004**	**0.0000**	**0.7848**	**0.7848**	**5.0000e-005**	**0.0000**	**0.7858**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0144	0.0000	0.0144	7.5300e-003	0.0000	7.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6100e-003	0.0691	0.0480	5.0000e-005		3.7200e-003	3.7200e-003		3.4300e-003	3.4300e-003	0.0000	5.0488	5.0488	1.4700e-003	0.0000	5.0797
Total	**6.6100e-003**	**0.0691**	**0.0480**	**5.0000e-005**	**0.0144**	**3.7200e-003**	**0.0181**	**7.5300e-003**	**3.4300e-003**	**0.0110**	**0.0000**	**5.0488**	**5.0488**	**1.4700e-003**	**0.0000**	**5.0797**

3.3 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	5.7000e-004	8.2000e-004	0.0000	3.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1343	0.1343	0.0000	0.0000	0.1344
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.5000e-004	6.1400e-003	1.0000e-005	7.4000e-004	1.0000e-005	7.5000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.6504	0.6504	5.0000e-005	0.0000	0.6514
Total	**5.1000e-004**	**1.2200e-003**	**6.9600e-003**	**1.0000e-005**	**7.7000e-004**	**2.0000e-005**	**7.9000e-004**	**2.1000e-004**	**2.0000e-005**	**2.2000e-004**	**0.0000**	**0.7848**	**0.7848**	**5.0000e-005**	**0.0000**	**0.7858**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3629	2.2203	1.7487	2.5900e-003		0.1483	0.1483		0.1435	0.1435	0.0000	219.5958	219.5958	0.0486	0.0000	220.6166
Total	**0.3629**	**2.2203**	**1.7487**	**2.5900e-003**		**0.1483**	**0.1483**		**0.1435**	**0.1435**	**0.0000**	**219.5958**	**219.5958**	**0.0486**	**0.0000**	**220.6166**

3.4 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	2.2000e-004	3.2000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0519	0.0519	0.0000	0.0000	0.0520
Vendor	0.0273	0.1336	0.2946	3.0000e-004	8.1100e-003	2.1800e-003	0.0103	2.3300e-003	2.0000e-003	4.3300e-003	0.0000	27.2176	27.2176	2.4000e-004	0.0000	27.2226
Worker	0.0254	0.0377	0.3560	5.1000e-004	0.0428	4.1000e-004	0.0433	0.0114	3.8000e-004	0.0118	0.0000	37.7246	37.7246	2.6900e-003	0.0000	37.7810
Total	**0.0527**	**0.1715**	**0.6509**	**8.1000e-004**	**0.0510**	**2.5900e-003**	**0.0536**	**0.0137**	**2.3800e-003**	**0.0161**	**0.0000**	**64.9942**	**64.9942**	**2.9300e-003**	**0.0000**	**65.0556**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3629	2.2203	1.7487	2.5900e-003		0.1483	0.1483		0.1435	0.1435	0.0000	219.5956	219.5956	0.0486	0.0000	220.6164
Total	**0.3629**	**2.2203**	**1.7487**	**2.5900e-003**		**0.1483**	**0.1483**		**0.1435**	**0.1435**	**0.0000**	**219.5956**	**219.5956**	**0.0486**	**0.0000**	**220.6164**

3.4 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	2.2000e-004	3.2000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0519	0.0519	0.0000	0.0000	0.0520
Vendor	0.0273	0.1336	0.2946	3.0000e-004	8.1100e-003	2.1800e-003	0.0103	2.3300e-003	2.0000e-003	4.3300e-003	0.0000	27.2176	27.2176	2.4000e-004	0.0000	27.2226
Worker	0.0254	0.0377	0.3560	5.1000e-004	0.0428	4.1000e-004	0.0433	0.0114	3.8000e-004	0.0118	0.0000	37.7246	37.7246	2.6900e-003	0.0000	37.7810
Total	**0.0527**	**0.1715**	**0.6509**	**8.1000e-004**	**0.0510**	**2.5900e-003**	**0.0536**	**0.0137**	**2.3800e-003**	**0.0161**	**0.0000**	**64.9942**	**64.9942**	**2.9300e-003**	**0.0000**	**65.0556**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0953	0.6047	0.5009	7.6000e-004		0.0387	0.0387		0.0375	0.0375	0.0000	63.9539	63.9539	0.0135	0.0000	64.2382
Total	**0.0953**	**0.6047**	**0.5009**	**7.6000e-004**		**0.0387**	**0.0387**		**0.0375**	**0.0375**	**0.0000**	**63.9539**	**63.9539**	**0.0135**	**0.0000**	**64.2382**

3.4 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.0000e-005	9.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0150	0.0150	0.0000	0.0000	0.0150
Vendor	7.4100e-003	0.0356	0.0823	9.0000e-005	2.3800e-003	5.5000e-004	2.9300e-003	6.8000e-004	5.0000e-004	1.1800e-003	0.0000	7.8619	7.8619	6.0000e-005	0.0000	7.8632
Worker	6.4800e-003	9.7700e-003	0.0917	1.5000e-004	0.0126	1.1000e-004	0.0127	3.3400e-003	1.0000e-004	3.4400e-003	0.0000	10.6150	10.6150	7.1000e-004	0.0000	10.6299
Total	**0.0139**	**0.0455**	**0.1741**	**2.4000e-004**	**0.0150**	**6.6000e-004**	**0.0156**	**4.0200e-003**	**6.0000e-004**	**4.6200e-003**	**0.0000**	**18.4920**	**18.4920**	**7.7000e-004**	**0.0000**	**18.5082**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0953	0.6047	0.5009	7.6000e-004		0.0387	0.0387		0.0375	0.0375	0.0000	63.9538	63.9538	0.0135	0.0000	64.2381
Total	**0.0953**	**0.6047**	**0.5009**	**7.6000e-004**		**0.0387**	**0.0387**		**0.0375**	**0.0375**	**0.0000**	**63.9538**	**63.9538**	**0.0135**	**0.0000**	**64.2381**

3.4 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.0000e-005	9.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0150	0.0150	0.0000	0.0000	0.0150
Vendor	7.4100e-003	0.0356	0.0823	9.0000e-005	2.3800e-003	5.5000e-004	2.9300e-003	6.8000e-004	5.0000e-004	1.1800e-003	0.0000	7.8619	7.8619	6.0000e-005	0.0000	7.8632
Worker	6.4800e-003	9.7700e-003	0.0917	1.5000e-004	0.0126	1.1000e-004	0.0127	3.3400e-003	1.0000e-004	3.4400e-003	0.0000	10.6150	10.6150	7.1000e-004	0.0000	10.6299
Total	**0.0139**	**0.0455**	**0.1741**	**2.4000e-004**	**0.0150**	**6.6000e-004**	**0.0156**	**4.0200e-003**	**6.0000e-004**	**4.6200e-003**	**0.0000**	**18.4920**	**18.4920**	**7.7000e-004**	**0.0000**	**18.5082**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9200e-003	0.0604	0.0451	7.0000e-005		3.6600e-003	3.6600e-003		3.3700e-003	3.3700e-003	0.0000	6.0998	6.0998	1.8300e-003	0.0000	6.1383
Paving	1.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.8200e-003**	**0.0604**	**0.0451**	**7.0000e-005**		**3.6600e-003**	**3.6600e-003**		**3.3700e-003**	**3.3700e-003**	**0.0000**	**6.0998**	**6.0998**	**1.8300e-003**	**0.0000**	**6.1383**

3.5 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	9.3000e-004	8.7700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0147	1.0147	7.0000e-005	0.0000	1.0161
Total	**6.2000e-004**	**9.3000e-004**	**8.7700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0147**	**1.0147**	**7.0000e-005**	**0.0000**	**1.0161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9200e-003	0.0604	0.0451	7.0000e-005		3.6600e-003	3.6600e-003		3.3700e-003	3.3700e-003	0.0000	6.0998	6.0998	1.8300e-003	0.0000	6.1383
Paving	1.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.8200e-003**	**0.0604**	**0.0451**	**7.0000e-005**		**3.6600e-003**	**3.6600e-003**		**3.3700e-003**	**3.3700e-003**	**0.0000**	**6.0998**	**6.0998**	**1.8300e-003**	**0.0000**	**6.1383**

3.5 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	9.3000e-004	8.7700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0147	1.0147	7.0000e-005	0.0000	1.0161
Total	**6.2000e-004**	**9.3000e-004**	**8.7700e-003**	**1.0000e-005**	**1.2000e-003**	**1.0000e-005**	**1.2100e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0147**	**1.0147**	**7.0000e-005**	**0.0000**	**1.0161**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8476					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2795
Total	**0.8492**	**0.0109**	**9.3400e-003**	**1.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.3000e-004**	**0.0000**	**1.2795**

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	4.3000e-004	4.0500e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4683	0.4683	3.0000e-005	0.0000	0.4690
Total	**2.9000e-004**	**4.3000e-004**	**4.0500e-003**	**1.0000e-005**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4683**	**0.4683**	**3.0000e-005**	**0.0000**	**0.4690**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8476					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0109	9.3400e-003	1.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	1.2766	1.2766	1.3000e-004	0.0000	1.2795
Total	**0.8492**	**0.0109**	**9.3400e-003**	**1.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.3000e-004**	**0.0000**	**1.2795**

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	4.3000e-004	4.0500e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4683	0.4683	3.0000e-005	0.0000	0.4690
Total	**2.9000e-004**	**4.3000e-004**	**4.0500e-003**	**1.0000e-005**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4683**	**0.4683**	**3.0000e-005**	**0.0000**	**0.4690**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.378463	0.110094	0.166130	0.176574	0.101508	0.012590	0.019002	0.015908	0.002011	0.000198	0.009330	0.001253	0.006940

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Vegetation

APPENDIX B

Biological Resources Assessment

Biological Resources Assessment

State of California Department of Forestry and Fire Protection

Altaville Forest Fire Station Auto Shop Replacement Project

Prepared For:

State of California Department of General Services
Real Estate Services Division

October 29, 2013

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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Figure 2. Natural Resources Conservation Service Soil Types

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Attachment A - Representative Site Photos

Attachment B - Plants Observed On-Site (04 September 2013)

Attachment C - Wildlife Observed On-Site (04 September 2013)

Attachment D - USFWS Letter

1.0 INTRODUCTION

At the request of Department of General Services, Real Estate Services Division (RESD), ECORP Consulting, Inc. (ECORP) has conducted a biological resource assessment for a 5.95-acre site located in Altaville, a former unincorporated community in Calaveras County now located in the northwest portion of the City of Angels Camp. The purpose of the assessment was to collect information on the biological resources present on the site, and to determine any potential biological constraints to site construction.

1.1 Project Location

The Proposed Project is located in Altaville, a former unincorporated community in Calaveras County now located in the northwest portion of the City of Angels Camp. (Figure 1. *Project Vicinity*). The site corresponds to Section 29, Township 03 North, Range 13 East within the "Angels Camp, California" 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey 1962). The project is located at approximately 38° 04' 58" North and 120° 33' 42" West within the Upper Calaveras watershed (USGS Hydrological Unit Code [HUC] #18040011) (U.S. Department of the Interior, Geological Survey 1978).

1.2 Project Description

The proposed project entails the construction of a new automotive repair and maintenance facility at the Altaville Forest Fire Station (FFS). Two single-story buildings are proposed for construction: (1) a five-bay automotive shop, and; (2) a generator/pump building. Site improvements in the project area include: clearing, grading, drainage, retaining walls, retention pond, walkways, curbs, water, sewer, electrical, telephone, irrigation, lighting, fencing, landscaping and extension of utilities from the existing site to the new building. The automotive shop will also have an attached vehicle wash rack with filtration system and a pump test pit.

Electrical systems will be installed with underground feeders from the generator/pump building to the new automotive shop. The automotive shop will be designed to meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) requirements to attain a Silver rating. Domestic water is assumed to be stubbed from the main site and extended to the new automotive shop. The waste sewer system requires a lift station and a tie into the existing 6-inch stub. Storm water systems will connect to an on-site interceptor and retention basin. Condensation from the air-conditioning unit's cooling coils will be piped into the waste water or storm water system.

Both buildings will be constructed on a reinforced concrete slab placed on a graded foundation. The building pads will extend five feet beyond the exterior walls of the building with all utilities included. Fencing will be installed at the southern, eastern, and western ends of the property boundaries. Propane gas service is already on-site, but two new dedicated tanks, one diesel and one propane gas, will be installed and extended to the new automotive shop.

Final plans and project description details are not yet available.

1.3 Biological Setting

The Altaville FFS is located in Altaville in the northwestern portion of the City of Angels Camp, Calaveras County, California. The facility is located in the Northern Sierra Nevada Foothills subregion of the California Floristic Province (Hickman 1993). This area is characterized by a Mediterranean climate, which is comprised of hot and dry summer months and cold and wet winter months. The annual precipitation in

Angels Camp is 33.7 inches (with the wettest period during November-March), and average temperatures range from 45.3 degrees Fahrenheit (F) in December to 76.7 degrees F in July (NOAA 2002).

The surrounding topography is flat, gently rolling, or hilly. The project site is situated on a west-facing slope at an elevation range of 1,540 – 1,550 feet above mean sea level. The site is primarily oak woodland, with an understory of non-native annual grassland. Much of the south and eastern half of the site is disturbed, with an ill-defined dirt road used as a turnaround for vehicles, piles of materials and storage placed at intervals, and other debris in places.

2.0 REGULATORY SETTING

2.1 Federal

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and animals that are listed as endangered or threatened by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Section 9 of FESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 USC 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

2.1.3. Federal Clean Water Act

The federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "Waters of the United States" without a permit from the U.S. Army Corps of Engineers

(USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit.

Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

2.2 State

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, CESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the CDFG Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (Fish and Game Code Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code Sections 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The CESA of 1984 (Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the Fish and Game Code.

2.2.4 California Streambed Alteration Notification/Agreement

Section 1602 of the Fish and Game Code requires that a Streambed Alteration Application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

2.2.5 CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

2.3 Local

2.3.1 City of Angels Camp General Plan 2020

The Vision Statement adopted by the Angels Camp city council in 1998 is:

> *"To beautify and promote uniformity in the city by encouraging cleanliness rehabilitation, maintenance, and enhancement of public and private property;*
>
> *To create family sustaining jobs and healthy well-balanced community;*
>
> *To promote the cultural interest of the city through the preservation of our historical heritage; and*
>
> *To provide public services and facilities that are compatible with the needs and philosophy of the community"* (City of Angels 2009).

3.0 METHODS

ECORP biologist Eric Stitt and Dorienne Dunning conducted the site assessment on 04 September 2013. Prior to conducting the field portion of the assessment, the CDFW's California Natural Diversity Database (CNDDB) (CDFW 2013) and California Native Plant Society Electronic Inventory (CNPS 2013) were queried to determine the special-status species that had been documented in the topographic quadrangle that encompasses the site. Additional data regarding the potential occurrence of special-status species were gathered from various online websites and databases such as Calflora. Soil types were determined using the United States Department of Agriculture National Resource Conservation Service Web Soil Survey (NRCS 2013).

The project site was systematically surveyed on foot to ensure total site coverage. Special attention was given to identifying those portions of the site with the potential to support special-status species and sensitive habitat. Biological resource information that was collected included:

- Potential Waters of the U.S.;
- Plant and animal species directly observed;
- Characterization of habitats present on-site;
- Animal signs (e.g., scat, tracks);
- Active bird nests;
- Burrows and any other special habitat features; and
- Representative site photographs.

3.1 Special-Status Species

Using information from the CNDDB, the literature review, and observations in the field, a list of special-status plant and animal species that have the potential to occur on the site was generated (Table 1). Each of these species was assessed for their potential to occur on-site based on the following criteria guidelines:

Present: Species was observed on-site during a site visit or focused survey.

High: Habitat (including soils and elevational requirements) for the species occurs on-site and a known occurrence occurs within 5 miles of the site.

Moderate: Habitat (including soils and elevational requirements) for the species occurs on-site and a known occurrence occurs within the database search, but not within 5 miles of the site; or a known occurrence occurs within 5 miles of the site and marginal or limited amounts of habitat occurs on-site.

Low: Limited habitat (including soils and elevational requirements) for the species occurs on-site and a known occurrence occurs within the database search, but not within 5 miles of the site.

Absent: No suitable habitat (including soils and elevational requirements) occurs on-site, the site is located outside the species known geographical range, or the species was determined to be absent during focused surveys.

4.0 RESULTS

Representative site photos are shown in Attachment A.

4.1 Site Characteristics and Land Use

The proposed project is on partially-developed lands southwest of the existing Altaville FFS. The on-site topography is flat to the south and east, and gently rolling to the north and west. The south and eastern ½ of the site is disturbed, with an ill-defined dirt road used as a turnaround for vehicles, piles of materials and storage placed at intervals, and other debris in places. The northwestern half of the project site is blue oak (*Quercus douglasii*) woodland, with an understory of non-native annual grassland consisting of wild oat (*Avena fatua*) and ripgut brome (*Bromus diandrus*). Residential housing occurs immediately to the northwest of the site, a commercial/retail development occurs east of the site, and undeveloped oak grassland occurs to the south of the project.

4.2 Plant Communities and Wildlife

4.2.1 Plant Communities

The primary vegetation community within the proposed project area is blue oak woodland. The oaks present are generally large, with measurements of 20-inch and greater diameter breast height (DBH). The understory was comprised of non-native grasses (wild oats, ripgut brome, rye grass [*Festuca perennis*]) and forbs, including cheeseweed (*Malva parviflora*), turkey mullien (*Croton setigerus*), and puncture vine (*Tribulus terrestris*). The grass understory is regularly mowed/disced for fire prevention. Approximately 40 plantings of small oaks occur in this area as well, as mitigation for a different project. A list of plants observed during the field surveys is included in Attachment B.

4.2.1.1 Native Oaks and Blue Oak Woodland

Native blue oak woodland occurs on-site, and depending on the final site configuration, one to several blue oaks may be impacted by the proposed project. Oaks may be affected by unavoidable loss due to development of part of the site, or may be encroached upon by construction or development within a space of 1.5 times the distance between the trunk and the drip line of a tree.

4.2.2 Wildlife

Wildlife habitat is found throughout the site. California ground squirrels (*Otospermophilus beecheyi*) and Botta's pocket gopher (*Thomomys bottae*) were documented in the oak woodland, and western fence lizards (*Sceloporus occidentalis*) were observed using the trunks of oaks. A small game trail, probably the result of foraging black-tail jack rabbit (*Lepus californicius*), was observed leading off-site into the surrounding oak grassland to the south. Bird nesting habitat occurs throughout the blue oak woodland. Habitat for ground-nesting birds is limited due to the frequency of disturbance at the site. Birds observed during the field survey included turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), white-breasted nuthatch (*Sitta carolinensis*), and western scrub jay (*Aphelocoma californica)*. A list of wildlife observed during the field surveys is included in Attachment C.

4.2.3 Special-Status Plants

No special-status plants were found during the field surveys, although some species have been previously documented to occur within 5 miles of the proposed project site (Figure 4, Table 1) (CDFW 2013). Special-status plants with nearby occurrences are: Congdon's lomatium (*Lomatium congdonii*), Mariposa cryptantha (*Cryptantha mariposae*), Parry's horkelia (*Horkelia parryi*), Red Hills soaproot (*Chlorogalum grandiflorum*), Tuolumne button-celery (*Eryngium pinnatisectum*), Whipple's monkeyflower (*Mimulus guttatus* = M. *whipplei*), and yellow-lip pansy monkeyflower (*Mimulus pulchellus*).

The majority of special-status plants in this region are associated with unique soil/geological characteristics, vegetation communities, and/or habitats, such as serpentine soils, chaparral, or vernal pools. The proposed project supports none of these characteristics, communities, or habitats, and therefore, species with these requirements are unlikely to occur. Additionally, the frequency of maintenance, including mowing and discing of the grassland understory on-site likely precludes the presence of any special status plant species occurring. For these reasons, no further studies or mitigation measures are proposed for special-status plants.

4.2.4 Special-Status Wildlife

No special-status animals were found during the field survey. Three special-status species have been documented within 5 miles of the project site (Figure 4, Table 1). These are: foothill yellow-legged frog (*Rana boylii*), tricolored blackbird (*Agelaius tricolor*), and pallid bat (*Antrozous pallidus*). Of these, potential habitat is present only for pallid bat, which could potentially use the trees or structures on-site for roosting. However, this species is very sensitive to human disturbance and given the abundance of habitat in the region, it is considered unlikely that pallid bats would occur on-site. Furthermore, other species of bats only have a low potential to occur on the site given the extent of onsite development and human use. For these reasons, no further studies or mitigation measures are proposed for bat species.

Most of the other species are associated with unique vegetation communities or habitats, such as marshes, vernal pools, creeks, and streams. There is no habitat on-site for special-status invertebrates, amphibians, or reptiles. However, the trees present support potentially suitable nesting habitat for Cooper's hawk (*Accipiter cooperii*) and other nesting birds covered under MBTA. Additionally, although the probability is considered low, the large oaks and man-made structures on-site may provide roosting habitat for other special-status bats.

Table 1. Potentially Occurring Special-Status Species

Common Name	Scientific Name	Federal ESA Status	California ESA Status	Other Status	Habitat Description	Potential To Occur On-Site
Plants						
Jepson's onion	*Allium jepsonii*	-	-	1B	Found on serpentine or volcanic soils in chaparral, cismontane woodland, and lower montane coniferous forests 984' - 4,331')	Absent. Habitat for this species is not present on the project site.
Rawhide hill onion	*Allium tuolumnense*	-	-	1B	Found on serpentine soils in cismontane woodland; known from 20 occurrences between 1000 - 2000 feet in elevation, Tuolumne Co.	Absent. Habitat for this species is not present on the project site.
Ione manzanita	*Arctostaphylos myrtifolia*	FT	-	1B	Occurs on Ione Formation soils (acidic, clay or sandy) in chaparral and cismontane woodland from 200 to 2,000 feet	Absent. Habitat for this species is not present on the project site.
Nissenan manzanita	*Arctostaphylos nissenana*	-	-	1B	Found in rocky areas in closed-cone coniferous forest and chaparral (1,476' - 3,609')	Absent. Habitat for this species is not present on the project site.
Chinese Camp brodiaea	*Brodiaea pallida*	FT	CE	1B	Found on serpentine soils in vernal streambeds in cismontane woodland/Valley and foothill grassland. Known from only two occurrences near Chinese Camp.	Absent. Habitat for this species is not present on the project site.
Red Hills soaproot	*Chlorogalum grandiflorum*	-	-	1B	Found on serpentine or gabbro soils in chaparral, cismontane woodland, and lower coniferous forest (804' - 3,068')	Absent. Habitat for this species is not present on the project site.
Mariposa clarkia	*Clarkia biloba* ssp. *australis*	-	-	1B	Found on serpentine soils in chaparral and cismontane woodland from 100 to 300 – 4,800 feet.	Absent. Habitat for this species is not present on the project site.
Beaked clarkia	*Clarkia rostrata*	-	-	1B	Found in cismontane woodland and valley and foothill grassland, often on north-facing sandstone slopes, from 200 to 1,640 feet	Absent. Habitat for this species is not present on the project site.
Mariposa cryptantha	*Cryptantha mariposae*	-	-	1B	Found on serpentine soils in rocky chaparral between sea level and 2,000 feet	Absent. Habitat for this species is not present on the project site.
Tuolumne button-celery	*Eryngium pinnatisectum*	-	-	1B	Occurs in vernal pools and mesic areas in cismontane woodland and lower montane coniferous forest from 230 – 3,000 feet	Absent. Habitat for this species is not present on the project site.
Delta button-celery	*Eryngium racemosum*	-	CE	1B	Found in vernally mesic clay depressions in riparian scrub (10' - 98')	Absent. Habitat for this species is not present on the project site.
Spiny-sepaled button-celery	*Eryngium spinosepalum*	-	-	1B	Found in freshwater wetlands and riparian areas in valley grassland from 240 to - 750 feet in elevation.	Absent. Habitat for this species is not present on the project site.
Tuolumne fawn lily	*Erythronium tuolumnense*	-	-	1B	Found in broad-leafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest from 1,000 – 2,000	Absent. Habitat for this species is not present on the project site.

Common Name	Scientific Name	Federal ESA Status	California ESA Status	Other Status	Habitat Description	Potential To Occur On-Site
					feet.	
Parry's horkelia	*Horkelia parryi*	-	-	1B	Occurs on lone formation soils in chaparral and cismontane woodland from 263 to 4,000 feet.	Absent. Habitat for this species is not present on the project site.
Tuolumne iris	*Iris hartwegii ssp. columbia*	-	-	1B	Occurs in cismontane woodland and lower montane coniferous forest from 1400 – 4,600 feet.	Absent. Habitat for this species is not present on the project site.
Forked hare-leaf	*Lagophylla dichotoma*	-	-	1B	Occurs in cismontane woodland and valley and foothill grassland, sometimes on clay soils, between 0 and 2,000 feet.	Absent. Habitat for this species is not present on the project site.
Congdon's lomatium	*Lomatium congdonii*	-	-	1B	Occurs on serpentine soils in chaparral and cismontane woodland from 900 to 7,000 feet. Known from fewer than twenty occurrences.	Absent. Habitat for this species is not present on the project site.
Shaggyhair lupine	*Lupinus spectabilis*	-	-	1B	Found on serpentine soils in chaparral and cismontane woodland from 850 – 2,700 feet.	Absent. Habitat for this species is not present on the project site.
Yellow-lip pansy monkeyflower	*Mimulus pulchellus*	-	-	1B	Found in mesic, often disturbed areas such as meadows and seeps in lower montane coniferous forest, often on clay soils. Found between 3,000 and 5,000 feet.	Absent. Habitat for this species is not present on the project site.
Whipple's monkeyflower	*Mimulus whipplei*	-	-	1A	Presumed extinct. Known only from the type collection (year 1854) in lower montane coniferous forest (at 2,200 feet). Recent searches have not rediscovered this plant.	Absent. Habitat for this species is not present on the project site.
Veiny monardella	*Monardella venosa*	-	-	1B	Found on heavy clay soils in cismontane woodland and valley and foothill grassland (197' - 1,345')	Absent. Habitat for this species is not present on the project site.
Tongue-leaf copper-moss	*Scopelophila cataractae*	-	-	2B	Found in seeps in rock with high levels of heavy metals, at 1312 feet elevation in the Copperopolis vicinity.	Absent. Habitat for this species is not present on the project site.
Red Hills vervain	*Verbena californica*	FT	CT	1B	Found in seeps or creeks on serpentine soils in cismontane woodland or valley and foothill grassland.	Absent. Habitat for this species is not present on the project site.
Invertebrates						
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	-	-	Found in vernal pools and ephemeral wetlands.	Absent. Habitat for this species is not present on the project site.
Vernal pool tadpole shrimp	*Lepidurus packardi*	FE	-	-	Found in vernal pools and ephemeral wetlands.	Absent. Habitat for this species is not present on the project site.

Common Name	Scientific Name	Federal ESA Status	California ESA Status	Other Status	Habitat Description	Potential To Occur On-Site
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	FT, FPD	-	-	Uses elderberry shrubs as obligate host plant.	Absent. Habitat for this species is not present on the project site.
Amphibians						
California tiger salamander (Central California DPS)	*Ambystoma californiense*	FT	CT	CSC	Uses vernal pools, wetlands and adjacent grassland or oak woodland; needs underground refuge, usually ground squirrel or gopher burrows. Uses vernal pools, ponds, and seasonal wetlands for breeding. Largely terrestrial as adults.	Absent. Habitat for this species is not present on the project site.
California red-legged frog	*Rana draytonii*	FT	-	CSC	Found historically in the Coast Ranges from Mendocino County south to Baja California, and inland from the northern Sacramento Valley to Sierra Nevada foothills, south to Tulare County. Currently occurs in lowlands or foothills at waters with dense shrubby or emergent riparian vegetation. Larvae require 11 to 20 weeks to transform, sometimes overwintering. Adults must have aestivation habitat to endure summer dry down.	Absent. Habitat for this species is not present on the project site.
Foothill yellow-legged frog	*Rana boylii*	-	-	CSC	Uses sunny to partially-shaded shallow streams and creeks with a rocky or cobble substrate. Needs cobble as egg-laying substrate, and larvae (with adaptations for high velocity water) need at least 15 weeks to reach metamorphosis. Occurs from sea level to 6,000 feet.	Absent. Habitat for this species is not present on the project site.
Reptiles						
Western Pond Turtle	*Actinemys marmorata marmorata*	-	-	CSC	The only extant freshwater turtle in California. This turtle requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	Absent. Habitat for this species is not present on the project site.
Birds						
Sharp-shinned hawk (wintering)	*Accipiter striatus*	-	-	CNDDB	Nests in riparian areas within Ponderosa Pine, deciduous riparian, black oak, and mixed coniferous forests. Usually nests on north facing slopes within approximately 300 feet of water.	Moderate

Common Name	Scientific Name	Federal ESA Status	California ESA Status	Other Status	Habitat Description	Potential To Occur On-Site
Cooper's hawk (nesting)	*Accipiter cooperii*	-	-	CNDDB	Nests primarily in deciduous riparian forest, canyon bottoms, and live oak woodlands. Forages in woodlands and edges.	Moderate
Golden eagle (nesting and wintering)	*Aquila chrysaetos*	-	-	BCC, CFP	grassland	Absent. Habitat for this species is not present on the project site.
Olive-sided flycatcher	*Contopus cooperi*	-	-	CSC	Found in coniferous forests, often with tall trees overlooking canyons, meadows, lakes, and other topographic features.	Absent. Habitat for this species is not present on the project site.
Yellow warbler (nesting)	*Dendroica petechia*	-	-	CSC	Nests in riparian zones with willow (*Salix* spp.), cottonwood (*Populus fremontii*), Aspen (*Populus tremuloides*), and alder (*Alnus* spp).	Absent. Habitat for this species is not present on the project site.
Yellow-breasted chat (nesting)	*Icteria virens*	-	-	CSC	riparian	Absent. Habitat for this species is not present on the project site.
Bell's sparrow (nesting)	*Artemisiospiza belli*	-	-	BCC	Nests in chamise (*Addenostemma fasciculatum*) dominated chaparral among coastal sage scrub. Nests on the ground or low within shrubs.	Absent. Habitat for this species is not present on the project site.
Tricolored blackbird (Nesting colony)	*Agelaius tricolor*	-	-	CSC	A highly colonial species that requires open water and a nearby foraging area with abundant invertebrate prey.	Absent. Habitat for this species is not present on the project site.
Mammals						
Western red bat	*Lasiurus blossevillii*	-	-	CNDDB	Found in riparian woodlands and orchards.	Low
Pallid bat	*Antrozous pallidus*	-	-	CSC	Roosts in mines, man-made structures, rock outcrops, and woodlands near open grasslands for foraging. Roosts must be thermally buffered. Very sensitive to human disturbance.	Low
Western mastiff bat	*Eumops perotis californicus*	-	-	CSC	Uses mines, rocky ledges, structures, vertical cliff faces.	Low

Status Codes:

FE - Federal ESA listed, Endangered.
FT - Federal ESA listed, Threatened.
FPE - Formally Proposed for federal ESA listing as Endangered.
FPT - Formally Proposed for federal ESA listing as Threatened.
FPD - Listed under Federal ESA, but formally proposed for delisting.
Fd - Formally Delisted (delisted species are monitored for 5 years).
FC - Candidate for federal ESA listing as Threatened or Endangered.
NMFS - NOAA/NMFS species of concern
BCC - U. S. Fish and Wildlife Service Bird of Conservation Concern (USFWS, 2002).
CE - California ESA or Native Plant Protection Act listed, Endangered.
CT - California ESA or Native Plant Protection Act listed, Threatened.
CR - California ESA or Native Plant Protection Act listed, Rare.
CC - Candidate for California ESA listing as Endangered or Threatened.
CFP - Fish and Game Code of California Fully Protected Species (§3511-birds, §4700-mammals, §5050-reptiles/amphibians).
CSC - California Department of Fish and Game Species of Special Concern (CDFG, updated August 2004).
1A - California Rare Plant Rank/Presumed extinct.
1B - California Rare Plant Rank/Rare or Endangered in California and elsewhere.

Common Name	Scientific Name	Federal ESA Status	California ESA Status	Other Status	Habitat Description	Potential To Occur On-Site
2	- California Rare Plant Rank/Rare or Endangered in California, more common elsewhere.					
3	- California Rare Plant Rank/Plants About Which More Information is Needed - A Review List.					
4	- California Rare Plant Rank/Plants of Limited Distribution - A Watch List.					
CNDDB	- Species that is tracked by CDFG's Natural Diversity Database but does not have any of the above special-status designations otherwise.					

4.3 Soils

One (1) soil unit, or type, has been mapped within the site: Guenoc-Stonyford association, 5 to 50 percent slopes (Figure 2) (U.S. Department of Agriculture, Soil Conservation Service 1966).

4.4 Potential Waters of the U.S.

During this field survey, no potential Waters of the U.S. were found within the proposed project area, and there are no previously mapped NWI features (USFWS 2013). The proposed project area gently slopes to the south and west. NWI features mapped in this area include freshwater emergent wetlands, freshwater pond, and other features (Figure 3). Cherokee Creek is a riverine feature that occurs approximately 0.2 miles northwest of the project boundary (Figure 3).

4.5 Wildlife Movement/Corridors

The proposed project is located immediately adjacent to California State Highway 49. This is a commercial zone with abundant human and vehicle traffic present, large parking lots, fences, and significant night-time lighting. All these factors would generally deter wildlife movement in the immediate surroundings. While some wildlife movement is expected, development of the project site should not adversely affect wildlife movement in the region.

5.0 RECOMMENDATIONS

As discussed above, there are no potential Waters of the U.S. located in the proposed impact area and, therefore, a wetland delineation is not warranted at this time.

The Altaville FFS site supports native blue oak woodland, and development of the site may require removal or encroachment into the protected area surrounding a tree (1.5 times the distance between trunk and drip line).

- A *Blue Oak Mitigation and Monitoring Plan* was developed for the original station replacement project and the plantings outlined in that plan are currently planted per specifications. In accordance with the specifications outlined in that document, oak trees that are removed or otherwise adversely affected shall be mitigated per this plan. Specifically, the Altaville FFS shall implement a strategy to mitigate for future oak mitigation on an appropriate offsite parcel that ensures successful mitigation of blue oaks impacted on the project site. Required replacement ratios, timing of activities, watering frequency, survival requirements of plantings, and monitoring duration and frequency shall all be included in the plan.

The Altaville FFS site supports potentially suitable habitat for one special-status bird species and nesting birds.

All native birds, including raptors, are protected under the Fish and Game Code and the Federal MBTA. As such, to ensure that there are no impacts to protected active nests, the following mitigation measures are recommended:

- Conduct a pre-construction nesting bird survey of all suitable habitat on the project within 14 days of the commencement of construction during the nesting season (February 1-August 31). If active nests are found, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest tree, to be determined by a qualified biologist. Once the young are independent of the nest, no further measures are necessary. Pre-construction nesting surveys are not required for construction activity outside the nesting season.

Other special-status birds identified as potentially occurring are migrants and/or wintering species. These species, such as Merlin, do not nest in this region. Therefore, no surveys for wintering and migrant species are recommended.

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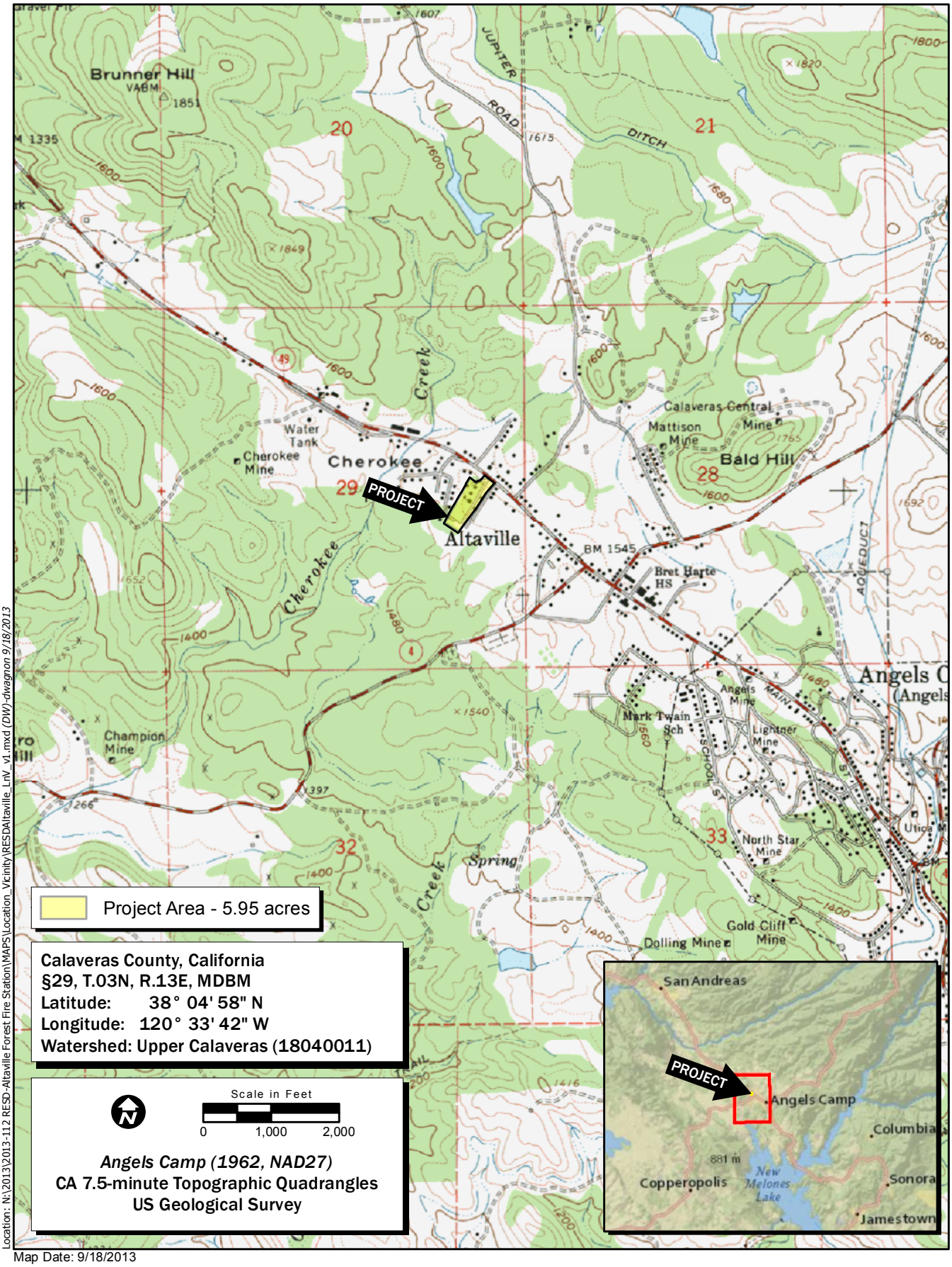
LIST OF FIGURES

Figure 1. Project Location and Vicinity

Figure 2. Natural Resources Conservation Service Soil Types

Figure 3. Aerial and Wetland Information

Figure 4. CNDDB Occurrences of Special-Status Species



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Map Date: 9/18/2013
Service Layer Credits: National Geographic (ESRI)

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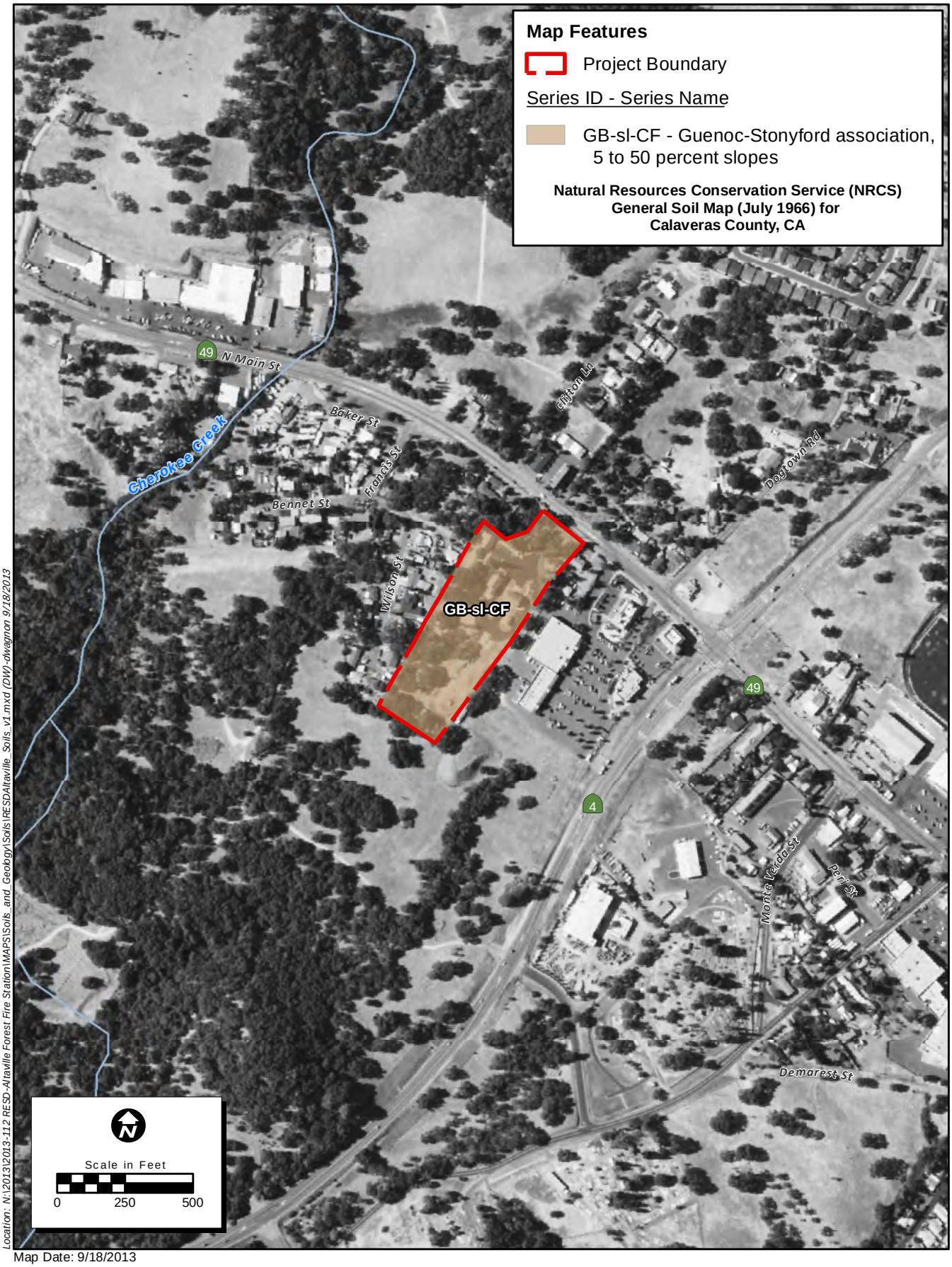
Figure 1. Project Location and Vicinity

2013-112 RESD-Altaville Forest Fire Station



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Map Date: 9/18/2013
Photo Source: NAIP (2012)

Figure 2. Natural Resources Conservation Service Soil Types

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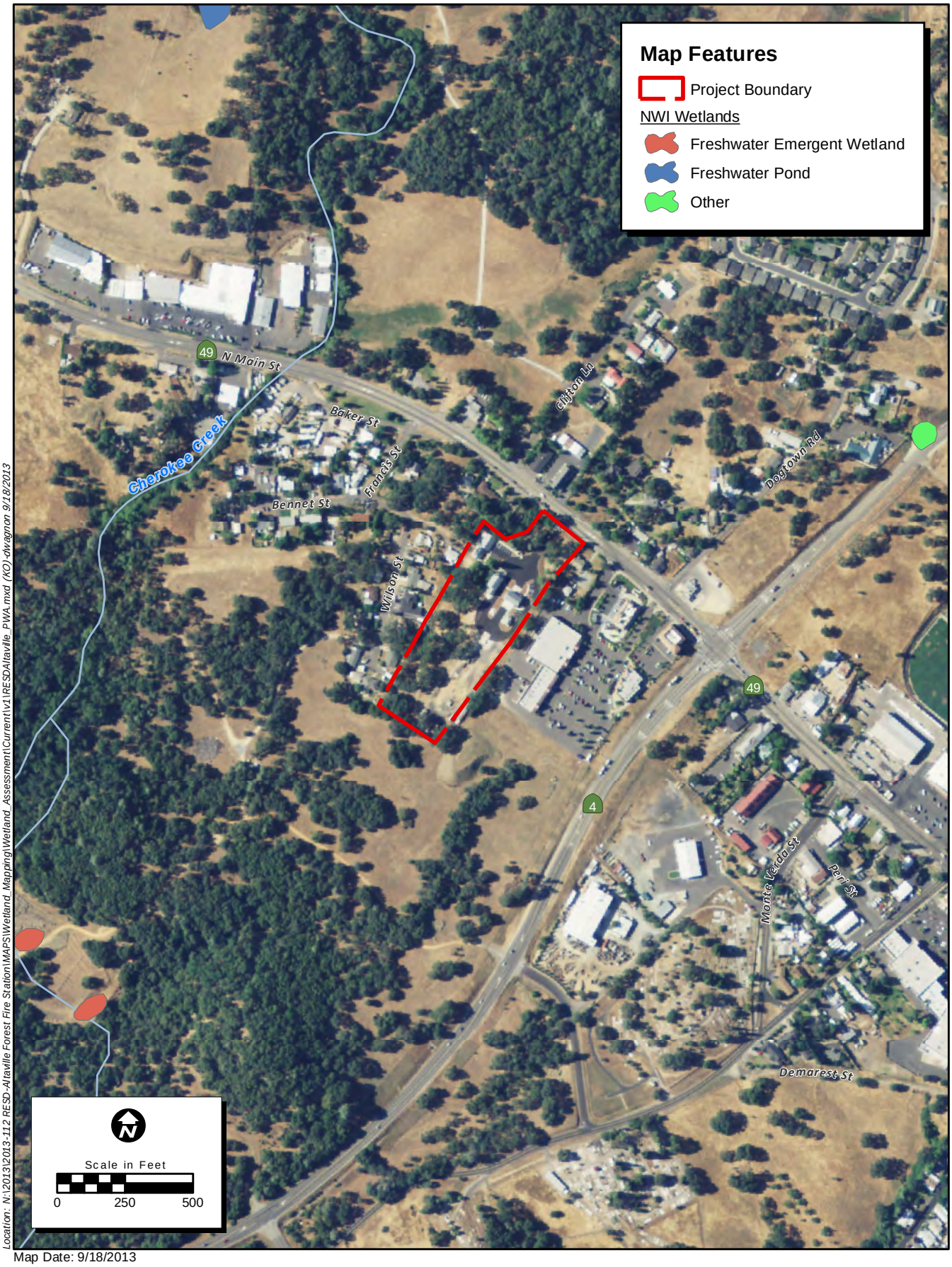
2013-112 RESD Altaville Forest Fire Station



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Map Date: 9/18/2013
Photo Source: NAIP (2012)

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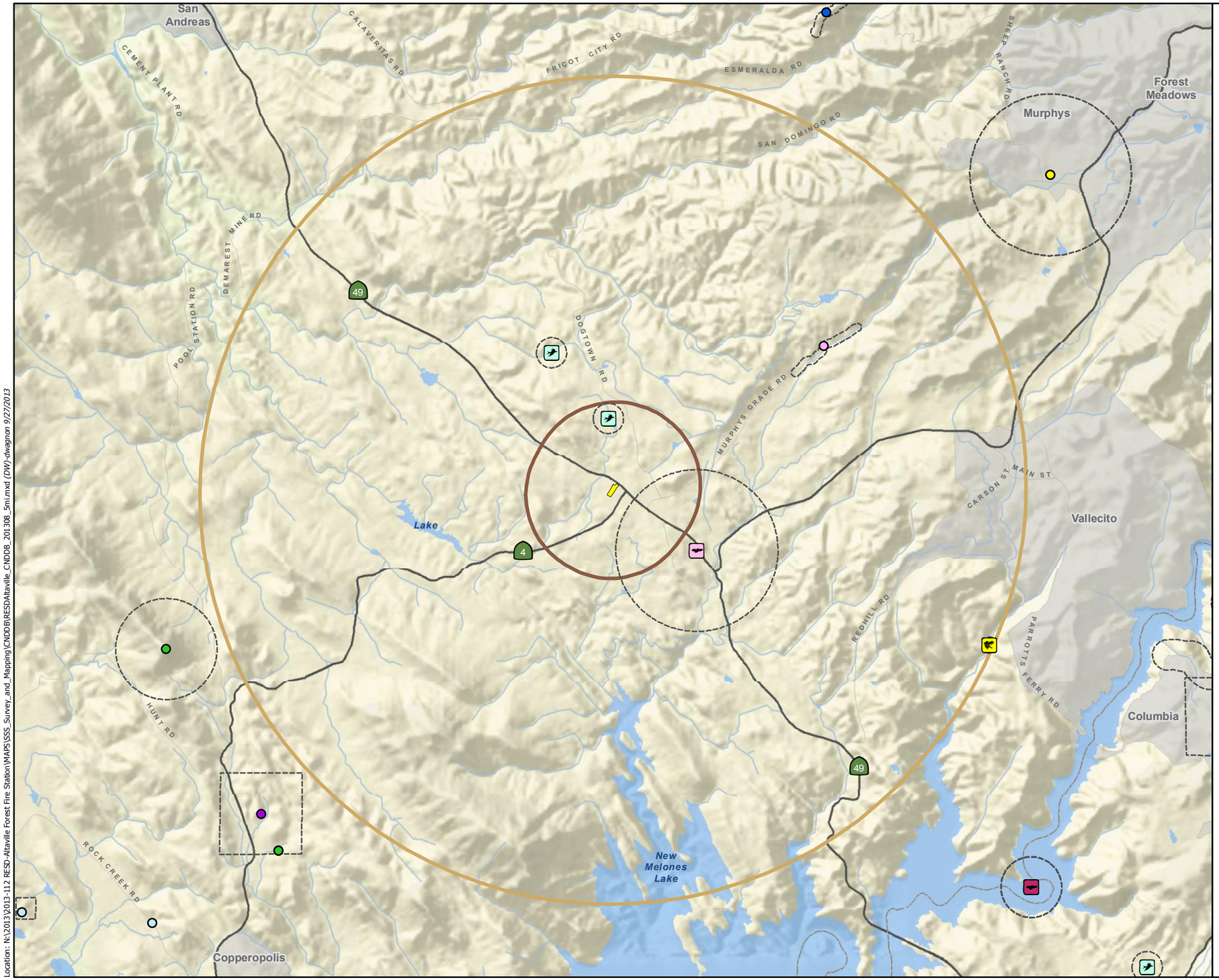
Figure 3. Preliminary Wetland Assessment

2013-112 RESD Altaville Forest Fire Station

Figure 4.
CNDDB Occurrences of Special-Status Species



Distance From Project

- 1 mile
- 5 miles

Boundaries

- Project Boundary [1]
- CNDDB Polygon Extent [2]

CNDDB Occurrences [2]

Plants

- Congdon's Lomatium
- Mariposa Cryptantha
- Parry's Horkelia
- Red Hills Soaproot
- Tuolumne Button-celery
- Whipple's Monkeyflower
- Yellow-lip Pansy Monkeyflower

Birds

- Tricolored Blackbird

Amphibians/Reptiles

- Foothill Yellow-legged Frog
- California Red-legged Frog*

Mammals

- Pallid Bat
- Western Mastiff Bat
- Western Red Bat

This map may include multiple species' occurrences at each location, some of which may not be visible on this graphic. The CNDDB occurrences shown may not reflect the actual location of the occurrence.

**** Species occurrence is represented solely by a polygon. The centroid point is not visible within the map extents.***

[1] Project Boundary: Calaveras County Parcels
[2] CDFW California Natural Diversity Database (CNDDB), Aug. 2013 Update (GIS Shapefile) CNDDB Occurrences Located on USGS 7.5' Quadrangles: Angels Camp, Calaveritas, Columbia, Murphys, Salt Spring Valley, Sonora.

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Location: N:\2013\2013-112 RESD-Altaville Forest Fire Station\MAPS\SSS_Survey_and_Mapping\CNDDB\RESDAltaville_CNDDB_201308_5mi.mxd (DW)-dwagnon 9/27/2013

2013-112 RESD Altaville Forest Fire Atation

Miles
0 1 2

Map Date: 9/27/2013

LIST OF ATTACHMENTS

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Attachment B - Plants Observed On-Site (04 September 2013)

Attachment C - Wildlife Observed On-Site (04 September 2013)

Attachment D - USFWS Letter

ATTACHMENT A

Representative Site Photos

Attachment A.
Representative Site Photographs

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2013-112 RESD Altaville

Attachment A.
Representative Site Photographs

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2013-112 RESD Altaville

Attachment A.
Representative Site Photographs

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2013-112 RESD Altaville

ATTACHMENT B

Plants Observed On-Site (04 September 2013)

Attachment B. Plants Observed On Site (04 September 2013)

Scientific Name	Common Name
EUPHORBIACEAE	**Euphorb Family**
Croton setigerus	Turkey mullien
ZYGOPHYLACEAE	**Caltrop Family**
Tribulus terrestris	Puncture vine
GERANIACEAE	**Geranium Family**
Geranium dissectum	Cut-leaf geranium
MALVACEAE	**Mallow Family**
Malva parviflora	*Cheeseweed*
POACEAE	**Grass Family**
Cynofon dactylon	*Bermuda grass*
Bromus diandrus	*Ripgut brome*
Avena fatua	*Wild oats*
Festuca perennis	*Wild Rye*
FAGACEAE	**Oak Family**
Quercus douglassi	Blue oak
Q. wizlizenii	Interior live oak
PINACEAE	**Pine Family**
Pinus ponderosa	Ponderosa pine
CUPRESSACEAE	**Cypress Family**
Calocedrus decurrens	Incense cedar

*denotes non-native species.

ATTACHMENT C

Wildlife Observed On-Site (04 September 2013)

Attachment C. Wildlife Observed On Site (04 September 2013)

Common Name	Scientific Name
Reptiles	
Western fence lizard	*Sceloporus occidentalis*
Birds	
Turkey Vulture	*Cathartes aura*
Rock Pigeon	*Columba livia*
Mourning Dove	*Zenaida macroura*
Anna's Hummingbird	*Calypte anna*
European Starling	*Sturnus vulgaris*
House Finch	*Haemorhous mexicanus*
Western Meadowlark	*Sturnella neglecta*
Western scrub jay	*Aphelocoma californica*
Northern mockingbird	*Mimus polyglottos*
Common raven	*Corvus corax*
White-breasted nuthatch	*Sitta carolinensis*
Bushtit	*Psaltriparus minimus*
Acorn woodpecker	*Melanerpes formicivorus*
California towhee	*Pipilo crissalis*
Black phoebe	*Sayornis nigricans*
Oak titmouse	*Baeolophus inornatus*
Western bluebird	*Sialia mexicana*
Brewer's blackbird	*Euphagus cyanocephalus*
Mammals	
Botta's pocket gopher	*Thomomys bottae*
California ground squirrel	*Otospermophilus beecheyi*
Coyote	*Canis latrans*

ATTACHMENT D

USFWS Letter

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

August 28, 2013

Document Number: 130828094301

Eric Stitt
ECORP Consulting Inc.
2525 Warren Drive
Rocklin, CA 95677

Subject: Species List for RESD Altaville

Dear: Mr. Stitt

We are sending this official species list in response to your August 28, 2013 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be November 26, 2013.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found here.

Endangered Species Division

TAKE PRIDE IN AMERICA

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 130828094301

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)

Rana draytonii
California red-legged frog (T)

Plants

Arctostaphylos myrtifolia
Ione manzanita (T)

Brodiaea pallida
Chinese Camp brodiaea (T)

Verbena californica
Red Hills (=California) vervain (T)

Quads Containing Listed, Proposed or Candidate Species:

SONORA (458B)
NEW MELONES DAM (459A)
COPPEROPOLIS (459B)
MURPHYS (475B)
COLUMBIA (475C)
CALAVERITAS (476A)
SAN ANDREAS (476B)
SALT SPRING VALLEY (476C)
ANGELS CAMP (476D)

County Lists

Calaveras County

Listed Species

Invertebrates

Branchinecta conservatio
Conservancy fairy shrimp (E)

Branchinecta lynchi
Critical habitat, vernal pool fairy shrimp (X)
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)

Rana draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Rana sierrae
Mountain yellow legged frog (PX)

Reptiles

Thamnophis gigas
giant garter snake (T)

Mammals

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Arctostaphylos myrtifolia
Ione manzanita (T)

Brodiaea pallida
Chinese Camp brodiaea (T)

Castilleja campestris ssp. succulenta
Critical habitat, succulent (=fleshy) owl's-clover (X)

Chamaesyce hooveri
Critical habitat, Hoover's spurge (X)

Neostapfia colusana
Colusa grass (T)
Critical habitat, Colusa grass (X)

Pseudobahia bahiifolia
Hartweg's golden sunburst (E)

Tuctoria greenei
Critical habitat, Greene's tuctoria (=Orcutt grass) (X)

Verbena californica
Red Hills (=California) vervain (T)

Proposed Species

Amphibians

Anaxyrus canorus
Yosemite toad (PX)

Candidate Species

Amphibians

Bufo canorus
Yosemite toad (C)

Rana muscosa
mountain yellow-legged frog (C)

Mammals

Martes pennanti
fisher (C)

Key:

(E) *Endangered* - Listed as being in danger of extinction.
(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service.

Consult with them directly about these species.
Critical Habitat - Area essential to the conservation of a species.
(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
(C) *Candidate* - Candidate to become a proposed species.
(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that

may result in take, then that agency must engage in a formal consultation with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you

address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be November 26, 2013.

APPENDIX C

Cultural Resources Assessment

Cultural Resources Inventory Report
California Department of General Services
Real Estate Services Division
Altaville Forest Fire Station
Calaveras County, California
ECORP Project No. 2013-112

Prepared For:
Department of General Services
Real Estate Services Division
707 Third Street 3-40
West Sacramento, California 95605

Prepared By:
Jeremy Adams, Stephen Pappas, and Lisa Westwood, RPA
ECORP Consulting, Inc.
2525 Warren Drive
Rocklin, California 95677

October 2013

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

MANAGEMENT SUMMARY

In 2013, the California Department of General Services, Real Estate Services Division, retained ECORP Consulting, Inc. to conduct a cultural resources inventory for the proposed Altaville Forest Fire Station Auto Shop Replacement Project (Project). The California Department of General Services, Real Estate Services Division, proposes to construct a new automotive repair and maintenance facility at the Altaville Fire Station. The Project is located approximately 1.5 miles northeast of Angels Camp along Highway 4 in Altaville, Calaveras County, California (Project Area).

The inventory included a records search, literature review, and field survey. The records search results indicated that 25 previous cultural resources studies have been conducted within 0.5 mile of the Project Area. As a result of those studies, 23 sites have previously been recorded within 0.5 mile of the Project Area. One of those sites, the Altaville Grammar School, was originally recorded within the Project Area, but has since been relocated to outside of the Project Area.

As a result of the field survey, two cultural resources were recorded inside the Project Area: ALT-001 [redacted] and ALT-002 [redacted]. These resources must be evaluated using the National Register of Historic Places and California Register of Historical Resources eligibility criteria. If eligible sites are located inside the Project Area, as determined by the U.S. Army Corps of Engineers and the State Historic Preservation Officer (SHPO), mitigation could consist of some combination of preservation in place, data recovery, and public interpretation. Recommendations for the management of unanticipated discoveries are also provided.

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1.0 INTRODUCTION

In August 2013, ECORP was retained by the State of California Department of General Services (DGS), Real Estate Services Division (RESD), to conduct a cultural resources inventory of the proposed Altaville Forest Fire Station Auto Shop Replacement Project located in the City of Altaville, Calaveras County, California. A survey of the property was required to identify potentially eligible cultural resources (archaeological sites and historic buildings, structures, and objects) that could be affected by the project, and to support the preparation of an environmental document under the California Environmental Quality Act (CEQA).

1.1 Project Location

The Project Area consists of approximately 5.95 acres of property located in the northeast quarter of the southeast quarter of Section 29 of Township 3 North, Range 13 East, Mount Diablo Base and Meridian (MDBM), as depicted on the 1962 Angels Camp, California USGS 7.5' topographic quadrangle map (Figures 1 and 2). The Project Area address is 125 North Main Street, in Altaville, California. It is also designated as Assessor Parcel Number (APN) 058-013-011-000.

1.2 Project Description

The proposed Project entails the construction of a new automotive repair and maintenance facility at the Altaville Forest Fire Station. Two single-story buildings are proposed for construction: (1) a five-bay automotive shop, and; (2) a generator/pump building. Site improvements in the Project Area include: clearing, grading, drainage, retaining walls, retention pond, walkways, curbs, water, sewer, electrical, telephone, irrigation, lighting, fencing, landscaping and extension of utilities from the existing site to the new building. The automotive shop will also have an attached vehicle wash rack with filtration system and a pump test pit.

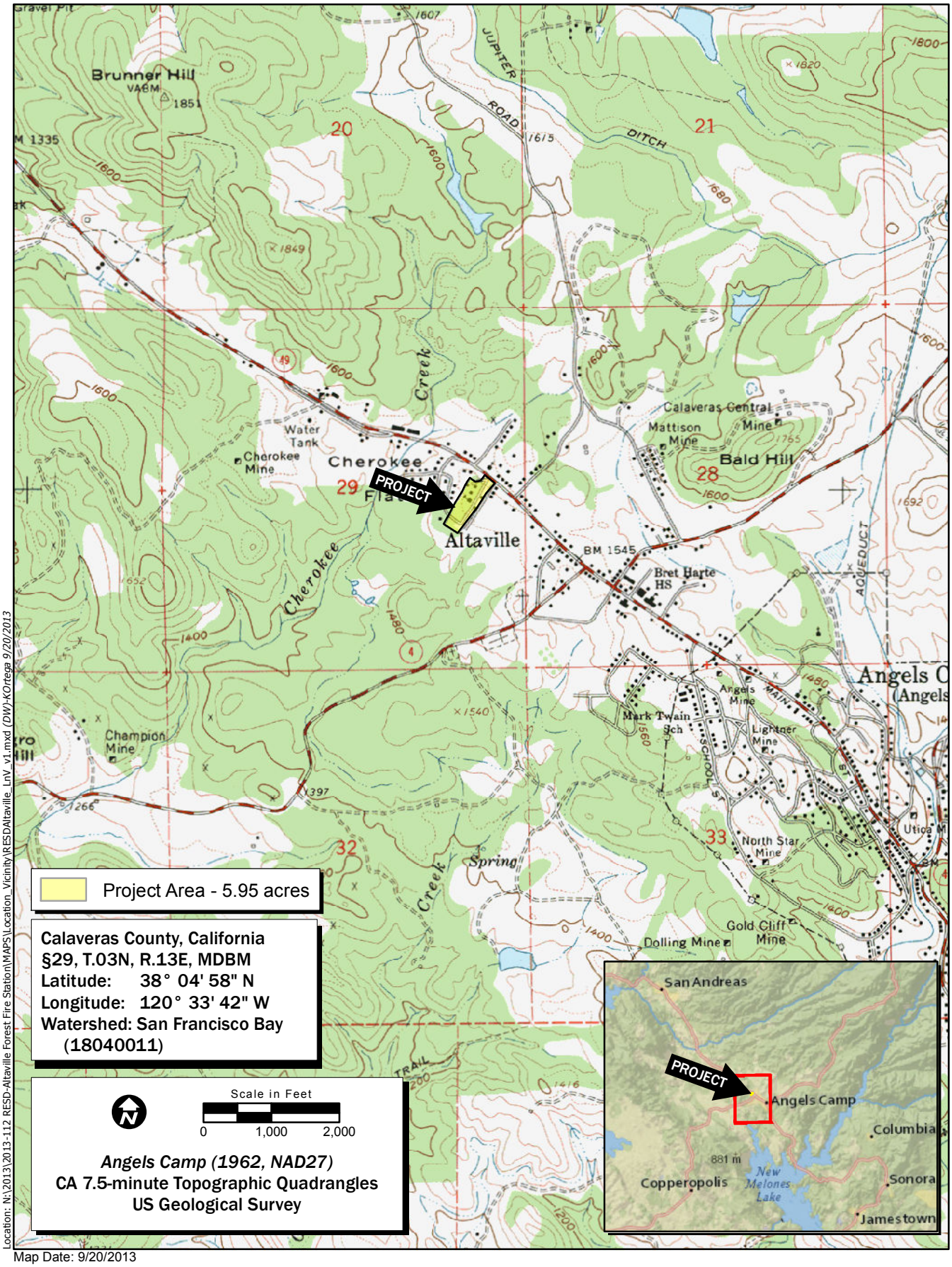
Electrical systems will be installed with underground feeders from the generator/pump building to the new automotive shop. The automotive shop will be designed to meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) requirements to attain a Silver rating. Domestic water is assumed to be stubbed from the main site and extended to the new automotive shop. The waste sewer system requires a lift station and a tie into the existing 6-inch stub. Storm water systems will connect to an on-site interceptor and retention basin. Condensation from the air-conditioning unit's cooling coils will be piped into the waste water or storm water system.

Both buildings will be constructed on a reinforced concrete slab placed on a graded foundation. The building pads will extend five feet beyond the exterior walls of the building with all utilities included. Fencing will be installed at the southern, eastern, and western ends of the property boundaries. Propane gas service is already on-site, but two new dedicated tanks, one diesel and one propane gas, will be installed and extended to the new automotive shop.

Final plans and Project description details are not yet available. The potential for impacts to cultural resources within the Project Area will be determined when complete plans and a final Project description are available.

1.3 Area of Potential Effect

The Area of Potential Effects (APE) consists of the horizontal and vertical limits of the project, and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the project. The horizontal APE consists of all areas where activities associated with the project are proposed, and in the case of the current project, equals the project area subject to environmental review under CEQA. This includes areas proposed for construction, pole



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Map Date: 9/20/2013
Service Layer Credits: National Geographic (ESRI)

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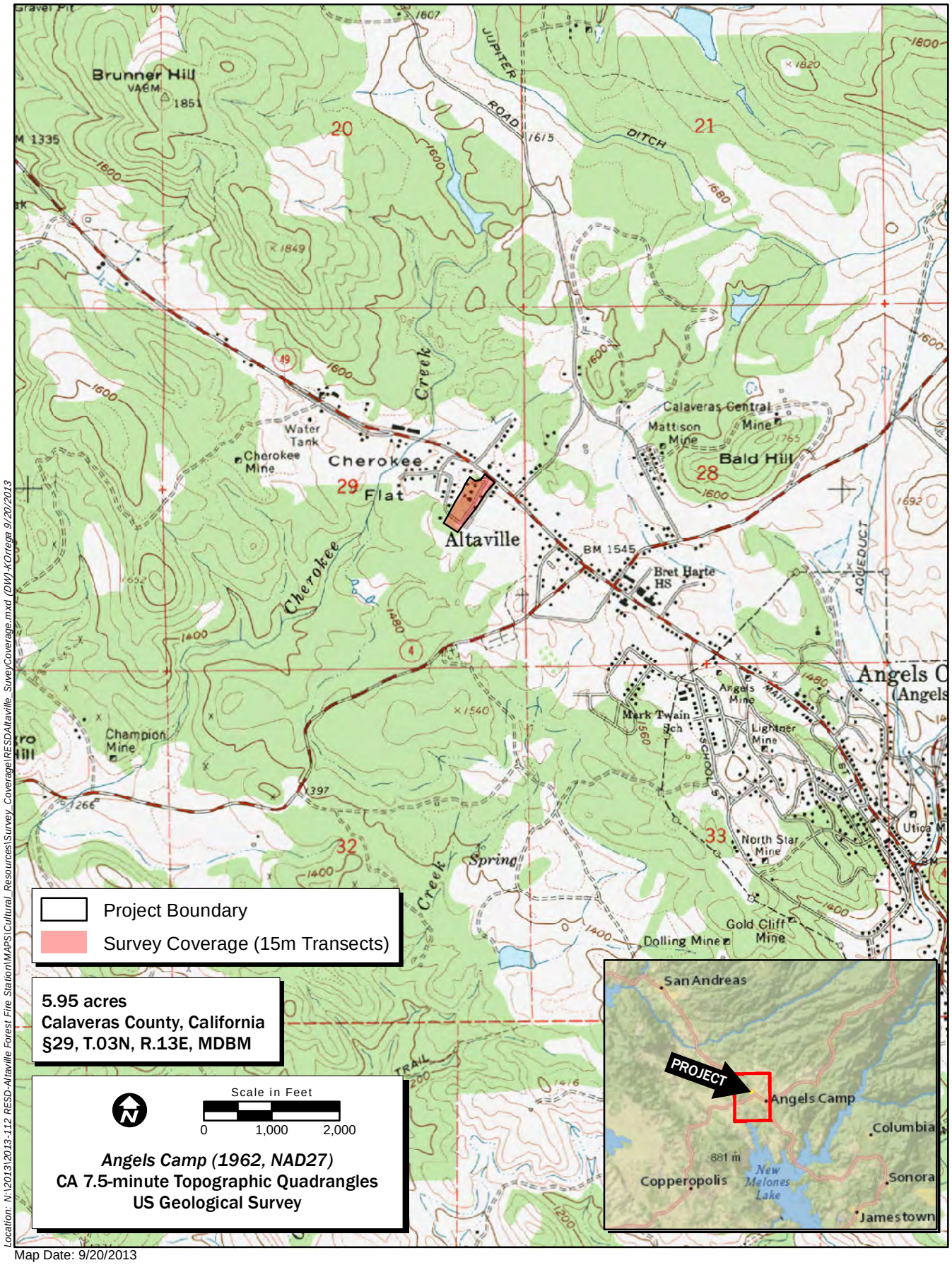
ENVIRONMENTAL CONSULTANTS

Figure 1. Site and Vicinity

2013-112 RESD-Altaville Forest Fire Station



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Map Date: 9/20/2013
Service Layer Credits: National Geographic (ESRI)

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Figure 2. Survey Coverage

2013-112 RESD-Altaville Forest Fire Station

replacement or installation, vegetation removal, grading, trenching, stockpiling, staging, paving, and other elements described in the official project description. The horizontal APE is illustrated in Figure 1 and also represents the survey coverage area. The horizontal APE covers a total of approximately 5.95 acres.

The vertical APE is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. Thus, the vertical APE includes all subsurface areas where archaeological deposits could be affected. The subsurface vertical APE varies across the project, depending on whether or not solar panel supports are installed. Ground disturbance of up to 20 feet below the surface will be necessary in order to construct the buildings.

The vertical APE also is described as the maximum height of poles and equipment, which could impact the physical integrity and integrity of setting of cultural resources, including districts and traditional cultural properties. For the current project, the above-surface vertical APE is up to 50 feet above the surface, which is the maximum height of the proposed buildings.

1.4 Regulatory Context

To meet the regulatory requirements of the Project, this cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within CEQA (Pub. Res. Code § 21000 *et seq*.). The goal of CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed projects that require state or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development project maps.

CEQA (Title 14, CCR, Article 5, Section 15064.5) applies to cultural resources of the historical and prehistoric periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant impact on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California Register of Historical Resources (CRHR) (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) or the National Register of Historic Places (NRHP) (36 CFR 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under 36 CFR Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

1.5 Report Organization

The following report documents the study and its findings and was prepared in conformance with the California Office of Historic Preservation's *Archaeological Resource Management Reports: Recommended Contents and Format.* Attachment A includes a confirmation of the records search with the California Historical Resources Information System (CHRIS). Attachment B contains documentation of Native American Consultation. Attachment C presents photographs of the Project Area. Attachment D contains confidential site records.

Sections 6253, 6254, and 6254.10 of the California Code authorize state agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code §6250 *et seq*.) and California's open meeting laws (The Brown Act, Government Code §54950 *et seq*.) protect the confidentiality of Native American cultural place information. Under Exemption 3 of the federal Freedom of Information Act (5 USC 5), because the disclosure of cultural resources location information on federal lands is prohibited by the Archaeological Resources Protection Act of 1979 (16 USC 470hh), it is also exempted from disclosure under the Freedom

of Information Act. Likewise, the Information Centers of the CHRIS maintained by the Office of Historic Preservation prohibit public dissemination of records search information. In compliance with these requirements, the results of this cultural resource investigation were prepared in a publicly accessible format that omitted archaeological site locations.

2.0 SETTING

The Project Area is located within the town of Altaville in Calaveras County, California. The facility is located in the Northern Sierra Nevada Foothills sub-region of the California Floristic Province and is characterized by a Mediterranean climate, which is comprised of hot and dry summer months and cold and wet winter months (Hickmann 1993).

The local topography is gently rolling to hilly with an undeveloped oak landscape to the south, residences to the west, commercial/retail facilities to the east, and a church and residences to the north. The land within the Project Area is relatively level terrain with elevations ranging from 1,540 to 1,550 feet above mean sea level. The western edge of the property consists of an oak landscape, while the remaining portions of the Project Area have been graded, landscaped, or paved to support the fire station facilities.

One soil type has been identified within the Project Area: Guenoc-Stonyford association, 5 to 50 percent slopes (U.S. Department of Agriculture, Natural Resources Conservation Service 2013).

The primary vegetation community within the undeveloped portions of the Project Area is blue oak (*Quercus douglassi*) woodland. The majority of the Project has been graded with most vegetation removed. Wildlife within the Project Area may consist of California ground squirrel (*Otospermophilus beecheyi*), coyote (*Canis latrans*) or fox, turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), rock pigeon (*Columba livia*), tree swallow (*Tachycineta bicolor*), white-breasted nuthatch (*Sitta carolinensis*), and Western meadowlark (*Sturnella neglecta*). Other wildlife may include gopher snake (*Pituophis catenifer*) and mule deer (*Odocoileus hemionus*).

3.0 CULTURAL CONTEXT

3.1 Regional Prehistory

It is generally believed that human occupation of California began at least 10,000 years before present (BP). The archaeological record indicates that between approximately 10,000 and 8000 years BP, a predominantly hunting economy existed, characterized by archaeological sites containing numerous projectile points and butchered large animal bones. Animals that were hunted probably consisted mostly of large species still alive today. Bones of extinct species have been found, but cannot definitely be associated with human artifacts. Although small animal bones and plant grinding tools are rarely found within archaeological sites of this period, small game and floral foods were probably exploited on a limited basis. A lack of deep cultural deposits from this period suggests that groups included only small numbers of individuals who did not often stay in one place for extended periods (Wallace 1978).

Around 8000 BP, there was a shift in focus from hunting towards a greater reliance on plant resources. Archaeological evidence of this trend consists of a much greater number of milling tools (e.g., metates and manos) for processing seeds and other vegetable matter. This period, which extended until around 5000 years BP, is sometimes referred to as the “Millingstone Horizon” (Wallace 1978). Projectile points are found in archaeological sites from this period, but they are far fewer in number than from sites dating to before 8000 BP. An increase in the size of groups and the stability of settlements is indicated by deep, extensive middens at some sites from this period (Wallace 1978).

In sites dating to after about 5000 BP, archaeological evidence indicates that reliance on both plant gathering and hunting continued as in the previous period, with more specialized adaptation to particular environments. Mortars and pestles were added to metates and manos for grinding seeds and other vegetable material. Flaked-stone tools became more refined and specialized, and bone tools were more common. During this period, new peoples from the Great Basin began entering southern California. These immigrants, who spoke a language of the Uto-Aztecan linguistic stock, seem to have displaced or absorbed the earlier population of Hokan-speaking peoples. During this period, known as the "Late Horizon," population densities were higher than before and settlement became concentrated in villages and communities along the coast and interior valleys (Erlandson 1994; McCawley 1996). Regional subcultures also started to develop, each with its own geographical territory and language or dialect (Kroeber 1925; McCawley 1996; Moratto 1984). These were most likely the basis for the groups encountered by the first Europeans during the eighteenth century (Wallace 1978). Despite the regional differences, many material culture traits were shared among groups, indicating a great deal of interaction (Erlandson 1994). The introduction of the bow and arrow into the region sometime around 2000 BP is indicated by the presence of small projectile points (Wallace 1978; Moratto 1984).

3.2 Local Prehistory

The most extensive data set for the west slope of the Sierra Nevada in Calaveras County comes from archaeological studies carried out on the North Fork of the Stanislaus River for the New Melones Archaeological Project between 1969 and 1990. Several decades of work conducted in the area resulted in the identification of at least eight distinct periods of occupation, dated to between 9600 BP and AD 1848 (Fitting, Costello, and Crew 1979; Moratto, Tordoff, and Shoup 1988; Peak and Crew 1990).

The earliest evidence of human use of the area comes from the Clarks Flat locality (CA-CAL-275 and CA-CAL-342), which produced a large cultural assemblage (Moratto, Tordoff, and Shoup 1988; Peak and Crew 1990). Artifacts collected from Clarks Flat include a variety of large stemmed projectile points (Western Stemmed Series), a transverse point (crescent), utilized flakes, gravers, and large scrapers. Assemblages of this type, dated to between 9600 and 6800 BP, are representative of the Clarks Flat Phase.

A second period of occupation identified at site CA-CAL-342, known as the Stanislaus Phase, is marked by the appearance of Pinto-like projectile points sometime around 6550 BP. Named the Stanislaus Broad-Stemmed by Peak and Crew (1990), the point style was in use for an apparently short period of time, perhaps only 300 years. Other artifacts in use during this phase include a variety of steatite objects, net weights, atlatl weights, manos, and other groundstone implements (Peak and Crew 1990).

The period between 5500 and 4500 BP is represented at another site within the North Fork Stanislaus River Drainage, CA-CAL-286. Designated the Texas Charley Phase, this period of occupation is characterized by the existence of "a distinctive, percussion flaked stone industry" with little evidence of habitation. Artifacts attributed to the phase include choppers, large lanceolate bifaces, possible manos, scrapers, and contracting stem biface fragments. This period is not well represented in the archaeological record and coincides with a warming and drying trend in the West known as the Altithermal (Antevs 1948). Most lithic material identified at the site is locally available chert from the Vallecito area (Moratto 1984; cf. PG&E 1999).

The Calaveras Phase (5500–3000 BP) within the Stanislaus River Drainage encompasses several cultural components and appears to be partially coeval with the Texas Charley Phase, albeit technologically (and possibly culturally) distinct. The phase is marked by the presence of Humboldt and Pinto series projectile points and abundant groundstone. Human occupation of the area during this period was widespread, although ephemeral in nature (Peak and Crew 1990).

The period between 3000 to 1500 BP witnessed a sharp increase in use of the area by prehistoric Native Americans. Designated the Sierra Phase, this period of occupation in the New Melones area is represented at a number of sites, many of which contain midden deposits suggesting a much greater degree of sedentism (Peak and Crew 1990). Groundstone artifacts are abundant and it is during this time that mortar and pestle technology, which could be used for processing acorns, first appears in the area (Moratto, Tordoff, and Shoup 1988). Projectile points documented in Sierra Phase components include Elko Eared, Elko Corner Notched, Sierra Concave Base, and a variety of side notched, triangular, and contracting stem points (PG&E 1999). Well-established trade networks are evident in this period based on the presence of large quantities of obsidian that came from the western Great Basin (mostly from the Bodie Hills source) and *Haliotis* and *Olivella* beads and ornaments traded in from the coast (PG&E 1999).

Redbud Phase components (1500–700 BP) are represented in at least 24 sites in the New Melones area (Peak and Crew 1990). Human occupation of the area during this time is thought to be ephemeral and of low intensity. Settlement patterns are strikingly different from the preceding period, and marked by a high degree of residential mobility with small group sizes. Peak and Crew (1990) remark that this phase "does not seem to reflect cultural continuity with antecedent or subsequent phases in the study area." Bolstering support for the hypothesized break in cultural continuity with preceding phases is the apparent breakdown in trade networks as indicated by the near absence of obsidian artifacts. Furthermore, it is during the Redbud Phase that Rosegate and small barbed projectile points appear, marking the introduction of the bow and arrow into the area (PG&E 1999).

The Horseshoe Bend Phase, (700 BP–1848 AD), is marked by architectural remains, cemeteries, the reappearance of midden deposits, and the widespread use of bedrock mortars. Sedentism was on the rise during this phase, and very intensive use of the North Fork Stanislaus Drainage by people ancestral to the Miwok is evident (Peak and Crew 1990). The material culture of the Horseshoe Bend Phase mirrors that of the ethnographic Sierra Miwok and includes Desert Side-Notched, Cottonwood Triangular, and Gunther Barbed projectile points, beads of *Olivella*, *Saxidomus* and steatite, a variety of flaked stone tool types, as well as a sophisticated groundstone technology including milling artifacts and pestles used in bedrock mortars (PG&E 1999).

The period of Miwok acculturation and eventual loss of traditional life ways, subsequent to the Gold Rush, is represented by the Peoria Basin Phase. Occupation of the North Fork Stanislaus region became much more ephemeral during this period and a number of Euro-American artifacts appear in assemblages attributed to this phase (Peak and Crew 1990; PG&E 1999).

3.3 Ethnography

Ethnographically, the Project Area is in the nuclear territory occupied by the Northern Sierra Miwok. Prior to the arrival of the Spanish, the Miwok were one of the most geographically extensive native groups in California. They occupied an area extending from the crest of the Sierra, across the Great Valley and Delta Region, to the Coast Range north of San Francisco. The Northern Sierra Miwok lived within the foothills and mountains of the Cosumnes and Mokelumne River drainages. They belong to the Sierra Miwok language group, which is a subset of the Utian language family. Lexicostatistical chronologies suggest that the Miwok ancestors inhabited California's Delta Region for millennia and more recently expanded into the foothills (Levy 1978).

The tribelet was the primary political unit among the Miwok. The tribelet controlled a defined territory and all of the resources within it. Tribelets were composed of several lineages that were each tied to geographical locations. Levy (1978) suggests that the population of Sierra Miwok settlements averaged 25 persons.

Based on mission records, the accounts of early explores and initial attempts at censuses, it has been estimated that the total Miwok population was around 19,500 prior to AD 1800. In 1904, Special Indian Agent C.E. Kelsey estimated the total population at less than 800 (Slagle 2004).

Subsistence activities of the Northern Sierra Miwok closely resembled that of other inhabitants of the Sierra foothills. As winter snows thawed, small groups moved out of the village, following deer into higher elevations. At the same time, spring greens were gathered to supplement the stored foods and meat. Seeds of many different plants, particularly grasses, were collected between May and August. Following the annual burning of the underbrush in August, the highly prized Digger pine nuts were collected. Digger pine nuts were also occasionally collected before they were ripe in the spring. Fall and early winter was when families would set out to collect and stockpile acorns (Levy 1978). Hunting was a year-round activity for the Northern Sierra Miwok.

Acorns from at least seven species of oak were collected and eaten by native Californians. While acorns from the valley oak were most important to the Plains Miwok, Sierra Miwok made the most extensive use of acorns from the interior live oak, blue oak, and black oak. They were usually collected from the ground after they had fallen from the tree, although long sticks were sometimes used to collect acorns that had yet to be released (Levy 1978).

Nuts were also an important element of the Miwok diet and included buckeye, laurel, hazelnut, digger pine, and sugar pine. They also harvested roots like wild onion and “Indian potato,” which were eaten raw, steamed, baked, or dried and processed into flour cakes to be stored for winter use. Berries were eaten, although they did not comprise a substantial portion of the diet.

Animals taken by the Northern Sierra Miwok included mule deer, black bear, grizzly bear, blacktailed jackrabbits, cottontails, beavers, grey and ground squirrels, wood rats, valley quail, and mountain quail. Occasional forays were made down to the valley floor to hunt antelope and tule elk, which were not available in the Sierra foothills (Levy 1978). Fishing was undertaken by the Sierra Miwok, yet it was not a central part of the diet. Salmon was available in the lower stretches of Sierran rivers, and trout was taken at higher elevations.

Other foods exploited by the Northern Sierra Miwok included insects such as grasshoppers and yellow jacket larvae, and shellfish such as river muscles and fresh water clam (Levy 1978). Food taboos were observed by the Sierra Miwok and, as a result, they did not consume dog, coyote, skunk, eagle, great-horned owl, roadrunner, snakes, or frogs (Levy 1978).

The Sierra Miwok constructed a variety of structures for different purposes. The primary house used by the Miwok living in the foothills was the conical bark-slab house. More substantial semi-subterranean houses were occupied during the winter months by those with sufficient resources to construct such a structure. A circular brush structure was used in the summer during times of mourning. Semi-subterranean earth lodges, measuring 40–50 feet in diameter, were used for social or communal gatherings. The Miwok also made use of sweathouses that generally measured 6–15 feet in diameter.

Trade was important with goods generally traveling east to west and vice versa. Items such as Olivella and Haliotis shells, salmon, and salt traveled east from the coast and valley into the Sierra and beyond. Digger pine nuts, bows, arrows, deer skins, and sugar pine nuts came down from the Sierra to the Great Valley. Precious goods such as salt and obsidian were also traded in from the Great Basin. Basketry moved in both directions in the prehistoric trade networks (Wilson and Towne 1978; Levy 1978).

Primary sources on the aboriginal way of life for Northern Sierra Miwok people include Aginsky (1943), Barrett (1919), Barrett and Gifford (1933), Gifford (1917), Kroeber (1925), and Merriam (1910; 1955). Unfortunately, by the time ethnographers began interviewing people and recording aspects of traditional Sierra Miwok life, it had been all but destroyed.

The Spanish made occasional forays into the Central Valley beginning around 1769, with the first written description composed by Pedro Fages in 1772. By 1776, Miwok territory had been explored by José Canizares. In 1808, Miwok territory was again crossed by Gabriel Moraga while he led an expedition to identify appropriate sites for the establishment of new missions and to capture Indians who had fled missionary life. In 1813, a major battle was fought between the Miwok and the Spaniards near the mouth of the Cosumnes River.

Though the Northern Sierra Miwok appear to have largely escaped being removed to missions by the Spanish (unlike the Plains Miwok), they were not spared the ravages of European-spread disease. In 1833, an epidemic—probably malaria—raged through the Sacramento Valley, killing an estimated 75 percent of the native population. When John Sutter erected his fort at the future site of Sacramento, he had no problem getting the few native survivors to settle nearby. The discovery of gold in 1848, near the Nisenan village of Colluma (also Coloma), drew thousands of miners into the foothills and led to widespread killing and the virtual destruction of traditional Miwok culture.

3.4 Regional History

Although the Spanish had made forays into the Central Valley since about 1769, it was not until 1808 that Capitán Gabriel Moraga explored, and named, the Sacramento area. Other than fighting with the Indians, as in 1813 when Luis A. Arguello fought a major battle with the Miwok near the mouth of the American River, the Spanish took little interest in the area (Wilson and Towne 1978). In 1827, American trapper Jedediah Smith traveled up the Sacramento River and into the San Joaquin Valley to meet other trappers of his company he had left encamped there, but no permanent settlements were established (Peak & Associates 1997).

In 1839, John Augustus Sutter, a Swiss émigré, arrived at the confluence of the American and Sacramento Rivers with hopes of building an agricultural empire. Mexican Governor Juan Bautista Alvarado assisted in this dream by granting Sutter a 48,000-acre tract of land known as the New Helvetia Land Grant where Sutter built what is now known as Sutter's Fort (Owens 1994), the first permanent Euro-American settlement in the region. Sutter engaged hundreds of Native Americans, the majority of them former residents of the Spanish Missions to the west, for labor in the fields and in construction. Sutter's Fort became a Mecca for thousands of immigrants traveling the Overland Emigrant Trail, in need of rest and fresh supplies after the arduous trek across Carson Pass. The area around Sutter's Fort later developed into the town, and then city, of Sacramento. The course of California history changed dramatically when John Marshall discovered gold in a flume at Sutter's lumber mill on the South Fork of the American River near the Nisenan village of Culloma (Coloma) in 1848, initiating the California Gold Rush.

As a direct result of the Gold Rush, numerous mining towns arose seemingly overnight within the foothills. Although many of these claims and towns were short-lived, some attracted long-term settlement. Especially attractive was a 120-mile-long belt of gold mineralization called the Mother Lode. Gold-seekers from a variety of ethnic backgrounds and social classes prospected along this corridor that ran through western Calaveras County. In 1854, the largest gold nugget discovered in the United States was unearthed at the Morgan Hill Mine near Carson Hill.

Calaveras County was created during the 1849 – 1850 session of the California Legislature, as one of the original 27 counties. As originally laid out, the county encompassed parts of modern Amador, Alpine, and Mono Counties. Originally, the county seat was Pleasant Valley (also known as Double Springs), but was subsequently moved to Jackson in 1850, Mokelumne Hill in 1852, and finally to San Andreas in 1866 (Hoover *et al.* 2002). The county derives its name from the nearby river that was named by Spanish Royal Army Lieutenant Gabriel Moraga in 1808 (Hoover *et al.* 2002). Moraga called it El Rio de Las Calaveras because of a great number of human skulls eroding out of the river's bank.

Like in so many other regions of the Gold Country, many early settlers of Calaveras County quickly tired of the grueling work and minimal rewards that went hand in hand with gold mining. As a result, many people turned to more traditional trades such as ranching, farming, shop-keeping, and timber harvesting. The town of Arnold, roughly 21 miles northeast of Altaville, developed as a ranching and timber center in the county. Copperopolis, located approximately 12 miles south of Altaville, became a center for copper mining. Over the years, Copperopolis has produced more than nineteen million pounds of copper ore, making it the second largest copper production center in the United States (Calaveras Enterprise 2002).

Since the Gold Rush, Calaveras County's economy has substantially diversified. Today, major industries in the county include education, government, healthcare, recreation and tourism, forestry, agriculture, and energy production (Calaveras County Chamber of Commerce 2004). Perhaps the fastest growing segment of the local economy is tourism, which is driven in large part by the region's numerous wineries, state recreation areas, and campgrounds administered by the U.S. Forest Service.

3.5 Project Area History

The Town of Altaville was originally established in 1852 as a mining camp. The town grew as a result of the tremendous population growth during the California Gold Rush. Altaville was originally established on Cherokee Creek, in the Washington Flat region on the south side of Murphy's Grade Road. Washington Flat was named for the Washington Mining Company that filed a mining claim in the area on February 11, 1852 (Calaveras History 2013). The mining camp at Altaville was referred to as Cherokee Flat, Forks-of-the-Road, and Low Divide before an 1857 town meeting when Altaville was selected as the official name for the town (Gudde 1969; USGS 2013). In 1873, Altaville was officially designated a town.

Altaville is designated as California Historical Landmark #288 due to its location in the Mother Lode. It was a significant site for placer mining in Cherokee and Angel's Creeks during the 1850s, and was a center for quartz (lode) mining during the 1880s. Altaville also functioned as an important service town at the junction of two major stage and wagon routes into the gold country which later became California State Routes 4 and 49. The town had a school, dry goods stores, a hotel, livery stable, blacksmith shop, several mills, and a large foundry. Bartolo Prince, an Italian immigrant, arrived in Altaville in 1852. That same year, he established a dry goods store with his partner G. Garibardi. In 1857, the Prince and Garibardi Store was rebuilt of stone and still stands on Main Street in downtown Altaville (California Historic Landmark #735). For 47 years, Prince controlled most of Altaville's commercial enterprises, including his general merchandise store, the Altaville Hotel, a funeral parlor, a silkworm business, and a quartz mine. Due to their close proximity and economic ties, Altaville was annexed to Angels Camp in 1912 (Calaveras History 2013).

The Mother Lode belt, a massive gold-rich deposit of quartz veins in California, runs through Altaville to Angel's Creek and throughout Calaveras County. The Angels Camp Mining District is classified as both a placer and lode mining region, although most of the placer mining ended by 1860 when the surface deposits were depleted. By the late 1880s, large scale underground mining began in Angels Camp, due to new mining and milling technologies (Calaveras History 2013). One of the most productive mines was the Utica Mine established by the Utica Mining Company in the mid-1850s. The Utica Mine was a major source of gold, producing millions of dollars of the metal through the 1890s. From 1893 through 1895, over $4 million dollars' worth of gold was extracted from this mine. During World War I, all of the major mines in the Angels Camp District were closed after the accessible gold was depleted. The Calaveras Central drift mine and the Altaville drift mine, both exposed riverbed placer deposits, have been prospected intermittently since the mid-1950s (Clark 1970). Although Altaville began as a mining town, it was also recognized as a foundry town. D.D. Demerest established a foundry there in 1854 that produced most of the stamp mills and mining machinery used in the Calaveras and Tuolumne County mines (OHP 2013).

After the decline of California gold mining, the primary economic activities in the area were ranching and farming. Crops typically grown in the area were, and still are, alfalfa, wheat, and fruit, including peach and olive orchards, vineyards, and melons. Agricultural development in Calaveras County was delayed due to the perception that the topography of the land was only suitable for mining and not for cultivation. During the 19th century, ranching was more prevalent than farming in the county (Calaveras History 2013). Several types of livestock were raised including hogs, poultry, sheep, and cattle. Livestock grazing in the high country was documented as early as 1849. Many geographical features in this region were named after foothill ranching families. These places included Tryon Peak and Hiram Meadow.

The Altaville Grammar School was built in 1858 by the Town of Altaville. It is believed to be the oldest surviving schoolhouse in California, and it is listed on the NRHP (N795) (OHP 2013). The school was open from 1858 through 1950, before falling into disrepair (California Gold Country 2013). The school was located on land that became the California Department of Forestry and Fire Protection's Altaville fire station, constructed in 1950 (Calaveras History 2013). Plans for a new firehouse on this site required removing the school. Both the Calaveras County Historical Society and the California Department of Fire (CAL FIRE) were responsible for restoring the school and moving it to an accessible location on Highway 49 for use as a historical site open to the public. In 1981, a Historic Resources Inventory was completed along with a restoration plan. The building was relocated in 1983, and restoration work was completed in 1989 (CAL FIRE 2013; Calaveras History 2013).

4.0 METHODS

4.1 Personnel Qualifications

All phases of the cultural resources investigation were conducted or supervised by Registered Professional Archaeologist Lisa Westwood, who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeologist. Architectural historian Jeremy Adams, who meets the Secretary of the Interior's Professional Qualifications Standards for architectural historian and historian, conducted historical research and records search for the Project. Fieldwork was conducted by Field Director Stephen Pappas. Jeremy Adams, Stephen Pappas, and Lisa Westwood wrote the technical report. Resumes are available upon request.

Lisa Westwood is a Registered Professional Archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeologist with 18 years of cultural resource management, contract archaeology, museum curation, and teaching experience in northern and central California, southern Utah, New Mexico, and the Midwest. She holds a B.A. degree in Anthropology and an M.A. degree in Anthropology (Archaeology). She has participated in or supervised numerous survey, testing, and data recovery excavations, has recorded and mapped hundreds of prehistoric and historical sites, and has cataloged, identified, and curated hundreds of thousands of artifacts. She has conducted evaluations of cultural resources for eligibility to the National Register of Historic Places and California Register of Historical Resources and is well versed in impact assessment and development of mitigation measures for CEQA and Section 106 (NHPA) projects. She has authored or co-authored more than 150 cultural resources management reports.

Jeremy Adams meets the Secretary of the Interior's Professional Qualifications Standards for architectural historian and historian, holding an M.A. degree in Public History and a B.A. degree in History, with four years' experience specializing in historic resources of the built environment. He is skilled in carrying out historical research at repositories such as city, state, and private archives, libraries, CHRIS information centers, and historical societies. He has experience conducting field reconnaissance and intensive surveys. Mr. Adams has conducted evaluations of cultural resources for eligibility to the National Register of Historic Places and California Register of Historical Resources and has specialized experience evaluating electric transmission utilities.

Stephen Pappas is a Staff Archaeologist and Field Director for ECORP and has eight years of experience in cultural resources management, primarily in California and New Mexico. He holds a B.A. degree in Anthropology and has participated in all aspects of archaeological fieldwork, including survey, test excavation, data recovery, and construction monitoring. He has extensive familiarity in meeting the cultural resource requirements of CEQA and Section 106 of the National Historic Preservation Act.

4.2 Records Search Methods

A records search for the property was completed by the Central California Information Center (CCIC) of the CHRIS at California State University-Stanislaus on 22 August 2013 (CCIC search #8681J; Attachment A). The purpose of the records search was to determine the extent of previous surveys within a 0.5-mile (800-meter) radius of the proposed project location, and whether previously documented prehistoric or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area.

In addition to the official records and maps for archaeological sites and surveys in Calaveras County, the following historic references were also reviewed: Historic Property Data File for Calaveras County (Office of Historic Preservation 2012); *The National Register Information System website* (National Park Service 2013); *Office of Historic Preservation, California Historical Landmarks websit*e (Office Historic Preservation 2013); *California Historical Landmarks* (Office of Historic Preservation 1996 and updates); *California Points of Historical Interest* (Office of Historic Preservation 1992 and updates); *Directory of Properties in the Historical Resources Inventory* (1999); *Caltrans Local Bridge Survey* (Caltrans 2013a); *Caltrans State Bridge Survey* (Caltrans 2013b); and *Historic Spots in California* (Kyle 2002).

Other references examined include a DataQuick Property Search and historic General Land Office (GLO) land patent records (BLM 2013). Historic maps reviewed include:

- 1871 GLO Plat for Township 3 North, Range 13 East
- 1889 USGS California Jackson Sheet (1:125,000)
- 1889 (Edition of 1902) USGS California Jackson Sheet (1:125,000)
- 1945 USGS San Andreas, California (15-minute scale)
- 1962 USGS Angels Camp, California (7.5-minute scale)
- 1962 (Photorevised 1973) USGS Angels Camp, California (7.5-minute scale)

Historic aerial photos taken in 1944, 1959, 1984, 1988, 1998 and 2010 were also reviewed for any indications of property usage and built environment.

A letter was sent to the Calaveras County Historical Society on 22 August 2013 in order to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area.

4.3 Native American Coordination Methods

ECORP contacted the California Native American Heritage Commission (NAHC) on 15 August 2013, and 19 August 2013 to request a search of the Sacred Lands File for the Project Area. Although the search failed to yield information on Native American cultural resources located within or adjacent to the Project Area, the NAHC provided a list of individuals and organizations in the Native American community that may be able to provide information about unrecorded sites in the project vicinity (Attachment B).

ECORP contacted all persons or organizations on the NAHC list by letter on 30 August 2013 to request information on unrecorded cultural resources that may exist within the current Project Area, or to inquire about any concerns regarding sacred sites or traditional cultural properties in the vicinity that might be affected by the proposed action. Each individual was subsequently telephoned on 11 and 17 September

2013 to ensure that the materials had been received and to further solicit comments. Responses received are included in the Native American coordination log with Attachment B.

4.4 Field Methods

On 30 August 2013, the entire Project Area was subjected to an intensive pedestrian survey under the guidance of the *Secretary of the Interior's Standards for the Identification of Historic Properties* (National Park Service 1983) using 15 meter transects. One-half person day was expended in the field. At that time, the ground surface was examined for indications of surface or subsurface cultural resources. The general morphological characteristics of the ground surface were inspected for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances were examined for artifacts or for indications of buried deposits. No subsurface investigations or artifact collections were undertaken during the pedestrian survey.

All cultural resources encountered during the survey were recorded using Department of Parks and Recreation (DPR) 523-series forms approved by the California Office of Historic Preservation. The resources were photographed, mapped using a handheld survey grade GPS receiver, and sketched as necessary to document their presence. Isolates were recorded with a Primary Record and Location Map, while sites were recorded with a Primary Record, Archaeological Site Record, Location Map, Sketch Map, and any other pertinent forms. Any cultural resource that contained at least three artifacts in a ten square meter area or consisted of one or more features was considered a site. Any indications of cultural presence in the Project Area that failed to meet the definition of a site were recorded as isolates or were noted on a location map.

5.0 RESULTS

5.1 Records Search

The records search consisted of a review of previous research and literature, records on file with the CCIC for previously recorded resources, and historical aerial photographs and maps of the vicinity.

5.1.1 Previous Research

Three previous cultural resource investigations have been conducted within the Project Area. An additional 22 investigations have been conducted within 0.5 mile of the property. Approximately 15 percent of the Project Area and 35 percent of the total area surrounding the property within the record search radius has been previously surveyed (Table 1). These studies revealed the presence of historical sites associated with historic mining activities and homesteading. The previous studies were conducted between 1977 and 2010 and vary in size from one acre to 75.5 acres.

Table 1 – Previous Cultural Studies In or Within 0.5 Mile of the Project APE

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

The results of the records search indicate that approximately 15 percent of the property has been previously surveyed for cultural resources. Because only a portion of the Project Area was previously surveyed, a pedestrian survey of the entire APE was carried out.

[redacted] The Altaville Grammar School (P-05-2226) was originally located within the Project Area, but was moved to a location [redacted] outside of, the Project Area in 1983. The site record describes the original location as being within the Project Area (even though the school building has since been moved).

In addition to P-05-2226, 26 previously recorded historic-era cultural resources are located within 0.5 mile of the Project Area (Table 2). Of these, 10 are believed to be associated with historical mining activities in the vicinity, and the remaining sites are associated with early Euroamerican ranching, homesteading, and farming activities that influenced the growth of Altaville.

Table 2 – Previously Recorded Cultural Resources In or Within 0.5 Mile of the Project APE

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

5.1.2 Records

The *Office of Historic Preservation's Directory of Properties, Historic Property Data File for Calaveras County* (dated 4/5/2012) listed 13 properties within the town of Altaville, including the Altaville Grammar School, [redacted] (OHP 2012).

The National Register Information System (National Park Service 2013) failed to reveal any eligible or listed properties within the Project Area. The nearest National Register property is the Altaville Grammar School located adjacent to [redacted] the Project Area.

Resources listed as California Historical Landmarks (Office of Historic Preservation 1996) or listed as such on the Office of Historic Preservation website (Office of Historic Preservation 2013) were reviewed. The nearest listed landmark is #449: the Red Brick Grammar School in Altaville (plaque located outside of the Grammar School adjacent to [redacted] the Project Area).

Historic GLO land patent records from the BLM's patent information database (BLM 2013) revealed that the northeast quarter of the southeast quarter of Section 29 was patented to the City of Angels Camp City Council on March 29, 1982.

Table 3 – GLO Land Patent Records

Patentee	Patent Date	Serial Number	Patent Type/Authority	Location
City of Angels Camp City Council	3/29/1982	CACA 012000	July 22, 1937: Quitclaim Deed-Public Laws (Various Statutes)	NE¼ of SE¼ of Section 29

A DataQuick online property search for APN 058-013-011-000 revealed the property consists of approximately 6.5 acres of government-owned land. The land is within the Altaville Townsite housing subdivision owned by the State of California Division of Forestry. No other property history information was on record with DataQuick.

The Caltrans Bridge Local and State Inventories (Caltrans 2013a, Caltrans 2013b) indicated one bridge, the Cherokee Creek Bridge (30 0042), within 0.5 mile of the Project Area. The bridge was originally constructed in 1941, but it was later reconstructed or extended in 1986 and was determined not eligible for inclusion on the NRHP by Caltrans.

No response to the letter sent to the Calaveras County Historical Society has been received to date.

5.1.3 Map Review and Aerial Photographs

The review of historical aerial photographs and maps of the Project Area provide information on the past land uses of the property. Based on this information, the property was initially used for the Altaville Grammar School. It was not until the 1950s or 1960s that state fire facilities were constructed. Following is a summary of the review of historical maps and photographs.

- The 1871 GLO Plat for Township 3 North, Range 13 East depicts the "Village of Altaville" within the southeastern quarter of Section 29 with a northwest-southeast road located north of the village. This road appears to be in the same location as the current Highway 49.

- The 1873 Map of Altaville indicates a parcel within Block 4 as "Public School 1" located south of Main Street.

- The 1945 San Andreas (15-minute) map indicates a school (building with flag) within the Project Area. No other structures are shown within the project area; however, directly east and south of the school, another school is shown outside of the project area.

- The 1962 Angels Camp (7.5-minute) map shows a road along the eastern boundary of the Project Area, a short segment of road heading southwest from Highway 49 ending at five structures located within the Project Area, three of which are located in the northern half of the Project Area. A school (building with flag) is also indicated along the central-east edge of the Project Area, identifying the previous location of the Altaville Grammar School.

- A review of an aerial photograph from 1944 reveals the Project Area is located in a developing town which is still primarily rural. The property is shown as mostly bare land except for what appears to be a square building within the Project Area, likely the original grammar school.

- An aerial photograph from 1959 shows the Project Area is slightly more developed and graded with potentially two other buildings or structures in the area.

- The aerial photographs from 1998 and 2010 show the property in its current state.

5.2 Native American Coordination Results

A search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources in the Project Area. Follow-up letters and calls were made and are included in Attachment B.

5.3 Field Survey Results

The Project Area is situated on a parcel that has been mostly disturbed by grading, paving, landscaping

and construction of fire station facilities (shop, office, and barracks; Figure 3). The Project Area was subjected to intensive pedestrian survey with transects spaced 15 meters apart across the entire Project Area in a northeast-southwest direction.

According to recent aerial photographs, the existing fire station buildings were constructed recently, after 2010. The structures identified on the 1959 aerial photograph and the 1962 Angels Camp California quadrangle map are no longer present. The only portions of the property which retained the original landscape were located along the southern and western ends. This original landscape contained several oak trees with evidence of surface grading from a tractor (the tractor was located uphill along the raised, graded area). Small oak trees were planted in two rows along a possible road segment (Figure 4).

Figure 3. View of paved central area and fire facilities (view northeast, 30 August 2013).

Figure 4. View of original oak landscape in western edge of Project Area (view northeast, 30 August 2013).

One previously recorded site was recorded within the Project Area.

Site P-05-2226 is the Altaville Grammar School site (California State Landmark #499), located in the eastern-central end of the Project Area. A sketch map attached to the 1979 NRHP inventory nomination form identified the school along the eastern edge of the property, approximately 160 meters south of Highway 49. The school remained in this location until 1983 when it was moved to its current location, just north of the Project Area boundary, adjacent and south of Highway 49.

The previous location of the school and surrounding areas were graded and covered in road base to the east and concrete to the west (Figure 5). This area was intensively surveyed for any surface evidence of foundation remains or artifacts; however, none were observed. In addition, an area measuring approximately 100 feet north-south by 50 feet east-west was surveyed using a metal detector to identify any potential subsurface targets. No targets were identified.

Figure 5. View of area of previous location of Altaville Grammar School (view southwest, 30 August 2013).

In addition to the previously recorded schoolhouse, one newly identified site (ALT-001) and one possible isolate (ALT-002) were discovered as a result of ECORP's survey.

[redacted]

[redacted]

Figure 6. Overview of ALT-001 from southern end of site (view northeast, 30 August 2013).

[redacted]

Figure 7. Photograph ALT-002 (detail view, 30 August 2013).

6.0 MANAGEMENT CONSIDERATIONS

6.1 Conclusions

One isolated artifact, ALT-002, was found as a result of the field survey. Isolated artifacts are not eligible for the CRHR or the NRHP. As single artifacts, they do not have the potential to yield sufficient information important in prehistory to be eligible for the CRHR under Criterion 4 or for the NRHP under Criterion D. [redacted]

Site ALT-001, [redacted], was recorded within the Project Area. [redacted]

The former location of P-05-2226 was examined for artifacts or building remnants that may have been left behind when the school was moved in 1983; however, no artifacts or foundation remnants were found. After the school was moved, the area was graded and paved. A metal detector was used to investigate for possible targets (metal artifacts or fragments associated with the school), but no targets were located.

6.2 Recommendations

Site ALT-001, [redacted], is not associated with an important event in history, is not associated with a person of historical significance, does not contain standing structures that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values, and as a modern push pile which contains historic-era trash, does not have the potential for subsurface material that could provide important information. Therefore, ALT-001 is not eligible for inclusion in the CRHR under any criteria and no further action is recommended for this site.

The proposed Project will require some cut and fill of the slope on the western boundary of the current graded area and the construction of a retention basin to the south and west of the current graded area. Although ALT-002, [redacted], is not eligible for inclusion on the CRHR and is located in the oak scrub area to the west of the recently graded area, its presence nonetheless could indicate the possibility of other prehistoric activity within the Project Area. Because not all of the proposed Project will be located within the recently graded area and because the additional construction activities will include ground disturbance, ECORP recommends that all ground-disturbing activity be monitored by a qualified professional archaeologist, who has the authority to halt construction activity in accordance with the unanticipated discovery procedures discussed below.

Until the CEQA lead agency concurs with the identification and evaluation of eligibility of cultural resources, including archaeological sites and standing structures, no ground-disturbing activity or demolition should occur.

6.3 Unanticipated Discovery

Due to the sensitivity of the Project Area, there remains a possibility that unrecorded cultural resources are present beneath the ground surface, and that such resources could be exposed during project construction. Both CEQA and Section 106 of the National Historic Preservation Act require the lead agency to address any unanticipated cultural resource discoveries during project construction. Therefore, ECORP recommends the following mitigation measures be adopted and implemented by the lead agency to reduce potential adverse impacts to less than significant.

> **Mitigation Measure #1: Unanticipated Discovery**
>
> If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. A Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required.
>
> Work cannot continue within the no-work radius until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR.
>
> If a potentially eligible resource is encountered, then the archaeologist, lead agency, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations to evaluate eligibility and, if eligible, total data recovery as mitigation. The determination shall be formally documented in writing and submitted to

the lead agency as verification that the provisions in CEQA/NEPA for managing unanticipated discoveries have been met.

In the event that evidence of human remains is discovered, construction activities within 100 feet of the discovery will be halted or diverted and the requirements of Mitigation Measure #1 will be implemented. In addition, the provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. When human remains are discovered, state law requires that the discovery be reported to the County Coroner (Section 7050.5 of the Health and Safety Code) and that reasonable protection measures be taken during construction to protect the discovery from disturbance (AB 2641). If the Coroner determines the remains are Native American, the Coroner notifies the Native American Heritage Commission which then designates a Native American Most Likely Descendant (MLD) for the project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).

The Lead Agency is responsible for ensuring compliance with these mitigation measures because damage to significant cultural resources is in violation of CEQA and Section 106. Section 15097 of Title 14, Chapter 3, Article 7 of CEQA, *Mitigation Monitoring or Reporting*, “the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.”

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LIST OF ATTACHMENTS

Attachment A – Records Search Confirmation

Attachment B – Native American Coordination

Attachment C – Project Area Photographs

Attachment D – ***Confidential*** Cultural Resource Site Locations and Site Records

ATTACHMENT A

Confidential Records Search Confirmation

This Attachment contains information on the specific location of cultural resources. This information is not for publication or release to the general public. It is for planning, management and research purposes only. Information on the specific location of prehistoric and historic sites is exempt from the Freedom of Information Act and California Public Records Act.

ATTACHMENT B

Native American Coordination

Native American Contacts
Altaville Auto Shop 2013-112 Calaveras County

Name	Affiliation	Date Contacted			Response Received?	Comments
		1. Letter	2. Phone	3. Phone		
Native American Heritage Commission 915 Capital Mall, Room 364 Sacramento, CA 95814 nahc@pacbell.net (916) 373-3710 (916) 373-5471 Fax	N/A	8/27/13	N/A	N/A	Yes	
Briana Creekmore P.O. Box 84 Wilseyville, CA 95257 209-298-7158	Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13-left a message. 9/17/13-left a message.
Buena Vista Rancheria Rhonda Morningstar Pope, Chairperson 1418 20th Street, suite 200 Sacramento, CA 95811 Rhonda@buenavistatribe.com 916-491-0011 916-491-0012-fax	Me-Wuk/Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13-not in the office, referred to Roseland and left a message. 9/17/13-left a Voicemail. 9/19/2013: e-mail received from Roselynn Lwenya, Environmental Resources Director/THPO for the Buena Vista Rancheria. She does not have information regarding existence of cultural resources within the location, however, defers consultation to Calaveras County Native American Tribes.
Calaveras Band of Mi-Wuk Indians Lois Williams P.O. Box 876 West Point, CA 95255 209-293-4882	Mi-Wuk	8/30/13	9/11/13	9/17/13	No	9/11/13-recording, call cannot be completed at this time. 9/17/13-No ring and then a disconnect. I tried twice.
Calaveras Band of Mi-Wuk Indians Charles Wilson, Chairperson 546 Bald Mountain Road West Point, CA 95255 209-293-2189	Mi-Wuk	8/30/13	9/11/13	9/17/13	No	9/11/13-recording, call cannot be completed at this time. 9/17/13- recording, call cannot be completed at this time.

Name	Affiliation	Date Contacted			Response Received?	Comments
		1. Letter	2. Phone	3. Phone		
Calaveras Band of Mi-Wuk Indians Debra Grimes, Cultural Res. Specialist P.O. Box 1015 West Point, CA 95255 Dmiwuk@aol.com 209-770-4137 209-470-8688	Mi-Wuk/Miwok	8/30/13	9/11/13	9/18/2013	No	9/11/13-number no longer in service. 9/18/2013 – E-mail sent.
Calaveras Band of Mi-Wuk Indians Adam Lewis, Tribal Preservation Assistant P.O. Box 899 West Point, CA 95255	Mi-Wuk/Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13-no phone number or e-mail.
Calaveras County Mountain Miwok Indian Council Arvada Fisher, Vice Chairperson 416 Railroad Flat Railroad Flat, CA 95248 mountainmiwok@yahoo.com 209-770-7511-cell	Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13 – No comment.
California Valley Miwok Tribe Chairperson Sylvia Burley 10601 N Escondido Pl Stockton, CA 95212 office@cvmt.net 209-931-4567 209-931-4333	Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13-left a message. 9/11/13-left a message.
Ione Band of Miwok Indians Yvonne Miller, Chairperson P.O. Box 699 Plymouth, CA 95669 209-274-6753 209-274-6636-fax	Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13-recording that the number has not been assigned yet. 9/17/13- recording that the number has not been assigned yet.

Name	Affiliation	Date Contacted			Response Received?	Comments
		1. Letter	2. Phone	3. Phone		
Ione Band of Miwok Indians Cultural Committee Anthony Burris, Chairperson P.O. Box 699 Plymouth, CA 95699 209-274-6753 209-274-6636-fax	Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13-recording that the number has not been assigned yet. 9/17/13-recording that the number has not been assigned yet.
Wilton Rancheria Andrew Franklin, Chairperson 9300 W. Stockton, Suite 200 Elk Grove, CA 95758 916-683-6000 916-683-6015	Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13-not in, referred to Steve Hutchison 9/17/13- not in, referred to Steve Hutchison
Wilton Rancheria Steve Hutchason, Director of Cultural Preservation 9300 W. Stockton, Suite 200 Elk Grove, CA 95758 shutchason@wiltonrancheria-nsn.gov 916-683-6000 916-683-6015	Miwok	8/30/13	9/11/13	9/17/13	No	9/11/13-not in, left a message 9/17/13-not in, left a message

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Wilton Rancheria
Steven Hutchason, Director of Cultural Preservation
9300 W. Stockton, Suite 200
Elk Grove, CA 95758

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Steven:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5′ topographic quadrangle.

The purpose of the study is to identify cultural resources that could be affected by the proposed project, as required by Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). The investigation included a records search conducted with the California Historical Resources Information System and a search of the Native American Heritage Commission's (NAHC) Sacred Lands File. The search of the Sacred Lands file did not identify any known Native American cultural resources within the immediate project vicinity; however, the NAHC provided us with your name and contact information.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

Enclosures, as stated

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Wilton Rancheria
Andrew Franklin, Chairperson
9300 W. Stockton, Suite 200
Elk Grove, CA 95758

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Andrew:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5′ topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

Enclosures, as stated

2525 Warren Drive, Rocklin, California 95677 • Tel: (916) 782-9100 • Fax: (916) 782-9134 • Web: www.ecorpconsulting.com

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Ione Band of Miwok Indians Cultural Committee
Anthony Burris, Chairperson
P.O. Box 699
Plymouth, CA 95669

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Anthony:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5′ topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

Enclosures, as stated

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Ione Band of Miwok Indians
Yvonne Miller, Chairperson
P.O. Box 699
Plymouth, CA 95669

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Yvonne:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5′ topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

Enclosures, as stated

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Calaveras Valley Miwok Tribe
Chairperson
10601 N Escondido Pl
Stockton, CA 95212

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Chairperson:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5′ topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

Enclosures, as stated

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Calaveras County Mountain Miwok Indian Council
Arvada Fisher, Vice Chairperson
416 Railroad Flat
Railroad Flat, CA 95248

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Arvada:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5′ topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

2525 Warren Drive, Rocklin, California 95677 • Tel: (916) 782-9100 • Fax: (916) 782-9134 • Web: www.ecorpconsulting.com

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Calaveras Band of Mi-Wuk Indians
Adam Lewis, Tribal Preservation Assistan
P.O. Box 899
West Point, CA 95255

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Adam:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5' topographic quadrangle.

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Jeremy Adams
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ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Calaveras Band of Mi-Wuk Indians
Debra Grimes, Cultural Res. Specialist
P.O. Box 1015
West Point, CA 95255

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Debra:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5' topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Calaveras Band of Mi-Wuk Indians
Charles Wilson, Chairperson
546 Bald Mountain Road
West Point, CA 95255

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Charles:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5′ topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Calaveras Band of Mi-Wuk Indians
Lois Williams
P.O. Box 876
West Point, CA 95255

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Lois:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5' topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Buena Vista Rancheria
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200
Sacramento, CA 95811

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Rhonda:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5' topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

30 August 2013

Briana Creekmore
P.O. Box 84
Wilseyville, CA 95257

RE: Cultural Resources Identification Effort at Altaville Forest Fire Station (ECORP Project No. 2013-112).

Dear Briana:

ECORP Consulting, Inc. is currently conducting a cultural resources inventory of a 5.95-acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project. The project area is shown on the enclosed 1962 U.S. Geological Survey Angels Camp, California 7.5′ topographic quadrangle.

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Sincerely,

Jeremy Adams
ECORP Consulting, Inc.

Enclosures, as stated

From: s.burley@californiavalleymiwoktribe-nsn.gov
To: Jeremy Adams
Subject: Altaville Forest Fire Station, Calaveras County. (ECORP Project No. 2013-112).
Date: Sunday, September 15, 2013 9:59:17 AM

09/15/2013

Jeremy Adams,
ECORP Consulting, Inc.
2525 Warren Drive
Rocklin, California 95677
jadams@ecorpconsulting.com

Re: Cultural Resources Identification Effort at Altaville Forest Fire Station, Calaveras County. (ECORP Project No. 2013-112).

Dear Mr. Adams,

This letter is in response to your email dated 08.30.2013, in regards to the Cultural Resources Identification Effort at Altaville Forest Fire Station, Calaveras County. (ECORP Project No. 2013-112).

The California Valley Miwok Tribe (CVMT) is of the understanding that ECORP Consulting, Inc. is conducting a cultural resources inventory of a 5.95 acre parcel located near Altaville in Calaveras County. The study is being conducted in advance of approval of the proposed Altaville Forest Fire Station Auto Shop Replacement project.

COMMENTS
The Altaville / Angels Camp area in Calaveras County has a wide spread history of Miwok villages/camps, hunting and gathering areas, including ceremonial areas. The California Valley Miwok Tribe's only concern is that if ground disturbance is required, there is a heightened possibility of Miwok artifacts and/or human remains being discovered, therefore, CVMT is requesting that the Tribe be notified if any Miwok artifacts and/or human remains are found during the course of the proposed project.

Respectfully,

/s/
Silvia Burley Chairperson
s.burley@californiavalleymiwoktribe-nsn.gov

.....

California Valley Miwok Tribe
10601 N. Escondido Pl.
Stockton, CA 95212
Ph: (209) 931-4567 Fax: (209) 931-4333
Office Email: office@cvmt.net

Tribal Council: tribe@californiavalleymiwoktribe-nsn.gov

Website: http://www.californiavalleymiwoktribe-nsn.gov

ATTACHMENT C

Project Area Photographs

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

PHOTOGRAPH RECORD

Primary #
HRI#
Trinomial

 Resource/Project Name: RESD Altaville Fire **Year** 2013

Camera: Lens Size: 35mm

Film Type and Speed: Digital Negatives Kept at: ECORP Consulting, Inc.

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
9	29			East end (center of APE) pavement	NE	001
9	29			East end (center of APE) pavement	SW	002
9	29			Middle pavement area overview	NW	003
9	29			Eastern shops/overhangs	SW	004
9	29			Central APE overview	North	005
9	29			South end overview	South	006
9	29			East side overview from south end	North	007
9	29			Stones/pavers/etc at south end	North	008
9	29			South edge of APE	NW	009
9	29			South central portion of paved area	NE	010
9	29			Central paved area (from location of prev. school)	NE	011
9	29			ALT-001 overview from top of slope (pipe in middle)	North	012
9	29			ALT-001 top of slope	East	013
9	29			ALT-001 from north end along slope edge	SW	014
9	29			ALT-001 from south end along top slope	NE	015
9	29			Modern wood fragment	Detail	016
9	29			Rusted pipes w/in ALT-001	Detail	017
9	29			ALT-001 Pile of branches w/ bricks and building material at bottom	SE	018
9	29			ALT-001 Branch pile overview from north	SW	019
9	29			Built up slope south of new facilities	NE	020
9	29			East side of APE overview from pavement	SW	021
9	29			North end of east end APE	SW	022
9	29			Landscaped NW portion of APE	NE	023
9	29			Baby trees along west side of APE	SW	024
9	29			Ground visibility along west end	NE	025
9	29			ALT-002 possible mano (top)	Detail	026
9	29			ALT-002 possible mano (bottom)	-	027
9	29			ALT-002 possible mano (profile)	-	028
9	29			ALT-002 possible mano (back)	-	029
9	29			ALT-002 possible mano (front)	-	030
9	29			Area of ALT-002 (road grade)	NE	031
9	29			Area of ALT-002 (road grade)	SW	032
9	29			Area of ALT-002 (showing push pile in distance)	East	033
9	29			West side of headquarters	NE	034
9	29			Rear of headquarters	SE	035
9	29			Schoolhouse from headquarters	NE	036
9	29			Side of headquarters	SE	037
9	29			Rear side schoolhouse	NE	038
9	29			Back schoolhouse	NE	039
9	29			Rear side schoolhouse	NW	040
9	29			East side schoolhouse	NW	041
9	29			Front east side schoolhouse	SW	042
9	29			Front schoolhouse	SW	043
9	29			Front west side schoolhouse	South	044
9	29			Schoolhouse interior	-	045
9	29			Museum board	-	046
9	29			Historic schoolhouse photo	-	047

California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PHOTOGRAPH RECORD

Primary #
HRI#
Trinomial

 Resource/Project Name: RESD Altaville Fire **Year** 2013

Camera: Lens Size: 35mm

Film Type and Speed: Digital Negatives Kept at: ECORP Consulting, Inc.

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
9	29			Historic schoolhouse photo	-	048
9	29			Altaville photo board	-	049
9	29			Landscaped area east of schoolhouse	SW	050
9	29			Landscaped area east of schoolhouse (HWY 49 in background)	NE	051
9	29			NE corner of APE	SW	052
9	29			NE corner of APE	NW	053
9	29			Building east of APE	South	054
9	29			Building east of APE	NE	055
9	29			Brick/rock ring around tree (materials also found in south end of APE)	North	056
9	29			Paved area north of station bays	SW	057
9	29			Paved driveway to HWY 49	NE	058
9	29			Paved/graveled area (around old schoolhouse location)	SW	059
9	29			Edge of pavement, beginning of gravel (SH loc)	South	060
9	29			Overview of previous location of schoolhouse	SE	061
9	29			West of prev schoolhouse location	NE	062
9	29			end of pavement, north end of tree area	SW	063
9	29			Main paved area south of firetruck bays	South	064

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ANGELS
CAMP
MUSEUM
Gold Country History
in 3-Building Complex
WAGON & CARRIAGE EXHIBITS
PICNIC AREA
GIFT SHOP & CHANGING EXHIBIT
GOLD PANNING
ALTAVILLE SCHOOLHOUSE
SAM CHOY CHINESE MERCANTILE
753 S. MAIN ST. • ANGELS CAMP, CA • 209.736.2963
EXPLORE • EXPERIENCE • HAVE FUN • IT'S THE MOTHER LODE

Altaville

The Altaville School District was officially formed from a part of the Angels District in February, 1859. Apparently the schoolhouse was already under construction, for an item in the *San Andreas Independent* of January 8 stated: "The new schoolhouse is nearly completed. It stands upon a beautiful natural eminence and presents quite a pleasing ornament as well as a useful appendage to the town."

Two acres of land were donated for the school by M. D. Harmon. A substantial portion of the funds to erect the building were raised at a dance held in the billiard room of the H. R. Prince building in Altaville. Various socials were organized to finance the furnishings of the new school. John Ward, David Demarest, and Gitchell Bregg were elected as trustees. There were soon ninety-two pupils enrolled, ranging in age from five to seventeen years. Mr. W. W. Durham was the first teacher employed. Miss M. J. Clayes taught the lower grades.

The building was sturdily and attractively constructed of brick that had been manufactured in a local kiln. It measured twenty-four feet wide and thirty-six feet long. This schoolhouse is a good example of the importance early residents placed upon the education of their children. It

Mayme Duffy's pupils pose in front of the new building in 1911. The original brick school may be seen in the background.

DIESEL
COMBUSTIBLE
NO SMOKING

ATTACHMENT D

Confidential Cultural Resource Site Locations and Site Records

This Attachment contains information on the specific location of cultural resources. This information is not for publication or release to the general public. It is for planning, management and research purposes only. Information on the specific location of prehistoric and historic sites is exempt from the Freedom of Information Act and California Public Records Act.

APPENDIX D

Paleontological Records Search and Sensitivity Assessment

18 September 2013

Valerie Namba
Department of General Services
Real Estate Services Division
707 Third Street 3-40
West Sacramento, California 95605

RE: Paleontological Records Search and Sensitivity Assessment for the RESD Altaville Forest Fire Station Project (ECORP Project No. 2013-112)

Dear Ms. Namba:

At your request, ECORP carried out a paleontological records search and sensitivity assessment for the RESD Altaville Forest Fire Station Project (Project) to support the preparation of an environmental document under the California Environmental Quality Act (CEQA). The Project is located in Altaville, a former unincorporated community in Calaveras County now located in the northwest portion of the City of Angels Camp, California (Figure 1. *Project Location and Vicinity*). The proposed Project entails the construction of a new automotive repair and maintenance facility at the Altaville Forest Fire Station. Two single-story buildings are proposed for construction: (1) a five-bay automotive shop, and; (2) a generator/pump building. Site improvements in the Project area include: clearing, grading, drainage, retaining walls, retention pond, walkways, curbs, water, sewer, electrical, telephone, irrigation, lighting, fencing, landscaping and extension of utilities from the existing site to the new building. The automotive shop will also have an attached vehicle wash rack with filtration system and a pump test pit. The ground disturbance varies across the Project depending on whether or not solar panel supports are installed. Ground disturbance of up to 20 feet below the surface will be necessary in order to construct the buildings.

METHODS

A paleontological assessment was requested from the University of California Museum of Paleontology (UCMP) on 21 August 2013. Conducted by Museum Scientist (Vertebrate Collections) Patricia Holroyd, Ph.D., the assessment included a search of the paleontology specimen collection records for the Project area and vicinity. In addition, a query of the UCMP online catalog records, a review of regional geologic maps from the California Geological Survey, and a review of existing literature on paleontological resources of Calaveras County was conducted by Biologist Marin Meza. The purpose of the paleontological assessment was to determine: the sensitivity of the Project area; whether or not known occurrences of paleontological resources are present within or immediately adjacent to the Project area; and whether or not implementation of the project could result in significant impacts to paleontological resources. Paleontological resources include mineralized (fossilized) or unmineralized bones, teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains.

Sedimentary rock units may be described as having (a) high (or known) potential for containing significant nonrenewable paleontological resources; (b) low potential for containing nonrenewable paleontological resources; or (c) undetermined potential (SVP 2013). The determination of a site's (or rock unit's) degree of paleontological potential is first founded on a review of pertinent geological and paleontological literature and on locality records of specimens deposited in institutions. The sensitivity of rock units in which fossils occur may be divided into three operational categories:

I. HIGH POTENTIAL. Rock units from which vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a have potential for containing significant nonrenewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.

II. UNDETERMINED POTENTIAL. Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

III. LOW POTENTIAL. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils. Such units will be poorly represented by specimens in institutional collections. These deposits generally will not require protection or salvage operations.

RESULTS

The UCMP has 27 paleontological specimens from 31 localities in Calaveras County (UCMP 2013a). Not all specimens in the UCMP collections have been cataloged and digitized however, and other specimens have likely been recorded within the vicinity of the Project area. The specific location of all localities is available only to qualified paleontologists, and the location of these occurrences relative to the Project area is unclear without more extensive archival research. Of the 27 specimens recorded within Calaveras County, all are fossil vertebrates (UCMP 2013a). No fossil specimens are catalogued in or around the Project area (Holroyd 2013, UCMP 2013a; see attachment).

According to the 2010 Geologic Map of California (Gutierrez et al. 2010) and the Geologic Map of the Sacramento Quadrangle (Wagner et al. 1981), the geologic formation that underlies the Project area is the Calaveras Complex of volcanic rocks. This formation is described generally as undivided Mesozoic metavolcanic rocks that include latite, dacite, tuff and greenstone that is commonly schistose. The soil survey for Calaveras County published by the U.S. Department of Agriculture (USDA) Soil Conservation Service (USDA 1966) indicates that the soil type on-site corresponds to the Guenoc-Stonyford association. This soil type is dominated by moderately deep to deep medium textured soils with finer textured subsoils over greenstone, limestone, andesitic conglomerate and granitic gneiss with the parent material being approximately 12-55 inches deep (City of Angels Camp 1999). In general, volcanic rocks very rarely preserve specimens because of extremely high temperatures associated with their origin (Hanson 2005).

The Calaveras Complex formed during the Mesozoic era and is estimated to have been created during the Jurassic epoch (UCMP 2013b). Mesozoic means "middle animals" and is the time during which the world fauna changed drastically from that which had been seen in the Paleozoic. Dinosaurs, which are perhaps the most well-known organisms of the Mesozoic era, evolved in the Triassic, but were not very diverse until the Jurassic period. With the exception of birds, dinosaurs became extinct at the end of the Cretaceous. The Mesozoic era was also a time of great change in the terrestrial vegetation. The early Mesozoic was dominated by ferns, cycads, ginkgophytes, bennettitaleans, and other unusual plants (UCMP 2013b).

RECOMMENDATIONS

The records search determined that no fossil vertebrate localities are located within the Project area. Additionally, based on the soil type and geological formation present within the Project area, it was determined that it has low potential for containing nonrenewable paleontological resources. Therefore, no impacts to significant paleontological resources are expected. The lead agency should implement a standard unanticipated discovery mitigation measure if paleontological resources are encountered during construction activities. If any fossils are recovered, they shall be analyzed to a point of identification and curated at an established accredited museum repository with permanent retrievable paleontologic storage. A technical report of findings shall be prepared with an appended itemized inventory of identified specimens and submitted with the recovered specimens to the curation facility.

Thank you for the opportunity to assist you in your project planning. If you have any questions, you may contact me by phone at (916) 782-9100 or by email at mmeza@ecorpconsulting.com.

Sincerely,

Sincerely,

Marin Meza
Biologist
ECORP Consulting, Inc.

Attachment(s)

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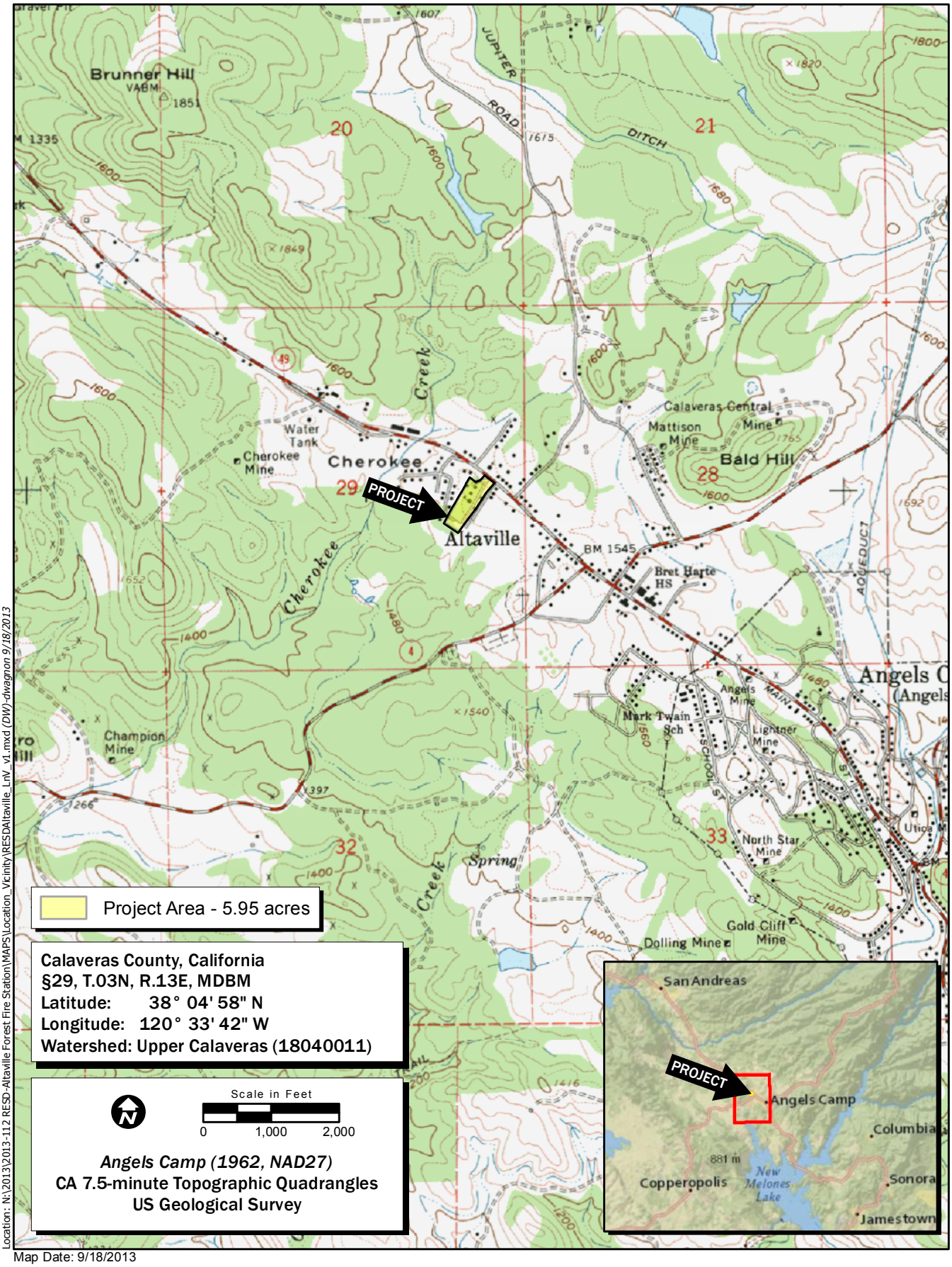

Location: N:\2013\2013-112 RESD-Altaville Forest Fire Station\MAPS\Location_Vicinity\RESDAltaville_LnV_v1.mxd (DW)-dwagnon 9/18/2013

Map Date: 9/18/2013
Service Layer Credits: National Geographic (ESRI)

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Project Location and Vicinity

2013-112 RESD-Altaville Forest Fire Station

Marin Meza

From: Patricia HOLROYD [pholroyd@berkeley.edu]
Sent: Friday, August 23, 2013 11:12 AM
To: Marin Meza
Cc: mark@berkeley.edu; Jeremy Adams
Subject: Re: Altaville Fire Station Auto Shop Record Search Request

Dear Marin,

I have conducted a search of the UCMP locality and specimen databases and find no prior records of vertebrate finds in or near the project area in Altaville.

Best wishes, Pat Holroyd

Patricia A. Holroyd, Ph.D.
Museum of Paleontology
1101 Valley Life Sciences Building
University of California, Berkeley, CA 94720
pholroyd@berkeley.edu

On Wed, Aug 21, 2013 at 4:26 PM, Marin Meza <MMeza@ecorpconsulting.com> wrote:

Dr. Holroyd,

Please find attached a record search request letter and accompanying map for the Altaville Fire Station Auto Shop in Calaveras County. If possible, please respond with an estimated date of when you will be returning results by email as the project is time sensitive.

Thank you,

Marin Meza

Wildlife Biologist

ECORP Consulting, Inc.

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2525 Warren Drive, Rocklin, CA 95677

Ph: 916.782.9100 ♦ Cell: 916.303.3934 ♦ Fax: 916.782.9134

mmeza@ecorpconsulting.com ♦ www.ecorpconsulting.com

APPENDIX E

Noise Assessment

Project:
Altaville Forest Fire Station Auto Shop Replacement Project
Noise Assessment

City of Angels Camp, CA
January 22, 2014

Job # 2013-170

Lead Agency:

Prepared for:

Attn: Chris Stabenfeldt

Prepared by:

j.c. brennan & associates, Inc.

Luke Saxelby, INCE Bd. Cert.
Board Certified, Institute of Noise Control Engineering

1287 High Street, Auburn, California 95603 * 530-823-0960 (p) * (530)823-0961 (f)

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Appendix B – Roadway Construction Model Inputs/Results
Appendix C – Wash Rack Noise Barrier Inputs and Results

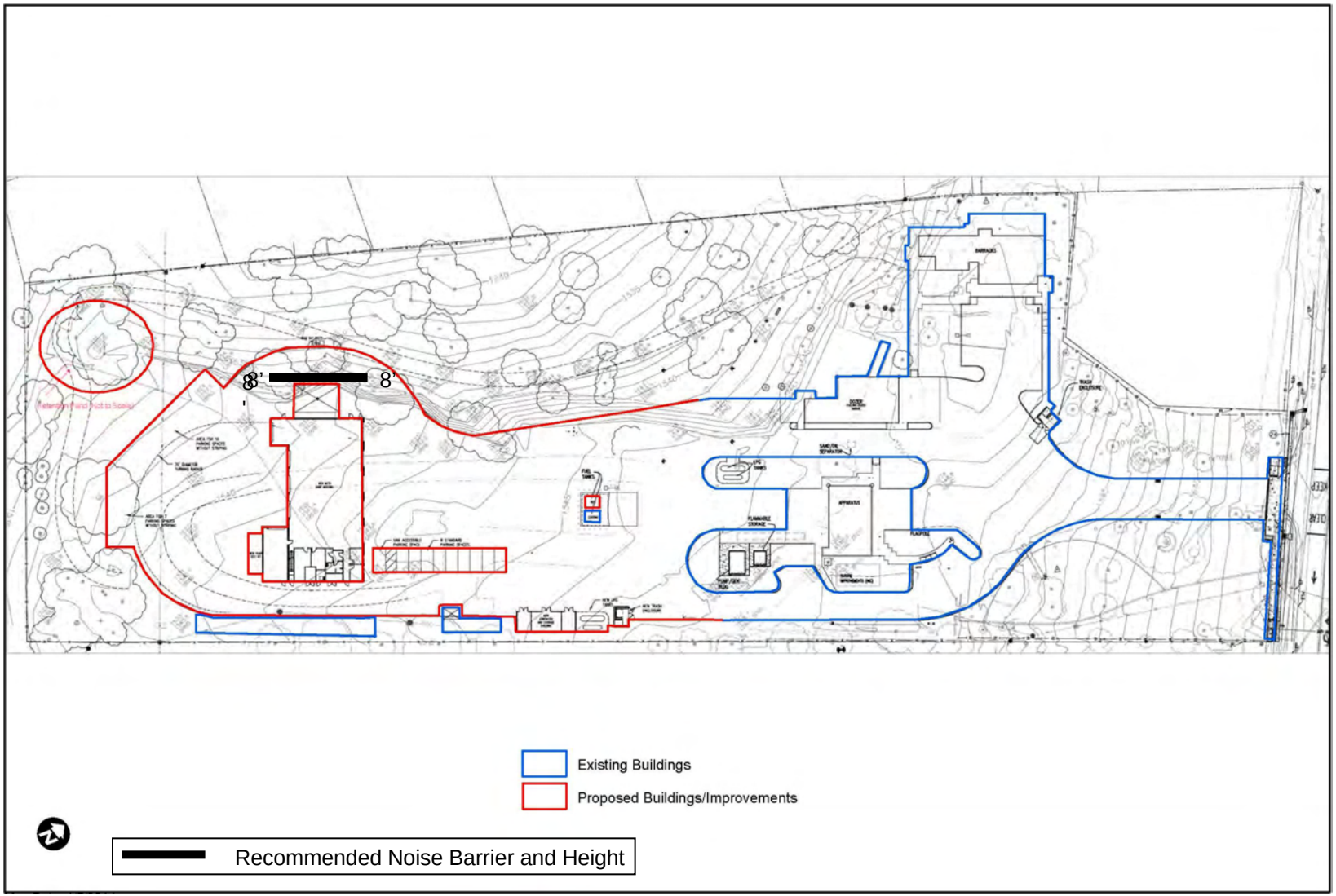
INTRODUCTION

The Proposed Project is located in the City of Angels Camp, California. The Project consists of a new five-bay auto shop at the Altaville FFS to replace the existing facility at the San Andreas FFS. The Project site covers approximately 1.84 acres and is located within the 5.95 acres owned by CAL FIRE. The new auto shop facility would consist of new single-story buildings that would include an Auto Shop/Welding Shop with a vehicle wash bay and a Generator/Flammable Storage building. In general, the Proposed Project would consist of the following site improvements:

- Retaining walls
- Grading and paving
- Utilities extension and fiber optic utility extension
- Landscaping and irrigation
- Site exterior lighting
- 6-foot chain-link fence at the Project site boundary on the south, west, and east.
- Pump test pit
- Trash enclosure
- Retention pond.

The purpose of this study is to examine the potential noise impacts associated with the Project at any existing noise-sensitive uses in the project vicinity. Figure 1 shows the project site plan.

Figure 1
Altavile Calfire Station Auto Shop Project – City of Angels Camp, California
Project Site Plan



j.c. brennan & associates
consultants in acoustics

Environmental Setting

Noise Background

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective. Often, someone's music is described as noise by another.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dBA. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dBA, and changes in levels (dBA) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels.

There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but may be expressed as dBA, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dBA apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. Table 1 lists several examples of maximum noise levels associated with common noise sources.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

Table 1 Typical Noise Levels		
Common Outdoor Activities	**Noise Level (dBA)**	**Common Indoor Activities**
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing
Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. November 2009.		

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dBA per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

A complete listing of acoustical terminology is provided in Appendix A.

Existing Noise Environment in Project Vicinity

The existing noise environment in the vicinity of the proposed new auto shop can be described as a rural area with relatively low ambient noise levels. The primary noise source in the vicinity of the proposed project is roadway traffic on S.R. 49, and activities associated with the CVS Drug Store. Those noise sources would include loading dock, parking lot activities and general site maintenance.

Existing Ambient Noise Levels

To quantify the existing ambient noise environment in the project vicinity a continuous noise level measurement was conducted on the project site on October 17-18, 2013. The noise measurement locations are shown on Figure 2. The noise level measurement survey results are provided in Table 2.

The sound level meter was programmed to collect hourly noise level intervals during the survey. The maximum value (L_{max}) represents the highest noise level measured during an interval. The average value (L_{eq}) represents the energy average of all of the noise measured during an interval. The median value (L_{50}) represents the sound level exceeded 50 percent of the time during an interval.

A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used for the ambient noise level measurement survey. The meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

Figure 2
Altavile Calfire Station Auto Shop Project – City of Angels Camp, California
Project Site and Noise Measurement Locations

j.c. brennan & associates
consultants in acoustics

Table 2 Summary of Existing Background Noise Measurement Data								
			Average Measured Hourly Noise Levels, dB					
			Daytime (7am-10pm)			Nighttime (10pm-7am)		
Site	**Location**	**CNEL**	L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
Continuous (24-hour) Noise Level Measurements								
LT-1	Southwest corner of project site. At single-family residential	49.3	44.4	41.6	62.9	41.5	37.5	55.0
Source: j.c. brennan & associates, Inc., 2014.								

REGULATORY FRAMEWORK

Federal

There are no federal regulations related to noise that apply to the Proposed Project.

State

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise levels in excess of local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels.

City of Angels Camp General Plan Noise Element

The Goals and Policies of the Angels Camp General Plan Noise Element establish criteria for new commercial or industrial development. The following are the goals and policies from the Noise Element which are relevant to the proposed project:

Goal 5.A Maintain or reduce noise levels throughout the city as necessary to achieve compatibility between differing land uses and to maintain the city's peaceful, rural community atmosphere.

Policies

5.A.1 Develop uniform, cost-effective and feasible standards for consistently and fairly mitigating temporary and permanent noise impacts associated with new development .

5.A.2 Continue to identify and implement solutions for resolving noise complaints received within Angels Camp.

5.A.3 Separate noise-generating and noise-sensitive land uses to maximum extent feasible.

5.A.4 Support alternative transportation routes, alternative transportation methods and other special programs aimed at reducing excessive noise levels.

Implementation Programs

5.A.a **Adopt Exterior Ambient Community Noise Exposure Levels (CNEL) for New Non-Residential Development.**

Adopt the following exterior ambient community noise exposure levels (CNELs) for application to new, non-residential development shall not exceed "normally acceptable" noise levels as defined in the following table, **Figure 5-1:**

Note to Figure 5-1: Where the location of an outdoor activity area is unknown, the exterior noise level standard shall be applied to the property line of the receiving land uses. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor of the noise barriers or the property line mitigation measure.

Determination of a Significant Increase in Noise Levels

California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it "increases substantially the ambient noise levels for adjoining areas".

Table 3 is based upon recommendations made in August 1992 by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been asserted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn}.

Based upon the Table 3 criteria, an increase in the traffic noise level of 1.5 dB or more would be significant where the ambient noise level exceeds 65 dB L_{dn}. The rationale for the Table 3 criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause significant annoyance.

Table 3
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, L_{dn} /CNEL	Increase Required for Significant Impact
<60 dBA	+5.0 dB or more
60-65 dBA	+3.0 dB or more
>65 dBA	+1.5 dB or more
Source: FICON, August 1992.	

Vibration Standards

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The City of Angels Camp does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities and railroad operations are addressed as potential noise impacts associated with project implementation.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 4 indicates that the threshold for damage to structures ranges from 2 to 6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

Table 4 Effects of Vibration on People and Buildings			
Peak Particle Velocity		**Human Reaction**	**Effect on Buildings**
in./sec.	**mm/sec.**		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.
Source: Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601 February 20, 2002.			

Figure 5-1 : Exterior Community Noise Exposure Levels- L_{dn} or CNEL, (in Decibels, dB)

Decibels	55	60	65	70	75	80
Land Use Category						
Residential low-density, single-family, duplex, mobile homes	Normally Acceptable					
		Conditionally Acceptable				
				Normally Unacceptable		
					Clearly Unacceptable	
Residential multi-family	Normally Acceptable					
			Conditionally Acceptable			
				Normally Unacceptable		
					Clearly Unacceptable	
Transient lodging, motels, hotels	Normally Acceptable					
			Conditionally Acceptable			
				Normally Unacceptable		
						Clearly Unacceptable
Schools, libraries, churches, hospitals, nursing homes	Normally Acceptable					
			Conditionally Acceptable			
				Normally Unacceptable		
						Clearly Unacceptable
Auditoriums, concert halls, amphitheaters (during use)						
	Conditionally Acceptable					
			Clearly Unacceptable			
Sports arena, outdoor spectator sports (during use)						
	Conditionally Acceptable					
				Clearly Unacceptable		
Playgrounds, neighborhood parks	Normally Acceptable					
				Normally Unacceptable		
					Clearly Unacceptable	
Golf courses, riding stables, water recreation, cemeteries	Normally Acceptable					
				Normally Unacceptable		
						Clearly Unacceptable
Office buildings, business, commercial and professional	Normally Acceptable					
				Conditionally Acceptable		
					Normally Unacceptable	
Industrial, manufacturing, utilities, agriculture	Normally Acceptable					
				Conditionally Acceptable		
					Normally Unacceptable	

Angels Camp 2020 General Plan **Noise Element** **V-12**

Figure 5-1 Key:

Normally Acceptable:
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any noise requirements.

Conditionally Acceptable:
New construction or development should be undertaken only after detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional Construction, but closed windows and fresh air supply or air conditioning will normally suffice.

Normally Unacceptable:
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable:
New construction or development should generally not be undertaken.

5.A.b **Continue to Enforce State Noise Insulation Standards and Uniform Building Code Standards for Interior Noise Levels**

Continue to enforce the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC) establishing interior noise exposure for multi-family housing, hotels and motels.

5.A.c **Continue to require Noise-Insulating Construction in the 60 CNEL Contour**

Continue to require noise-insulating construction for single-family and multi-family dwellings, hotels and motels located within the 60 CNEL contours (as indicated in *2020 General Plan* **Appendix 5A**, as may be updated), in order to reduce interior noise levels to 45 CNEL

Angels Camp Nuisance Ordinance

Angels Camp does not have a specific Noise Ordinance. However, the following section could apply to noise disturbances.

8.24.11 - Annoying, offensive or injurious things.

Every act or thing which necessarily and naturally produces annoyance, offense or injury to the public is a nuisance. (Ord. 12 §1(11), 1912)

Standards of Significance

CEQA Guidelines define a significant adverse impact on the environment as an impact that would:

a. Exposure of persons to or generation of noise levels in excess of standards established in the City of Angels Camp General Plan. Specifically, exterior noise levels exceeding 60 dB CNEL.

` b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels. Specifically, a threshold of 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage and human annoyance.

b. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, as defined by the FICON criteria contained in Table 3.

c. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, as defined by the FICON criteria contained in Table 3.

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

e. For a project within the vicinity of a private airstrip, where the project would expose people residing or working in the project area to excessive noise levels.

The proposed project is not located within two miles of an airport. Therefore, aircraft noise is not examined further in this report.

PROJECT IMPACT NOISE ASSESSMENT

Construction Noise

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in Table 5, ranging from 78 to 85 dBA at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

Table 5
Construction Equipment Noise

Type of Equipment	Maximum Level, dBA at 50 feet
Backhoe	78
Compactor	83
Compactor	80
Dozer	82
Dump Truck	76
Excavator	81
Paver	85
Grader	85
Roller	80
Trencher	81

Source: *Roadway Construction Noise Model User's Guide*. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

As a means of determining the construction noise impacts for each phase of the project, j.c. brennan & associates, Inc. used the Federal Highway Administration Construction Noise Model (RCNM). The model has typical maximum noise levels associated with individual pieces of construction equipment. It also has typical use factors to determine the hourly average (L_{eq}) noise levels associated with each individual piece of equipment.

Table 6 shows the list of equipment which is expected to operate during the construction. This assumption was provided in the Draft Initial Study and Mitigated Negative Declaration for the project. Project construction is estimated to begin February 2014 and last approximately 14 months.

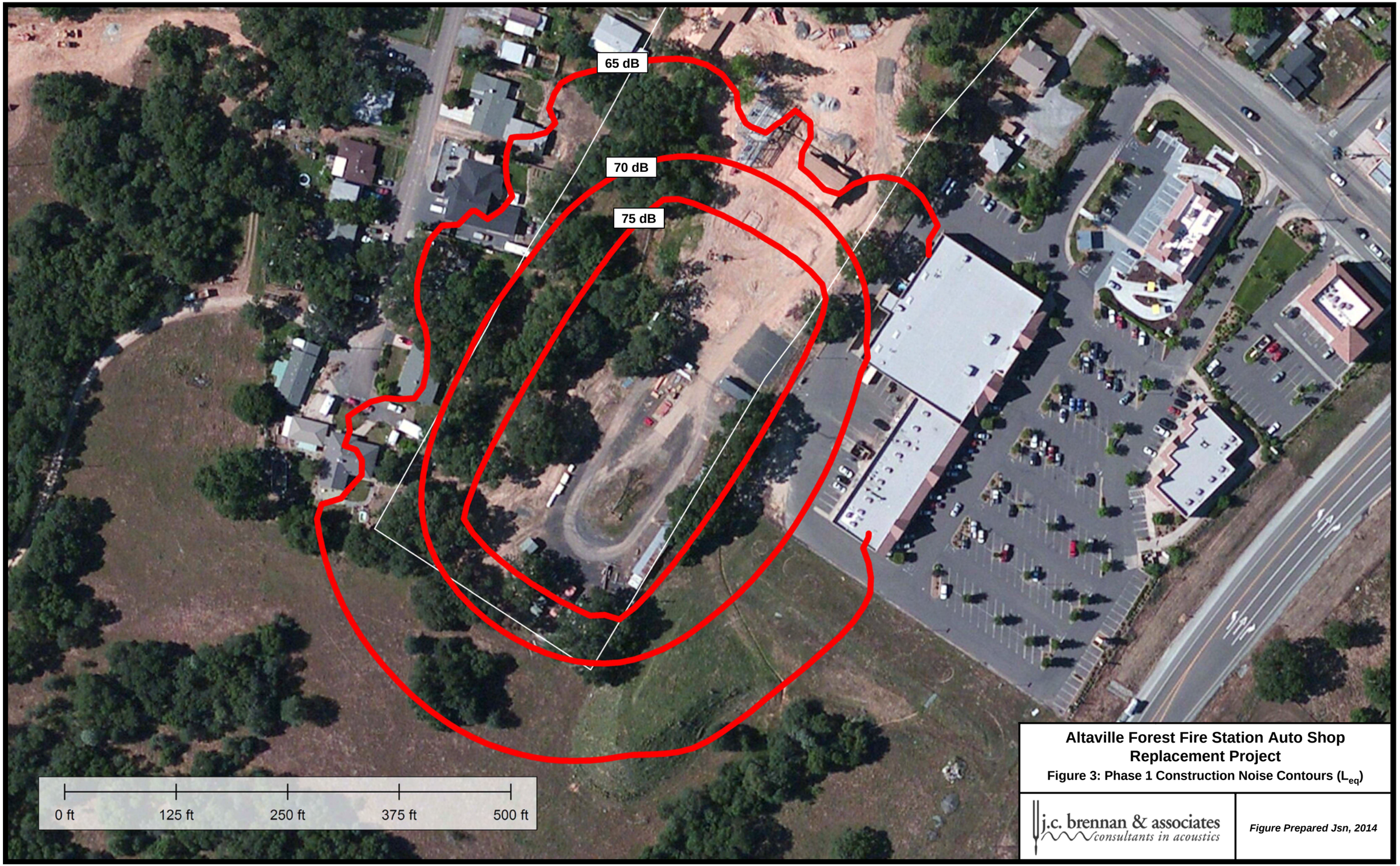
Table 6
Construction Equipment List

Phase	Equipment List
Phase 1 - Site Preparation / Grading Phase	Excavators (1) Back hoes (2) Riding compactors (2) Hand held portable compactors (2) Grader (1) Dump truck (1) Water truck (1)
Phase 2 - Construction of Structures	15-foot lifts (2) 20-ton crane (1) Fork lift (1) Water truck (1)

Based upon the results of the RCNM analysis, the predicted overall noise levels are shown in Table 7. The construction noise levels represent the noisiest construction periods. Appendix B provides the inputs and results for the RCNM model.

Table 7 Predicted Construction Noise Levels(Worst Case Period)		
Phase	**Equipment List**	**Estimated Hourly Sound Levels @ 50 feet L_{eq} / L_{max} (dBA)**
Site Preparation / Grading Phase	Excavators (1) Back hoes (2) Riding compactors (2) Hand held portable compactors (2) Grader (1) Dump truck (1) Water truck (1)	**Total: 86.2 dBA L_{eq} - 85.0 dBA L_{max}**
Construction of Structures Phase	15-foot lifts (2) 20-ton crane (1) Fork lift (1) Water truck (1)	**Total: 80. 6dBA L_{eq} – 77.1 dBA L_{max}**
Source: Federal Highway Roadway Construction Model (RCNM), j.c. brennan & associates, Inc. - 2014		

Figures 3 and 4 show the construction noise contours for Phase 1 and Phase 2, respectively. The construction noise contours were developed using the CadnaA noise prediction model with direct inputs from the FHWA Construction Noise Model. The CadnaA model can develop noise contours while accounting topography, intervening buildings, multiple noise sources and ground type.



Altaville Forest Fire Station Auto Shop Replacement Project

Figure 3: Phase 1 Construction Noise Contours (L_{eq})

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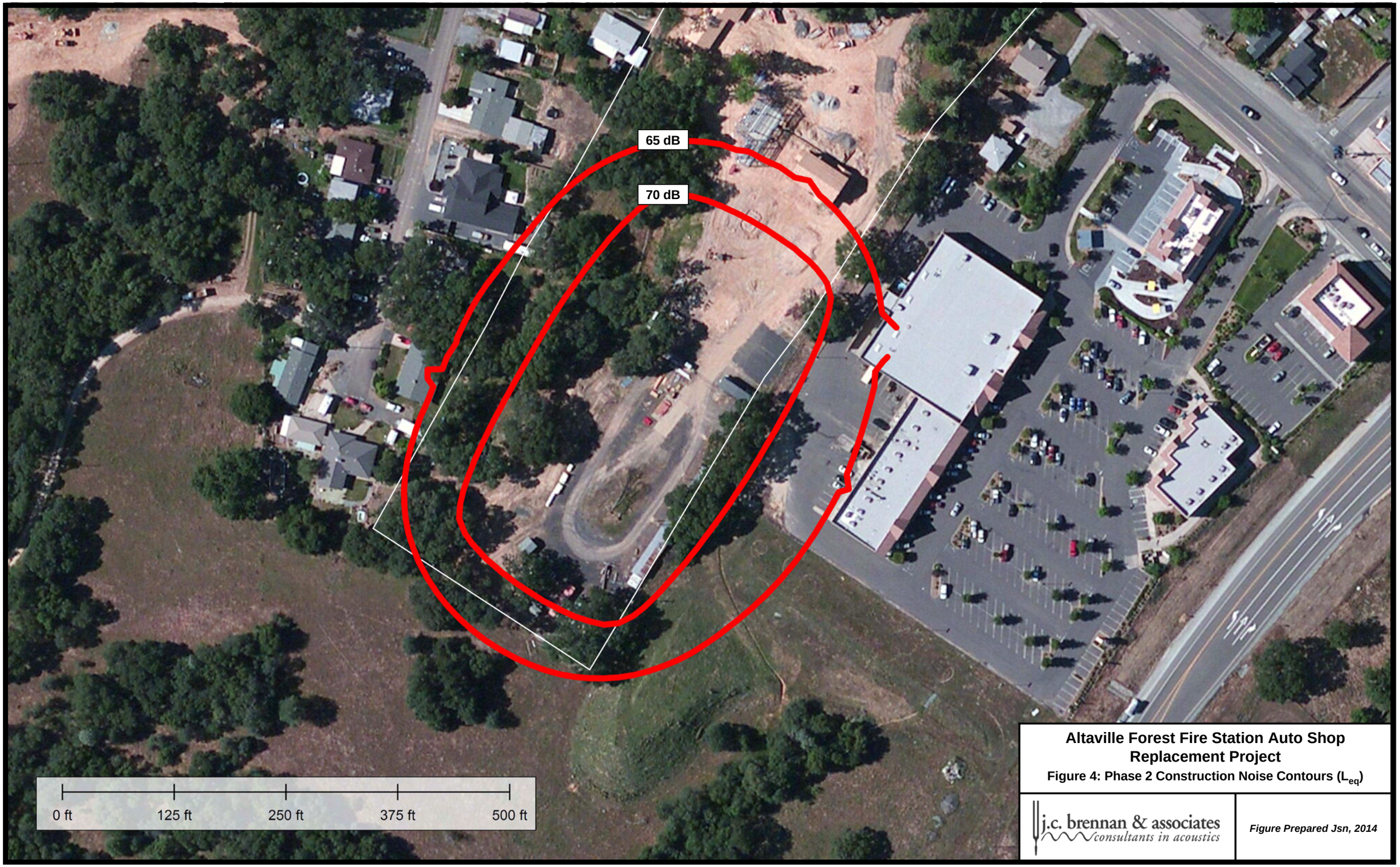
Figure Prepared Jsn, 2014



Altaville Forest Fire Station Auto Shop Replacement Project

Figure 4: Phase 2 Construction Noise Contours (L_{eq})

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Figure Prepared Jsn, 2014

The City of Angels Camp nuisance ordinance prohibits "every act or thing which necessarily and naturally produces annoyance, offense or injury to the public." Based upon the noise contours shown on Figures 3 and 4, construction of the proposed project may generate exterior noise levels exceeding 65 dBA Leq. Based upon a typical construction work schedule of 7:00 a.m. to 5:00 p.m., the CNEL for construction activity would be approximately 3 dB less, or 62 dB CNEL. This would exceed the City's 60 dB CNEL exterior noise level standard. However, daytime construction activity is typically exempt from local regulation. However, based on the existing low ambient noise measured at the adjacent residential uses, construction noise control measures should be implemented in order to reduce the potential for annoyance to sensitive receptors. The following construction noise reduction measures are recommended:

1. Limit construction to between the hours of 8:00 a.m. and 8:00 p.m. on weekdays;

2. Allow exceptions to the specified construction hours only for construction emergencies and when requested by the Department of Public Works and approved by the City Planning Department;

3. During construction, temporary sound barriers should be considered which shields homes from direct line of sight to equipment.

Construction Vibration Levels

Table 8 shows the typical vibration levels produced by various pieces of construction equipment.

Table 8
Typical Construction Equipment Vibration Levels

Type of Equipment	Peak Particle Velocity @ 25 feet (inches/second)	Peak Particle Velocity @ 50 feet (inches/second)	Peak Particle Velocity @ 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210	0.074	0.026

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006

The Table 8 data indicate that construction vibration levels anticipated for the project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. Implementation of the proposed project would have a less than significant impact.

Auto Shop and Operations Noise Levels

Typical noise sources associated with the new auto shop will include pneumatic air wrenches, compressors, impact tools, grinders, and panel cutters. As a means of evaluating noise levels associated with the new auto shop, j.c. brennan & associates, Inc. utilized noise measurement data collected at an existing auto shop in Grass Valley, California. The noise measurements were conducted at a distance of 20 feet from the bays.

Noise levels for the wash rack were collected at an auto shop in Sacramento, California and included the use of a high pressure spray rig. The noise level measurements were conducted at a distance of 75 feet.

The center of the proposed auto shop bays would be located approximately 180 feet from the nearest residential property line to the north. The center of the proposed wash rack would be located approximately 110 feet from the nearest residential property line to the north The predicted auto shop and wash rack noise levels are shown in Table 9, accounting for the increased distances to the adjacent residential property line.

Table 9
Predicted Auto Shop and Wash Rack Noise Levels

Equipment	Measured Noise Level	Predicted Maximum Noise Level at Property Line	Typical Hourly Use	Predicted L_{eq} at the Property Line
Compressor	53 dBA at 20'	34 dBA L_{max}	5 minutes	23 dBA L_{eq}
Impact Tools	54 dBA at 20'	35 dBA L_{max}	10 minutes	27 dBA L_{eq}
Panel Cutter	62 dBA at 20'	43 dBA L_{max}	5 - 10 minutes	35 dBA L_{eq}
Grinder	55 dBA at 20'	36 dBA L_{max}	5 - 10 minutes	28 dBA L_{eq}
Wash Rack	70 dBA L_{max} at 75' 62 dB L_{eq} at 75'	67 dBA L_{max}	30-60 minutes	59 dBA L_{eq}
			Cumulative Hourly L_{eq}	**59 dBA L_{eq}**

Source: j.c. brennan & associates, Inc. 2014

Based upon the Table 9 data, project-related noise levels are predicted to be 59 dBA L_{eq} at the nearest residential property line. The City of Angels Camp establishes a CNEL noise level standard of 60 dB for noise-sensitive uses. In order to calculate the project-related CNEL noise level, the proposed hours of operation for the project must be accounted for with nighttime and evening penalties applied for activities occurring during these hours. Table 10 shows the predicted CNEL noise levels for the proposed project.

Table 10 Predicted CNEL Noise Levels at the Nearest Property Line					
Equipment	**Predicted L_{eq} at the Property Line**	**# of Daytime Hours**	**# Evening Hours**	**# Nighttime Hours**	**Predicted CNEL**
Typical Operations (8 am to 5 pm daily)					
Compressor	23 dBA L_{eq}	8	0	0	18.5
Impact Tools	27 dBA L_{eq}	8	0	0	22.3
Panel Cutter	35 dBA L_{eq}	8	0	0	30.2
Grinder	28 dBA L_{eq}	8	0	0	23.3
Wash Bay	59 dBA L_{eq}	4	0	0	54.2
				CNEL:	**54.2 dB**
24-hour Operations					
Compressor	23 dBA L_{eq}	**12**	**3**	**9**	29.7
Impact Tools	27 dBA L_{eq}	**12**	**3**	**9**	33.7
Panel Cutter	35 dBA L_{eq}	**12**	**3**	**9**	41.7
Grinder	28 dBA L_{eq}	**12**	**3**	**9**	34.7
Wash Bay	59 dBA L_{eq}	**6**	**1**	**4**	62.1
				CNEL:	**62.1 dB**
Source: j.c. brennan & associates, Inc. 2014					

Based upon the Table 10 data, typical project operations are predicted to generate exterior noise levels of 54.2 dB CNEL at the nearest residential property line. This level would comply with the City of Angels Camp exterior noise level standard of 60 dB CNEL. Based upon the existing measured ambient noise level of 49.3 dB CNEL, the project would result in an increased ambient noise level of 4.9 dB CNEL. This would comply with the FICON substantial increase criteria of 5 dB where existing ambient noise levels are less than 60 dB, as described in Table 3.

Based upon the Table 10 data, 24-hour operations are predicted to cause an exceedance of the City of Angels Camp 60 dB CNEL exterior noise level standard. Additionally, the project-generated noise is predicted to cause an increase in ambient noise levels of 12.8 dB CNEL under the 24-hour operations scenario. This would also exceed the FICON criteria of 5 dB. Therefore, noise reduction measures should be considered to reduce this potential noise impact.

In order to reduce project-related noise levels at the nearest residential property line, a noise barrier analysis was conducted. Because the proposed wash rack is predicted to be the primary noise source associated with the project, the noise barrier performance was evaluated for the wash rack noise source only. The results of the noise barrier analysis indicate that a noise

barrier 8-feet in height would reduce wash rack noise levels by approximately 8.6 dB. Table 11 shows the resulting CNEL noise levels with construction of an 8-foot tall noise barrier adjacent to the wash rack. The recommended location of the noise barrier is shown on Figure 1. Appendix C shows the results of the complete results of the noise barrier analysis.

Table 11
Predicted CNEL Noise Levels with 8' Tall Wash Rack Barrier

Equipment	Predicted L_{eq} at the Property Line	# of Daytime Hours	# Evening Hours	# Nighttime Hours	Predicted CNEL
Typical Operations (8 am to 5 pm daily)					
Compressor	23 dBA L_{eq}	8	0	0	18.5
Impact Tools	27 dBA L_{eq}	8	0	0	22.3
Panel Cutter	35 dBA L_{eq}	8	0	0	30.2
Grinder	28 dBA L_{eq}	8	0	0	23.3
Wash Bay	59 dBA Leq – 8 dB (51 dBA L_{eq})	4	0	0	46.2
				CNEL:	**46.2 dB**
24-hour Operations					
Compressor	23 dBA L_{eq}	**12**	**3**	**9**	29.7
Impact Tools	27 dBA L_{eq}	**12**	**3**	**9**	33.7
Panel Cutter	35 dBA L_{eq}	**12**	**3**	**9**	41.7
Grinder	28 dBA L_{eq}	**12**	**3**	**9**	34.7
Wash Bay	59 dBA Leq – 8 dB (51 dBA L_{eq})	**6**	**1**	**4**	54.1
				CNEL:	**54.1 dB**
Source: j.c. brennan & associates, Inc. 2014					

Based upon the Table 11 data, use of an 8-foot tall noise barrier adjacent to the proposed wash rack would reduce project-related noise levels to less than 60 dB CNEL for typical operations and 24-hour operations. Additionally, the increases in ambient noise levels would be less than 5 dB for either operating scenarios. Therefore, no additional noise control measures would be required.

Traffic Noise Levels

The proposed project will not contribute to a substantial increase in traffic noise levels on the adjacent project roadways. Highway 49 at the project site carries approximately 8,200 vehicles per day (Caltrans ADT Traffic Volumes Book, 2012). The project would have to contribute more than 3,000 vehicles per day to cause an increase of 1.5 dB in traffic noise from Highway 49. The project's contribution to traffic on Highway 49 would be substantially less than 3,000 vehicles per day. Therefore, the proposed project is not predicted to substantially increase traffic noise levels.

NOISE REDUCTION MEASURES

Noise reduction measures should be included in the project. The following noise reduction measures are recommended for the proposed project:

1. Limit construction to between the hours of 8:00 a.m. and 8:00 p.m. on weekdays;

2. Allow exceptions to the specified construction hours only for construction emergencies and when requested by the Department of Public Works and approved by the County Planning Department;

3. During construction, temporary sound barriers should be considered which shields homes from direct line of sight to equipment. Temporary sound barriers can be erected on scaffolding or angle iron framing.

4. An 8-foot tall noise barrier should be constructed to shield the vehicle wash rack. Figure 1 shows the recommend noise barrier location. The noise barrier should be constructed of a masonry type material, such as CMU block or concrete panels. Wood is not recommended for use as a noise barrier material.

Appendix A
Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
$L_{(n)}$	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50% of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the “Maximum” level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is s rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

Appendix B

Roadway Construction Noise Model Inputs and Results

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consultants in acoustics

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 1/22/2014
Case Desc Phase 1

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
General	Residential	45	45	45

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	50	0
Backhoe	No	40		77.6	50	0
Backhoe	No	40		77.6	50	0
Compactor (ground)	No	20		83.2	50	0
Compactor (ground)	No	20		83.2	50	0
Compactor (ground)	No	20		83.2	50	0
Compactor (ground)	No	20		83.2	50	0
Grader	No	40	85		50	0
Dump Truck	No	40		76.5	50	0
Flat Bed Truck	No	40		74.3	50	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85	81	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flat Bed Truck	74.3	70.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	**85.0**	**86.2**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 1/22/2014
Case Desc Phase 2 - Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
General	Residential	45	45	45

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Man Lift	No	20		74.7	50	0
Man Lift	No	20		74.7	50	0
Crane	No	16		80.6	50	0
Flat Bed Truck	No	40		74.3	50	0
Flat Bed Truck	No	40		74.3	50	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flat Bed Truck	74.3	70.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flat Bed Truck	74.3	70.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.6	77.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Appendix C

Barrier Insertion Loss Calculation

Project Information:

Job Number: 2013-170
Project Name: Altaville Cal Fire
Location(s): 1

Noise Level Data:

Source Description: Wash Rack
Source Noise Level, dBA: 62
Source Frequency (Hz): 1000
Source Height (ft): 1543

Site Geometry:

Receiver Description: Nearest Backyard
Source to Barrier Distance (C_1): 40
Barrier to Receiver Distance (C_2): 140

Pad/Ground Elevation at Receiver: 1532
Receiver Elevation[1]: 1537
Base of Barrier Elevation: 1538
Starting Barrier Height 8

Barrier Effectiveness:

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
1546	8	-8.6	53.5	Yes
1547	9	-9.7	52.4	Yes
1548	10	-10.5	51.6	Yes
1549	11	-11.3	50.8	Yes
1550	12	-12.1	50.0	Yes
1551	13	-12.9	49.2	Yes
1552	14	-13.6	48.5	Yes
1553	15	-14.2	47.9	Yes
1554	16	-14.6	47.5	Yes
1555	17	-15.3	46.8	Yes
1556	18	-15.3	46.8	Yes

Notes: 1.Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)

j.c. brennan & associates
consultants in acoustics

APPENDIX F

Traffic Assessment

KD Anderson & Associates, Inc.
Transportation Engineers

January 20, 2014

Mr. Chris Stabenfeldt, Senior Environmental Planner / Project Manager
ECORP CONSULTING, INC.
2525 Warren Drive
Rocklin, CA 95677

RE: TRAFFIC ASSESSMENT FOR RESD CDF ALTAVILLE FOREST FIRE STATION AUTO SHOP RELOCATION PROJECT, ANGELS CAMP, CA

Dear Mr. Stabenfeldt:

This letter summarizes our focused traffic impact assessment for the CDF Altaville Forest Fire Station (FFS) Auto Shop Relocation Project (#2013-112).

Overview. The San Andreas and Altaville FFS's are serviced by the auto shop located in the community of San Andreas. A new auto shop will be constructed at the Altaville FFS which is located on a 6 acre site immediately adjacent to Main Street - State Route 49 (SR 49) towards the northern end of the Calaveras County City of Angels Camp. The project will make use of the existing FFS access on SR 49.

Project Characteristics

The characteristics of the project have been identified in terms of activities associated with construction and with regular operation.

The project will be constructed over a fourteen month period, with an anticipated completion date of April 2017. 10 to 20 construction employees are expected on the site at various times. Typical construction equipment associated with the building trades would be transported to the site at various times depending on the nature of construction occurring at any time. On a daily basis, construction could generate 20 to 40 vehicle trips per day, with most of that activity concentrated into the beginning and ending of the work day.

Traffic to and from the site would also occur on a regular basis when the project is in operation, and the amount of traffic will vary seasonally. Day to day operations would include an average of eight employees on-site. The project would operate Sunday through Saturday between the hours of 8:00 a.m. and 5:00 p.m. During the winter off-season the project would service 5 to 10 vehicles weekly. During the peak fire season, one or two vehicles could be serviced daily. In an emergency situation the facility could be open 24-hrs with 15 to 20 employees on site. Thus the regular daily trip generation could range from 20 to 30 daily trips (1/2 inbound, 1/2 outbound),

and most of this activity would be concentrated into typical morning and evening commute hours.

The directional distribution of the trips associated with the project will reflect the project's location in the Tuolumne- Calaveras Unit of CAL FIRE's Southern Region. The Altaville FFS covers an Initial Response Area (IRA), which includes the rural communities of Arnold, Sonora, Murphy's and San Andreas. As a result, most of the project's trips will be oriented to the north via SR 49 and southeast via SR 4.

The project will make use of the existing FFS access driveway on SR 49. The existing access is 30 feet wide and is roughly 720 feet north of the SR 49 / SR 4 intersection. SR 4 has been widened to its ultimate width along the FFS frontage.

Environmental Setting

Existing Roadway Network. The project would be constructed on the Altaville FFS site adjoining SR 49, and both regional and direct access to the site is provided by SR 49. SR 49 links the FFS with San Andreas to the north and with the downtown area of Angels Camp to the south. State Route 4 (SR 4) intersects SR 49 near the project site. SR 4 provides access to the mountain communities of Arnold and Murphys, and the SR 4 bypass links the site with SR 49 south of Angels Camp.

Main Street - State Route 49 (SR 49). State Route 49 is the primary north-south route in Calaveras County, and SR 49 links the county to Amador, El Dorado, and Placer Counties to the north and Tuolumne, Mariposa, and Madera Counties to the south. SR 49 is part of the Inter-regional Roadway System. In the vicinity of the proposed project North Main Street (SR 49) is designated an Arterial in the Angels Camp General Plan and is a two lane conventional highway with auxiliary two-way left turn lanes or left turn lanes at major intersections. The flow of traffic on SR 49 through Angels Camp is generally governed by the operation of signalized intersections, and the SR 49 / SR 4 (North) and SR 49 / Murphys Grade Road / Demarest Street intersections are the two currently signalized locations in Angels Camp.

The posted speed limit on SR 49 is 45 mph at the Angels Camp city limits north of the project site. The speed limit drops to 35 mph on North Main Street at Angels Food Market, and that limit remains through the SR 4 intersection. The 35 mph also exists on South Main Street, although there is a 25 mph school zone posted on South Main Street in the area of Twain Harte High School.

Caltrans provides *Annual Average Daily Traffic* (AADT) counts for SR 49, and the most recent daily traffic volumes on SR 49 are 14,000 AADT south of Murphys Grade Road and 15,900 AADT north of the Murphys Grade Road intersection (2011). The volume drops to 9,600 AADT

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approaching the SR 4 (North) intersection and to 8,200 AADT through the Altaville FFS access. Caltrans data indicates that trucks comprise 9% of the daily traffic on SR 49 in the study area.

The *SR 49 Transportation Concept Report (TCR) June 2010* is a general guide to the long range plan for improving the state highway. The TCR notes that the ultimate concept for SR 49 north of SR 4 is a four lane conventional highway or creation of a new facility on one of the alternative alignments noted in the Calaveras County Regional Transportation Plan (RTP) or the City of Angels General Plan.

State Route 4 (SR 4). State Route 4 is a primary east-west route across Calaveras County. SR 4 to the west connects Angels Camp with Copperopolis and Stockton. To the east, SR 4 extends to the Calaveras County communities of Arnold and Murphys and ultimately Alpine County. SR 4 is a two lane facility with limited access near its intersection with SR 49. Auxiliary left turn lanes are provided at intersections. The speed limit on SR 4 is posted at 45 mph east and west of SR 49.

Because the SR 4 Bypass opened recently, Caltrans has not yet published daily traffic volume data for SR 4 in the area near SR 49. Based on the peak hour volumes observed for a recent traffic study the daily volume is estimated to be roughly 4,000 vehicles per day west of SR 49 and 4,800 vehicles per day east of SR 49.

There are several intersections in the vicinity of the Altaville FFS site that affect the overall flow of traffic.

The **SR 49 / Altaville FFS driveway intersection** is a “tee” intersection without formal traffic control devices. There is a continuous Two Way Left Turn (TWLT) lane on SR 49 through the intersection. SR 49 has been widened to its planned ultimate width along the FFS frontage, and sidewalk has been constructed along the frontage as well. Sight distance in each direction meets minimum Caltrans standards for the posted speed limit.

The **SR 49 / Frog Jump Plaza North Access intersection** is roughly 250 feet south of the Altaville FFS driveway. The intersection is controlled by a stop sign on the shopping center approach to the intersection. A TWLT lane exists on SR 49 at this location, which allows exiting motorists to make “two-step” left turns onto northbound SR 49. There are no striped crosswalks on SR 49 at this location.

The **SR 49 / Dogtown Road / Frog Jump Plaza Access intersection** is located 450 feet from the Altaville FFS driveway. All turning movements are allowed onto and off of Dogtown Road, but the shopping center access is limited to right turns only. The TWLT lane on SR 49 begins at this intersection. There is a southbound right turn lane on SR 49 at the Frogtown Center access. There are no crosswalks at this intersection.

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The **SR 49 / SR 4 (north junction) intersection** is controlled by an actuated traffic signal. Each approach to the intersection features separate left turn, through and right turn lanes. Crosswalks are striped across the SR 4 approaches and across the southern SR 49 approach. The intersection accommodates the turning requirements of full-size trucks.

Traffic Impact Analysis Methodology. Quantitative Level of Service (LOS) analysis was performed for study area intersections based on the methodologies contained in the *2010 Highway Capacity Manual (2010 HCM)* published by the Transportation Research Board. LOS analysis is used to identify the relative delay experienced by motorists traveling on two lane rural highways. A grading scale of LOS "A" to LOS "F" is used to describe the quality of traffic flow, with LOS A representing uncongested operations and LOS F representing stop-and-go operation with appreciable congestion and delay.

Existing Traffic Operations. Information regarding current traffic operations has been obtained from a recent traffic impact analysis prepared for another project proposed in this area of Angels Camp[1].

Intersection Levels of Service. Traffic counts conducted in May 2013 are the basis for current Levels of Service calculations at study area intersections during the weekday a.m., afternoon and p.m. peak hours. As shown, the Levels of Service at the signalized SR 49 / SR 4 intersection is satisfactory during all peak periods (i.e., LOS C or better). While the overall Level of Service for un-signalized intersections on SR 49 may be acceptable, the Levels of Service for individual turning movements that yield the right of way can be poor during peak traffic hours. Motorists waiting to turn from the Dogtown Road intersection onto southbound SR 49 experience long delays that are indicative of LOS F in the p.m. peak hour. While no traffic volume information is available for the FFS driveway, based on the background traffic volume on SR 49 and presence of a continuous TWLT lane, motorists exiting the FFS would experience short delays that are indicative of LOS B or C conditions.

[1] Traffic Impact Analysis for the Mark Twain clinic on Dogtown Road, Angels Camp, CA, KDA, 9/9/2013.

TABLE 1
EXISTING CONDITIONS
PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS

Location	Control	AM Peak Hour		PM Peak Hour	
		LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)
SR 49 / Frog Jump Plaza					
(Overall Delay / LOS)	EB Stop	*(A)*	*(2.8)*	*(A)*	*(2.6)*
NB left turn from SR 49		A	8.5	A	9.2
EB left+right turn onto SR 49		C	15.3	C	19.8
SR 49 / Dogtown Rd / Frog Jump Plaza					
(Overall Delay / LOS)	EB/SB Stop	*(A)*	*(3.3)*	*(A)*	*(5.8)*
SB left turn from SR 49		A	9.1	A	9.9
EB right turn onto SR 49		B	11.0	B	13.1
WB left+right turn onto SR 49		D	29.5	**F**	**91.6**
SR 49 / SR 4	Signal	B	19.0	C	26.8
BOLD values exceed LOS D.					

Effects of Queuing on Access. The operation of the intersections on SR 49 is also affected by queuing on SR 49 that occasionally extends north from the SR 4 signal and blocks intersections. Observation of peak hour traffic indicated that the queue of southbound traffic backed up from the SR 4 signal through the Dogtown Road intersection and revealed that the queue of northbound left turns waiting to turn into the Frog Jump Plaza's northern driveway filled the TWLT lane between Dogtown Road and the shopping center access north of the McDonald's restaurant. The TWLT lane has room for five (5) vehicles before a sixth vehicle would block the Dogtown Road intersection, and there were four (4) instances over the two hour period when 5 or more vehicles were waiting to make northbound left turns.

The issue of Dogtown Road access to SR 49, as well as access to other properties, has been acknowledged by the City of Angels Camp and Caltrans for some time, and general concepts for improvements have been offered. Theoretically, a traffic signal could be installed, but the short distance between Dogtown Road and SR 4 is much less than the minimum distance typically required by Caltrans and makes this option undesirable. The Dogtown Road intersection could be limited to right-turns-only but alternatives for replacing left turn access to residents and business on Dogtown Road are limited. Southbound left turns at Dogtown Road could be prohibited and this traffic moved to a southbound to northbound u-turn at the SR 4 intersection. U-turns are currently prohibited at this intersection but may be feasible if the east side of SR 49 was widened within the Caltrans right of way in the area north of the existing curb return.

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Alternatives for southbound traffic leaving Dogtown Road are more problematic, since there is no readily available location for northbound-to-southbound u-turns at public road intersections on SR 49. The concept of creating a new route to another local street where left turn access on SR 49 could be permitted (i.e., Clifton Lane) has been discussed, but this option would require acquisition of private property.

Regulatory Background

Level of Service Policies. Local agencies adopt minimum Level of Service standards for their facilities. The City of Angels Camp General Plan policy 3A.e indicates that Local roads and Collector streets should operate at LOS C but that the intersection of Collector and Arterial streets are permitted to operate at LOS D.

The City may allow exceptions to these LOS standards subject to findings that improvements or other measures required to achieve the LOS standards established herein are unacceptable. In allowing an exception to the LOS standard, the city shall consider the following:

a. Number of hours per day that the intersection or roadway segment would operate at conditions worse than the adopted standard
b. The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations
c. Right-of-way needs versus the physical impacts on surrounding properties
d. Visual effects of the required improvement on the community's identify and character
e. Environmental impacts including air quality and noise impacts
f. Construction and right-of-way acquisition costs
g. Impacts on general safety
h. Impacts of the required construction phasing and traffic flows
i. Impacts on quality of life as perceived by residents
j. Geographical, environmental, social or economic factors
k. Ability to equitably fund needed improvements
l. Importance of proposed improvements in relation to other road needs given limited resources.

Exceptions to the standards will only be allowed after all reasonable measures and options are explored, including alternative forms of transportation.

General Plan policy 3.A.f expresses the City's intent to continue to support Caltrans goal of LOS C on IRRS roads and intersections. The policy acknowledges that Caltrans may consider LOS D on SR 49 and that the minimum Level of Service shall be no lower than LOS E.

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Project Impacts

The impacts of the proposed project have been assessed based on intersection Level of Service at key intersections.

Level of Service. The project may add 8 to 10 trips through the SR 49 access during typical commute hours. This represents roughly 1% increase from the current volume on SR 49 in this area. This volume would be too slight to have a measureable effect on current operating Levels of Service.

Future Cumulative Traffic Impacts

The Mark Twain Clinic traffic study identified available sources of information regarding future traffic volumes in the study area. The City of Angels Camp recently updated its General Plan and evaluated a revision to its Traffic Impact Fee Program (2009). As part of that process Year 2030 p.m. peak hour traffic forecasts were created for major intersections in Angels Camp. Review of the available forecasts indicates that appreciable traffic volume growth is projected on SR 49. The current p.m. peak hour volume on SR 49 north of SR 4 (i.e., 1,286 vph) is projected to reach 2,190 vph, or an increase of 70%.

On SR 4 the volume east of SR 49 is projected to increase from 465 vph to 650 vph in the year 2030, or 40% increase. The volume on Dogtown Road without the proposed project is forecast to increase from the current p.m. peak hour volume of 148 vph to 330 vph in the year 2030, or an increase of 120%.

The signalized SR 4 / SR 49 intersection is projected to operate with a Level of Service that satisfies the minimum LOS D standard. Thus, the project's cumulative impact to that intersection is not significant.

If background traffic on SR 49 increases as projected, it will be difficult to access properties along the highway. The SR 49 / Dogtown Road intersection is projected to operate at LOS F during peak hour peak hours, as is the SR 49 / Frog Jump Plaza North Access intersection. These deficiencies will likely occur regardless of whether the proposed Altaville FFS project proceeds or not.

The length of delays associated with exiting the Altaville FFS Site will become longer in the future, regardless of whether the proposed project is built or not. However, because the FFS generates much less traffic than occurs at other intersections, the Level of Service at this location will still satisfy the minimum LOS D standard.

While development of the proposed project does not by itself create the need for long term improvements, project traffic will incrementally contribute to the need for improvements that

KDA

have been identified in existing or pending plans and fee programs. In the long term a feasible access plan for SR 49 will need to be created by Caltrans and the City of Angels Camp which perpetuates access to local properties. The 2012 Calaveras County Regional Transportation Plan (RTP) suggests that the plan could involve creation of a new local street linking Dogtown Road with Clinton Avenue, although other options, roundabout intersections on SR 49, new traffic signals with u-turn capability, a new SR 49 alignment, etc. were identified.

Typically, the proponents of new development projects pay their fair share towards the cost of these regional improvements by paying adopted City of Angels Camp Traffic Impact Mitigation (TIM) fees. The current fee is roughly $274 per daily trip, which if applied to the project's 30 daily trip estimate would be $8,220. By paying adopted fees the project's cumulative impact would be mitigated to a less than significant level.

Please feel free to contact me at (916) 660-1555 if you have any questions.

Sincerely yours,

KD Anderson & Associates, Inc.

Kenneth D. Anderson, P.E.
President

Attachments: Vicinity Map, Site Plan

ECORP CDF Altaville Auto Shop Relocation.ltr

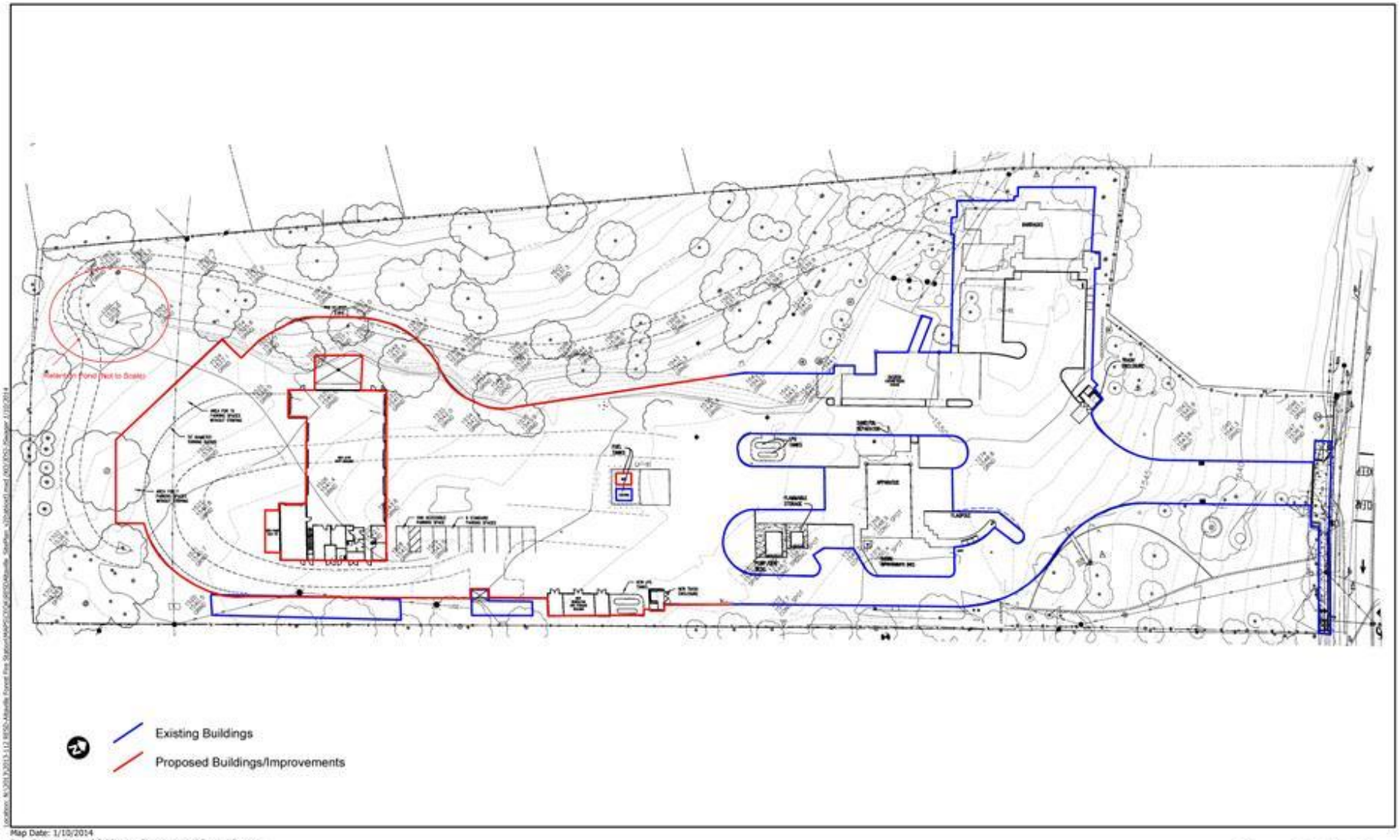
KDA

VICINITY MAP

KD Anderson & Associates, Inc.
Transportation Engineers

2610-08 LT 1/20/2014

figure 1



Map Date: 1/10/2014
Base Source: State of California - Department of General Services

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 3. Site Plan

2013-112 RESD Altaville Forest Fire Station

KD Anderson & Associates, Inc.
Transportation Engineers

SITE PLAN

2610-08 LT 1/20/2014

figure 2

APPENDIX G

Phase I Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT
ALTAVILLE FOREST FIRE STATION
125 NORTH MAIN STREET
ANGELS CAMP, CALIFORNIA 95221

PREPARED FOR:
California Department of General Services
RESD/Project Management Branch
707 Third Street, 3rd Floor
West Sacramento, CA 95605

PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612

January 6, 2014
Project No. 402242001

January 6, 2014
Project No. 402242001

To: Mr. Anthony Brown, MBA, PMP, CCM
Project Manager
RESD/Project Management Branch
California Department of General Services
707 Third Street, 3rd Floor
West Sacramento, California 95605

Subject: Phase I Environmental Site Assessment
Altaville Forest Fire Station
125 North Main Street
Angels Camp, California 95221

Dear Mr. Brown:

In accordance with our proposal, dated July 17, 2013, Ninyo & Moore has prepared this Phase I Environmental Site Assessment of the above-referenced site. The attached report presents our methodology, findings, opinions, and conclusions regarding the environmental conditions at the site. We appreciate the opportunity to be of service to you on this project.

Sincerely,
NINYO & MOORE

M. Terry
Melissa Terry
Senior Staff Scientist

Peter Sims
Peter Sims
Project Environmental Geologist

Professional Geologist
Kristopher M. Larson
No. 8059
State of California

Kris M. Larson, PG
Principal Environmental Geologist

PDS/KML/caa

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

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EXECUTIVE SUMMARY

Ninyo & Moore was retained by the Department of General Services (DGS) to perform a Phase I Environmental Site Assessment (ESA) on the Altaville Forest Fire Station located at 125 N. Main Street in Angels Camp, California. The site parcel is approximately 7.12 acres in size and is designated by Calaveras County as Assessor's Parcel Numbers (APNs) 580-130-11 and 580-120-23.

In summary, the following items were noted:

- Historical research regarding the site history compiled during the preparation of this report indicates the site was vacant, undeveloped oak woodlands prior to use as a school in 1858. The school building was located on the southwestern portion of the site until approximately 1985 when it was moved off-site to the northwest adjacent property. The site has been occupied by a fire station comprised of two buildings from approximately 1944 to 2011. A storage shed building was constructed between 1987 and 1998 and is still present at the site. In 2011, the two original fire station buildings were demolished and the current Altaville Forest Fire Station buildings were constructed in 2012.

- Site utilities include potable water and sanitary sewer provided by the City of Angels Camp; Pacific Gas & Electric (PG&E) providing electricity, and Ferral Gas providing propane fuel for on-site heating and cooling systems.

- On November 7, 2013, Mr. Peter Sims, Project Environmental Geologist with Ninyo & Moore, conducted a site reconnaissance. At the time of the site reconnaissance, the site was occupied by CalFire. The site structures included a barracks, dozer building, apparatus building, storage room, generator room, and storage shed with office space. The site is mostly paved with asphalt, and the remaining areas contain landscaping and exposed soil. The site buildings are composed of steel or wood frame construction, with the exception of the storage and generator rooms which are constructed with cinder-block.

- Additional site features observed included a combined 500-gallon gasoline and 1,000-gallon diesel above ground storage tank (AST) with dispensers, a 15-foot deep fire-pump test pit, a pad-mounted transformer, two pole-mounted transformers, and floor drains in the dozer building and apparatus building which drain to a sand/oil separator. These features were observed in good condition with no leaks, stains, or odors.

- Paint and paint thinner were stored in the northern portion of the storage shed. Waste oil was stored in 3-gallon plastic containers and a 30-gallon steel drum in the southern portion of the storage shed. Mixed gasoline and diesel labeled as "torch mix" was stored in 11 3-gallon plastic containers in the southern portion of the storage shed. Paint, lubricants, and paint thinner were stored in flammables cabinets in the dozer building and the apparatus building. Waste oily rags were stored in a flammables can in the dozer building. Quart-size containers of motor oil were stored in the generator room. Paint and lubricant were stored in the storage room. No leaks or stains were observed in connection with use or storage of hazardous substances and petroleum products on the site.

- Records obtained from the Calaveras County Environmental Health Department (CCEHD) indicate that the site uses and stores hazardous materials and generates reportable quantities of hazardous waste. Hazardous materials used and stored on-site include diesel fuel, transmission fluid, hydraulic fluid, motor oil and propane. Hazardous waste generated includes approximately 30-40 gallons of waste oil per month and 100 gallons of antifreeze per year. Two minor violations with regard to record keeping and hazardous materials storage were noted during our review of CCEHD files. Violations included failure to maintain three years worth of waste disposal manifests and failure to separate used oil filters from a waste oil container. According to the CCEHD files, the violations were corrected within one week of being received.

- The site is listed on several of the databases searched by Environmental Data Resources (EDR), including the Leaking Underground Storage Tank (LUST) site list, the AST site list and listings associated with the site's use and storage of hazardous materials and hazardous waste. A leak was discovered in two former 750-gallon underground storage tanks (USTs) containing gasoline and diesel at the site. Six groundwater monitoring wells (MW-1 through MW-6) were installed to monitor the release and were observed on site during our reconnaissance. According to the most recent groundwater monitoring event, which occurred on January 9, 2013, concentrations of MTBE were reported in MW-1, MW-3 and MW-4 at concentrations of 7.5 micrograms per liter (µg/l), 2.1 µg/l and 4.2 µg/l, respectively. MTBE was not detected in upgradient (with respect to the former USTs) well MW-2 or downgradient wells MW-5 or MW-6. Concentrations of benzene were detected in MW-1, MW-3 and MW-4 at concentrations of 2.0 µg/l, 0.59 µg/l and 0.55 µg/l, respectively. Concentrations of total petroleum hydrocarbons (TPH) as diesel (TPHd) were detected in all but one monitoring well, at concentrations ranging from 62 to 97 micrograms per liter (µg/l). No detectable concentrations of petroleum hydrocarbon constituents have been detected to date in MW-5, located 200 feet downgradient of the former USTs. A detailed discussion of the site's database listings is presented in Sections 4.1.1, 4.2.1 and 4.2.2.

- Several off-site facilities were located within the EDR search radius from the site. Based on our review of the listed facilities' regulatory status, distance from the site, and/or direction relative to groundwater flow, none of the off-site facilities are considered to be a REC to the site at this time.

- Based on review of the EDR Radius Map Reports, the primary soil types beneath the site are mapped as clay loam and stony loam. Generally, the soils within the site area have been formed by the weathering and breakdown of the underlying rocks and minerals including gabbroic rock, greenstone, slates, and tuffs (EDAW, 2002). Boring logs prepared by URS indicated that bedrock was encountered at approximately 4 to 8 feet bgs and contained multiple mentions of turquoise, blue-green, greenish-gray rock and greenstone which are indicative of rocks that may contain naturally occurring asbestos (NOA) (URS, 2007). Because gabbroic rock and greenstone may be a source of asbestos in soil, there is a potential for NOA to be present at the site.

- Based on completion of the Vapor Encroachment Screening Matrix (VESM), it was determined that the potential for a Vapor Encroachment Condition (VEC) *does exist* at the site, due to the presence of petroleum hydrocarbons in groundwater within 30 feet of a site building, as determined in the most recent January 2013 Semi-Annual Groundwater Monitoring Report by Versar, Inc. for the site. The source of the hydrocarbons was two USTs that are known to have leaked petroleum hydrocarbons to the soil and groundwater beneath the site. The USTs were formerly located adjacent to the southern exterior wall of the current garage/apparatus building and were removed in 1998.

- Due to the date of construction (between 1987 and 1998) of the storage shed building located along the southeasterly boundary of the site, there is a possibility that light ballasts containing PCBs may be present in this site building.

- An assessment of asbestos containing materials (ACMs) and lead-based paint was conducted by Ninyo & Moore in November 2013 on the storage shed building and fire pump test pit. ACMs were not detected. Lead-based paint and lead containing material were detected on both the storage shed and the fire pump test pit.

- Based on interviews stating that buried airplane and automobile parts are potentially present on the southern portion of the site, a geophysical survey was performed (Appendix F). The geophysical survey identified several areas of subsurface metallic debris, structures and pipes. Trenching was performed by the DGS in these areas to identify potential geotechnical hazards such as voids. The trenching identified buried metallic debris/waste, a drainage pipe, and a buried burn pile.

Ninyo & Moore has performed this Phase I ESA in accordance with the American Society for Testing and Materials (ASTM) Standards on ESAs for Commercial Real Estate E 1527-05, and the Environmental Protection Agency (EPA) proposed rule for All Appropriate Inquiry (AAI) standards as set forth in Title 40 of Code of Federal Regulations (CFR) Section 312.10. Any exceptions to, or deletions from, this practice are described in Section 8.4 of this report. This assessment has revealed no *de minimis* conditions or Historical Recognized Environmental Conditions (RECs) for the site. This assessment has revealed the following RECs and non-ASTM 1527-05 scope considerations:

<u>RECs:</u>

- The site is an active LUST site with groundwater impacted by MTBE, benzene, and TPHd.
- Buried metallic debris/waste and burn pile may be a source of impacts to site soil.
- There is a potential for the presence of NOA in site soils.

Non-ASTM 1527-05 Scope Considerations:

- Based on the completion of the VESM, there is a potential VEC currently existing at the site, due to the presence petroleum hydrocarbon constituents (diesel, benzene and MTBE) in groundwater within 30 feet of a site building, as determined in the most recent 2013 Semi-Annual Groundwater Monitoring Report by Versar, Inc.

- Due to the date of construction (between 1987 and 1998) of the storage shed building located along the southeasterly boundary of the site, there is a possibility that light ballasts containing PCBs may be present.

- Reported lead containing materials and lead-based paint are present in the storage shed building and the fire pump test pit.

Based on the results of this ESA, Ninyo & Moore recommends the following:

- Continue to pursue closure of the site LUST case through monitored natural attenuation.

- Conduct a Phase II ESA to determine if the buried metal debris/waste and burn pile on the southern portion of the site have resulted in a release of hazardous materials to the subsurface.

- In accordance with Calaveras County Air Pollution Control District (CCAPCD) requirements, one of the two options below should be implemented:

    - A workplan to investigate the potential presence of NOA at the site should be prepared and submitted to CCAPCD for approval. The workplan should detail the collection and analysis of soil samples for NOA. Upon approval, the workplan should be implemented and results of the NOA investigation submitted to CCAPCD. If the results of the NOA investigation determine that NOA is not present at the site, then an application for a variance from the requirements to prevent, control, and monitor fugitive dust should be submitted to CCAPCD.

    - If the NOA investigation determines that NOA is present in site soil or if a NOA investigation is not performed, then future site activities that disturb soil should be performed in accordance with CCAPCD requirements to prevent, control, and monitor fugitive dust.

- Review the results of Versar's forthcoming soil vapor survey to determine if the potential VEC identified has impacted the site.

- Prior to demolition or renovation activities at the storage shed and fire pump test pit, all lead containing materials and lead-based paint should be repaired or abated by a licensed lead containing material abatement/stabilization removal contractor in compliance with the most recent applicable federal, state, and local laws and regulations. In addition, PCB-containing light ballasts should be removed and properly recycled or disposed of by a licensed contractor according to all applicable federal, state, and local laws and regulations.

No significant historical data gaps were noted during the preparation of this Phase I ESA report.

CERTIFICATIONS, LIMITATIONS, AND STATEMENT OF INDEPENDENCE

This report has been prepared by the staff of Ninyo & Moore for DGS under the professional supervision of the principal and/or senior staff whose signatures appear hereon. Neither Ninyo & Moore, nor any staff member assigned to this investigation has any interest or contemplated interest, financial or otherwise, in the subject or surrounding properties, or in any entity which owns, leases, or occupies the subject or surrounding properties, or which may be responsible for environmental issues identified during the course of this investigation, and has no personal bias with respect to the parties involved.

The information contained in this report has received appropriate technical review and approval. The conclusions represent professional judgments founded upon the findings of the investigations identified in the report and the interpretation of such data based on our experience and expertise according to the existing standard of care. No other warranty or limitation exists, either expressed or implied.

The investigation was prepared in accordance with the scope of work provided by the client for the use and benefit of DGS, its successors, and assignees. It is based, in part, upon documents, writings, and information owned, possessed, or secured by DGS. Neither this report, nor any information contained herein shall be used or relied upon for any purpose by any other person or entity without the express written permission of DGS.

Anyone seeking defenses to Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability must take independent action to protect their position.

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. Please note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore

should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the site or nearby properties. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

1. INTRODUCTION

Ninyo & Moore was retained by the California Department of General Services (DGS) to perform a Phase I Environmental Site Assessment (ESA) on the property located at 125 North Main Street in Angels Camp, California (site). The site is approximately 7.12 acres in size and is designated by Calaveras County as Assessor's Parcel Numbers (APNs) 580-120-023 and 580-130-011. This section discusses the purpose, the involved parties, the scope of work, and the limitations and exceptions associated with the ESA.

1.1. Purpose

In accordance with the American Society for Testing and Materials (ASTM) Standards on ESAs for Commercial Real Estate E 1527-05, and the Environmental Protection Agency (EPA) proposed rule for All Appropriate Inquiry (AAI) standards as set forth in Title 40 of Code of Federal Regulations (CFR) Section 312.10, the objective of the due diligence Phase I ESA is to identify Recognized Environmental Conditions (RECs), which are defined by ASTM as "the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The work was conducted in general accordance with EPA's AAI standards, whose objective is to identify conditions indicative of releases and threatened releases of hazardous substances on, at, in, or to the site. The purpose of this ESA is to assess potential environmental concerns that may have resulted from historical operations of the site and nearby facilities.

1.2. Involved Parties

Mr. Peter Sims, Project Environmental Geologist with Ninyo & Moore, conducted a site reconnaissance of the property on November 7, 2013 as well as regulatory inquiries. Ms. Melissa Terry, Senior Staff Environmental Scientist conducted historical research and document review. Mr. Kris Larson, a Professional Geologist and Environmental Professional, performed quality review. This Phase I ESA was conducted by an environmental professional as set forth in Title 40 of CFR, Chapter I, Subchapter J, Part 312.10(b) (40 CFR §312.10[b]).

1.3. Detailed Scope of Services

Ninyo & Moore's scope of services for this Phase I ESA included the following:

- Performance of a site reconnaissance to visually and/or physically observe the interior and exterior of structures and other features on the site as well as visible exterior features of adjoining properties to identify areas of possibly contaminated surface soil or surface water, improperly stored hazardous materials, possible sources of polychlorinated biphenyls (PCBs), and possible risks of contamination from activities at the site and adjoining properties.

- Review of reasonably ascertainable standard environmental record sources including federal, state, and tribal regulatory agency databases for the site and for properties located within a specified radius of the site. The purpose of this review was to evaluate possible environmental impacts to the site and site vicinity activities. These databases list locations of known hazardous waste sites, landfills, leaking underground storage tanks (LUSTs), permitted facilities that utilize underground storage tanks (USTs), and facilities that use, store, or dispose of hazardous materials and/or petroleum products.

- Review of reasonably ascertainable additional environmental record sources including local records and/or additional state or tribal records for the site and for properties located within a specified radius of the site. The purpose of this review was to evaluate possible environmental impacts to the site and site vicinity activities. These databases list locations of known hazardous waste sites, solid waste landfills, registered storage tanks, emergency releases, contaminated public wells, and facilities that use, store, or dispose of hazardous materials and/or petroleum products.

- Review of reasonably ascertainable standard physical setting sources including a current United States Geological Survey (USGS) 7.5-minute topographic map, and possibly including USGS and/or state groundwater and geology maps, and Soil Conservation Service soil maps. The purpose of this review was to note information about the geologic, hydrogeologic, hydrologic, and/or topographic characteristics of the site and site vicinity.

- Review of reasonably ascertainable historical documents, including aerial photographs, historical fire insurance rate maps, city directories, and property tax files. The purpose of this review was to note any obvious uses of the subject site from the present, back to the subject site's first developed use, or back to 1940, whichever is earlier.

- Obtain and review an environmental lien search and activity use limitations (AULs) report for the site. The purpose of this review is to determine if there are any environmental liens or AULs for the site.

- Performance of interviews with present owners, operators, and occupants of the site as well as other knowledgeable parties as appropriate. The purpose of these interviews was to attempt to obtain information relevant to the uses and conditions of the site.

- Preparation of this Phase I ESA report documenting methodology; reporting findings, significant data gaps, and conclusions; and providing opinions of the impact on the site of conditions noted in the findings section regarding RECs at the site. As part of our recommendation, the report will discuss RECs if discovered, and offer recommendations for a Phase II ESA, if needed, to evaluate potential subsurface contamination in soil and groundwater for the subject property.

This study did not include an evaluation of geotechnical conditions or potential geologic hazards. In addition, unless otherwise indicated in Section 6 of this report, this Phase I ESA does not include analysis of the following: asbestos, lead-based paint methane gas, lead in drinking water, wetlands, cultural resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality including vapor intrusion, or high voltage power lines.

1.4. Significant Assumptions

No significant assumptions have been made in conducting this Phase I ESA.

1.5. Special Terms and Conditions

Ninyo & Moore was not made aware of any special terms and conditions associated with the site.

1.6. User Reliance

This report may be relied upon by, and is intended exclusively for, DGS. Any use or reuse of the findings, opinions, and/or conclusions of this report by parties other than the user is undertaken at said parties' sole risk.

2. SUBJECT SITE

Based on our review, the site is situated on approximately 7.12 acres of land located at 125 North Main Street in Angels Camp, California. The site location is presented on Figure 1 and the site vicinity and specific site features are presented on Figure 2. Select photographs taken during the site reconnaissance are included in Appendix A.

2.1. Site Description and Site Reconnaissance

On November 7, 2013, Mr. Peter Sims, Project Environmental Geologist with Ninyo & Moore conducted a site reconnaissance. At the time of the site reconnaissance the approximately 7.12 acre site was occupied by the Altaville Forest Fire Station which is owned, managed, and operated by the State of California, Department of Forestry and Fire Protection (CalFire). The site is predominantly paved with asphalt driveways and parking areas and is landscaped and unpaved areas (Figure 2).The site structures included:

- A barracks of wood frame construction with living quarters, kitchen, and bathrooms.
- An apparatus building of steel frame construction where the fire truck, hoses, fire fighting equipment, and a flammable cabinet containing paint, paint thinner, and lubricants are stored.
- A dozer building of steel frame construction where the dozer, dozer transportation truck, maintenance equipment, and waste oily rags are stored.
- A storage room of cinder block construction where fire fighting and maintenance equipment are stored.
- A generator room of cinder block construction containing a propane-fueled electrical generator.
- An open storage shed with an enclosed office space of wood frame construction where fire fighting and maintenance equipment are stored as well as paint, paint thinner, and petroleum products which are discussed further in Section 2.1.6.

In addition, the following features were located on site:

- An approximately 15 feet deep fire pump test pit of steel and cinder block construction, a combined 500-gallon gasoline and 1,000 gallon diesel aboveground storage tank (AST) and dispensers, and . six groundwater monitoring wells were located within the central portion of the site.
- A pad-mounted transformer was located within the northeastern portion of the site.
- Two pole-mounted transformers were located on the southern portion of the site.

2.1.1. Roads

As shown on Figure 2, the site is accessed by Highway 49 to the north. No roads cross the site.

2.1.2. Site Occupants

At the time of the site reconnaissance the site was occupied by CalFire.

2.1.3. Source of Potable Water

Potable water is provided by the City of Angels Camp.

2.1.4. Sewage Disposal System

The City of Angels Camp provides sanitary sewer service to the site.

2.1.5. Source of Fuel for Heating and Cooling

Electricity is provided to the site by Pacific Gas & Electric (PG&E). The fuel source for the site is provided by Ferral Gas, a private propane vendor.

2.1.6. Hazardous Substances and Petroleum Products Used or Stored On Site

Hazardous substances and petroleum products were stored in several site areas, and include the list below. Many of the storage areas for the substances and products listed below are indicated on Figure 2.

- Propane was stored in a 500-gallon and a 1,000-gallon AST on the central portion of the site.
- A 500-gallon gasoline AST connected to a 1,000-gallon diesel AST with dispensers were present on the central portion of the site.
- Paint and paint thinner were stored in the northern portion of the storage shed.
- Waste oil was stored in 3-gallon plastic containers and a 30-gallon steel drum in the southern portion of the storage shed.
- Mixed gasoline and diesel labeled as “torch mix” was stored in 11 3-gallon plastic containers in the southern portion of the storage shed.
- Paint, lubricants, and paint thinner were stored in flammables cabinets in the dozer building and the apparatus building.
- Waste oily rags were stored in a flammables can in the dozer building.
- Quart-size containers of motor oil were stored in the generator room.
- Paint and lubricant were stored in the storage room.

No leaks or stains were observed in connection with use or storage of hazardous substances and petroleum products on the site. It is unlikely the observed use and storage of hazardous substances and petroleum products has negatively impacted the environmental integrity of the site.

2.1.7. Disposal of Hazardous Waste

According to Mr. Steve Chambers with CalFire, petroleum and hazardous wastes are collected for disposal by Aramark on a monthly basis. Waste disposal items include waste oil stored in 3-gallon plastic containers, a 30-gallon steel drum in the southern portion of the storage shed, and oily rags stored in a flammables can in the dozer building.

2.1.8. Unidentified Substance Containers

No unidentified substance containers were observed during the site reconnaissance.

2.1.9. Evidence of Releases

Several groundwater monitoring wells were observed on the central portion of the site (Section 2.1.14) and were installed to monitor impacted groundwater from a former LUST. The well locations are shown on Figure 2. No other evidence of releases was observed during the site reconnaissance.

2.1.10. ASTs/ USTs

Propane was observed in a 500-gallon and a 1,000-gallon AST on the central portion of the site. A combined AST with dispensers containing compartments of gasoline (500 gallons) and diesel (1,000 gallons) was observed within the central portion of the site.

2.1.11. PCBs

Historically, PCBs (a group of hazardous substances and suspected human carcinogens) were widely used as an additive in cooling oils for electrical components. Typical sources of PCBs can include fluorescent light ballasts and electrical transformers. The use of PCBs in electrical transformers and ballasts manufactured prior to 1978 was not

regulated by the United States Environmental Protection Agency (USEPA). Light ballasts and electrical transformers manufactured since 1978, which do not contain PCBs, should be stamped indicating that the product is PCB free.

A pad-mounted transformer was observed on the eastern site boundary. Pole-mounted transformers were observed on the east and west site boundaries. The transformers were not assessed for PCBs during the site reconnaissance. However, because no leaks or staining were observed, it is not likely that the transformers have negatively impacted the environmental integrity of the site.

Fluorescent light fixtures were observed in the site buildings. Ninyo & Moore did not assess the fluorescent light ballasts for PCBs during the site reconnaissance. Because the site buildings (with the exception of the storage shed) were constructed in 2012, it is not likely that the light ballasts contain PCBs. The storage shed was constructed between 1987 and 1998 so it is not likely that the light ballasts contain PCBs.

2.1.12. Wastewater Systems

Floor drains were observed in the dozer building and the apparatus building which drain to sanitary sewer by way of a sand/oil separator. No other waste water systems were observed on the site during the site reconnaissance. No leaks, odors, or stains were observed in or near the floor drains. Because of the lack of physical evidence of impacts and the relatively recent construction of the wastewater system (2012), it is not likely that the wastewater system has negatively impacted the environmental integrity of the site.

2.1.13. Storm Water Systems

Storm water drains were not observed on the site during the site reconnaissance.

2.1.14. Wells

Ninyo & Moore observed six groundwater monitoring wells at the site (Figure 2) associated with the release from the former USTs which is discussed further in Section

4.2.1. Ninyo & Moore did not observe any domestic water wells, agricultural irrigation wells, dry wells, or injection wells on the site at the time of the site reconnaissance.

2.2. Adjoining Properties

Table 1 lists the properties adjoining the site and associated land use. As shown in the table below, the site is located within an area of mixed residential/commercial development with neighboring vacant properties to the south.

Table 1 – Adjoining Properties

Location	Adjoining Properties and Associated Land Use
North	Mixed residential and commercial properties across Route 49.
East	Mixed residential and commercial properties.
West	Residential properties.
South	Open space.

3. USER PROVIDED INFORMATION

The following sections summarize information provided by the user to assist the environmental professional in identifying the possibility of RECs in connection with the site and to fulfill the user's responsibilities in accordance with Section 6 of ASTM Practice E 1527-05. The user-completed questionnaire is provided in Appendix B.

3.1. Environmental Liens or Activity and Use Limitations

According to DGS there are no environmental liens or AULs associated with the site. An environmental lien and AULs search was conducted by EDR and is presented in Appendix B. The search did not reveal any environmental liens or AULs for the site.

3.2. Specialized Knowledge

DGS indicated that they do have specialized knowledge or experience related to the property due to CalFire occupying the Altaville Forest Fire Station since the 1950s. Specialized knowledge was obtained from Mr. Steve Chambers and is presented in Section 7.1.

3.3. Commonly Known or Reasonably Ascertainable Information

DGS informed Ninyo & Moore of the commonly known or reasonably ascertainable information within the local community that is material to RECs in connection with the site relating to the on-site LUST case. The on-site LUST case is discussed fully in Section 4.2.1.

3.4. Valuation Reduction for Environmental Issues

There is no valuation reduction for environmental issues.

3.5. Owner, Property Manager, and Occupant Information

The site is currently owned, managed, and occupied by CalFire.

3.6. Reason for Performing Phase I

This Phase I ESA has been completed for the exclusive use of DGS to evaluate the historical uses and practices associated with the property preliminary to performing demolition and construction activities at the site.

4. RECORDS REVIEW

4.1. Standard Environmental Record Sources

Environmental Data Resources Inc. (EDR) performed a computerized environmental information database search for each of the site and the site vicinity on October 30, 2013. The EDR reports included federal, state, and local databases. The review was conducted to evaluate whether or not the site or properties within the vicinity of the site have been listed as having experienced significant unauthorized releases of hazardous substances or other events with potentially adverse environmental effects for the site. Review of the EDR database reports obtained for this project indicated that the site was listed on five of the regulatory databases researched by EDR, the listings are associated with the presence of ASTs and USTs and the use and storage of hazardous materials on the site. A detailed discussion of the site listings is presented in Section 4.1.1.

A summary of the environmental databases searched, their corresponding search distance, and the number of listed off-site properties of potential environmental concern are presented

in Table 2. In addition, the EDR reports and a description of the assumptions and approaches to the database search are presented in Appendix C.

Table 2 – Summary of Environmental Database Search

Database Name	Agency	Search Radius (miles)	Facilities Listed
Federal Records			
RCRA Large/Small Quantity Generators List (LQ/SQ-GEN)	USEPA	0.25	1
State and Local Records			
EnviroStor	DTSC	1	1
Leaking Underground Storage Tank (LUST) List	SWRCB	0.5	6
Spills, Leaks, Investigation, and Cleanup (SLIC) List	RWQCB	0.5	1
Aboveground Petroleum Storage Tank (AST) List	Cal EPA	0.5	1
Additional Environmental Records			
Solid Waste Recycling Facility (SWRCY) List	DC	0.5	1
California Facilities Index (CA FID UST) List (no longer updated as of 1994)	CalEPA	0.25	1
HIST UST Hazardous Substance Storage Container (Historic UST) List (no longer updated as of 1990)	SWRCB	0.25	1
SWEEPS List (no longer updated as of 1994)	SWRCB	0.25	2
Hazardous Waste & Substance Site (HIST CORTESE) List (no longer updated as of 2001)	SWRCB	0.5	3
Certified Unified Program Agency (CUPA) List	CCEH	0.25	3
EDR US Historic Auto Stations	EDR	0.25	3

Notes:
USEPA – United States Environmental Protection Agency
DTSC – Department of Toxic Substances Control
SWRCB – State Water Resources Control Board
RWQCB – California Regional Water Quality Control Board
CalEPA – California Environmental Protection Agency
DC – California Department of Conservation
CCEH – Calaveras County Environmental Health
RCRA – Resource Conservation and Recovery Act
SWEEPS – Statewide Environmental Evaluation and Planning System
EDR – Environmental Data Resources

The following paragraphs describe the databases that were searched for properties of environmental concern, and include a discussion of the regulatory status of the facilities and potential environmental impact to the subject site (if applicable). The groundwater gradient information provided indicates whether the individual facility is assumed to be upgradient, downgradient, or cross-gradient from the site in terms of groundwater flow. Groundwater

gradient beneath the site is predominantly in a southwesterly direction and is discussed in Section 5.3.2.

4.1.1. Regulatory Database Listings for the Site

State Water Resources Control Board (SWRCB), LUST List

The LUST database is maintained by the SWRCB. It includes facilities with tanks under investigation for potential or confirmed leaks, and closed LUST facilities. The site was listed on the LUST database, with a status of "Open – Verification Monitoring." A detailed summary of the site's background and regulatory status is presented in Section 4.2.1. The site's status as an open LUST case is considered a REC.

California EPA (CalEPA), AST List

The AST database is maintained by CalEPA and includes locations of facilities with ASTs. The site was listed on the AST database because it maintains one combined 500-gallon gasoline/1,000-gallon diesel AST. The site's listing on the AST database is not considered a REC.

SWRCB, SWEEPS List

The SWEEPS database was an UST database maintained by a company contacted by the SWRCB in the 1990s. This database is no longer updated or maintained. Current UST database listings were obtained from the LUST, UST and AST database listings. The site's listing on the SWEEPS database is not considered a REC.

SWRCB, HIST CORTESE List

The HIST CORTESE database identifies historical hazardous waste and substance facilities. The list has not been updated since 2001. The site's listing on this database is associated with the site's open LUST case and therefore is considered a REC to the site.

Certified Unified Program Agency (CUPA) List

The CUPA list is maintained by the Calaveras County Environmental Health Department (CCEHD) and includes files from various agencies within the county. A detailed discussion of the site's CUPA listing is included in Section 4.2.2. Current UST database listings were obtained from the LUST, UST and AST database listings. The site's listing on the CUPA list is not considered a REC.

4.1.2. Regulatory Database Listings for Offsite Properties

USEPA, RCRA Large-Quantity and Small-Quantity Generators List

This database identifies USEPA-listed facilities that report generation of reportable quantities of hazardous waste under the RCRA program for the identification and tracking of hazardous waste. The list consists of properties that generate more than

1,000 kilograms (kg) of hazardous waste per month (large quantity generators or LQGs) and properties that generate less than 1,000 kg of hazardous waste per month (small quantity generators or SQGs), and is not necessarily indicative of facilities where a release of hazardous substances has occurred. One off-site facility was listed on this database within a quarter mile radius of the site. The facility is located greater than 1,350 feet crossgradient of the site. Based on the crossgradient position and the significant distance from the site, this facility is not considered a REC to the site at this time.

Department of Toxic Substances Control (DTSC) - EnviroStor

This database is maintained by the DTSC and identifies properties that have known contamination or properties where there may be reasons to investigate further. One off-site facility was listed on this database within a 1-mile radius of the site. The facility is located greater than 2,000 feet crossgradient of the site. Based on the crossgradient position and the significant distance from the site, this facility is not considered a REC to the site at this time.

SWRCB, LUST List

The LUST database is maintained by the SWRCB. It includes facilities with tanks under investigation for potential or confirmed leaks, and closed LUST facilities. Six off-site facilities were listed on this database. Five of the facilities are located greater than 1,000 feet downgradient of the site. Based on the cross- and/or downgradient positions and the significant distances from the site, these facilities are not considered a REC to the site at this time.

The Altaville Mobile facility at 273 North Main Street approximately 500 feet north-northwest and upgradient of the site was listed on this database. The facility had a release of gasoline that impacted soil only. The status of the facility was listed as "completed – case closed" as of 1991. Based on the release at the facility impacting soil only, the distance to the site, and the regulatory status, this facility is not considered a REC to the site at this time.

California Regional Water Quality Control Board (RWQCB), Spills, Leaks, Investigation, and Cleanup (SLIC) List

The SLIC database is designed to protect and restore water quality from spills, leaks, and similar discharges, and is maintained by the RWQCB. One off-site facility is listed on this database within a 0.5-mile radius of the site. This is the same facility listed on the DTSC's EnviroStor database. The facility is located greater than 2,000 feet crossgradient of the site. Based on the crossgradient position and the significant distance from the site, this facility is not considered a REC to the site at this time.

CalEPA, AST List

The AST database is maintained by CalEPA and includes locations of facilities with ASTs. The site is listed on this database and was discussed in Section 4.1.1. One off-site

facility is listed within a 0.25-mile radius of the site. The facility is located over 1,300 feet crossgradient of the site. Based on the crossgradient position and the significant distance from the site, this off-site facility is not considered to be a REC to the site at this time.

Department of Conservation's Solid Waste Recyclers (SWRCY) List

The SWRCY list is maintained by the Department of Conservation and is a listing of recycling facilities in California. One off-site facility was listed on this database within a 0.5-mile radius of the site. The facility is located greater than 1,400 feet crossgradient of the site. Based on the crossgradient position and the significant distance from the site, this off-site facility is not considered to be a REC to the site at this time.

CalEPA Facility Inventory Database (CA FID) List

The CA FID list is maintained by CalEPA and contains a historical listing of active and inactive UST locations from the SWRCB. This list is no longer updated. One off-site facility is listed within a 0.25-mile radius of the site. The facility is located over 1,000 feet cross/downgradient of the site. Based on the cross/downgradient position and the significant distance from the site, this off-site facility is not considered to be a REC to the site at this time.

SWRCB, Hazardous Substance Storage Container (HIST UST) List

The HIST UST database is maintained by the SWRCB and contains an historical listing of UST facilities. This list is no longer updated. One off-site facility is listed within a 0.25-mile radius of the site. The facility is located greater than 1,100 feet crossgradient of the site. Based on the crossgradient position and the significant distance from the site, this off-site facility is not considered to be a REC to the site at this time.

SWRCB, Statewide Environmental Evaluation and Planning System (SWEEPS) List

The SWEEPS database is a listing of USTs that was once updated and maintained by a company contacted by the SWRCB in the early1990's. The site is listed on this database and was discussed in Section 4.1.1. One off-site facility is listed within a 0.25-mile radius of the site. The facility is located over 1,000 feet cross/downgradient of the site. Based on the cross/downgradient position and the significant distance from the site, this off-site facility is not considered to be a REC to the site at this time.

DTSC, Hazardous Waste and Substance Site (HIST CORTESE) List

The HIST CORTESE database identifies historical hazardous waste and substance facilities. The list has not been updated since 2001. The site is listed on this database and was discussed in Section 4.1.1. Three off-site facilities are listed within a 0.5-mile radius of the site. All three facilities are located greater than 1,100 feet cross- and/or downgradient of the site. Based on the cross- and/or downgradient positions and the significant distances from the site, these off-site facilities are not considered to be a REC to the site at this time.

CUPA List

The CUPA listing is maintained by the CCEHD and includes files from various agencies within the county. The site is listed on this database and was discussed in section 4.1.1. Three off-site facilities are listed within a 0.25-mile radius of the site. All three facilities are located greater than 1,100 feet cross- and/or downgradient of the site. Based on the cross- and/or downgradient positions and the significant distances from the site, these off-site facilities are not considered to be a REC to the site at this time.

EDR, Historical Auto Stations

This database provides information on city directory listings of automotive service stations recorded by EDR. Three off-site facilities were listed on this database within a 0.25-mile radius of the site. One listing is a duplicate listing of the same address; therefore there are actually two off-site facilities within a 0.25-mile radius of the site. Both facilities are located greater than 1,100 feet crossgradient of the site. Based on the crossgradient positions and the significant distances from the site, these off-site facilities are not considered to be a REC to the site at this time.

4.2. Additional Environmental Record Sources

Based on the site reconnaissance, historical research, the environmental database review, and an interview with the owners, information regarding the site and properties of potential environmental concern located within the vicinity of the site was requested from local government regulatory agencies.

4.2.1. State Environmental Regulatory Agencies

The RWQCB GeoTracker website and DTSC EnviroStor website were reviewed for hazardous materials or hazardous wastes records associated with the site. No records for the site were found on the DTSC's EnviroStor website. The Central Valley RWQCB is the lead agency for the site's LUST case and therefore most reports and data generated thus far for the site are available on GeoTracker.

Our review of available GeoTracker records indicates that the site is currently an open LUST case. In 1998, a leak was discovered during the removal of two 750-gallon USTs containing gasoline and diesel fuel. Confirmation soil samples collected from the excavation at that time contained the following maximum reported concentrations:

- Total petroleum hydrocarbons (TPH) as gasoline at 8,750 milligrams per kilogram (mg/kg);

- TPH as diesel(d) was not detected;
- Benzene at 93.5 mg/kg;
- Toluene at 708 mg/kg;
- Ethylbenzene at 152 mg/kg;
- Total xylenes at 845 mg/kg; and
- Methyl tert-butyl ether (MTBE) was not detected.

Groundwater was not encountered in the tank excavation.

Between 2003 and 2008, six groundwater monitoring wells (MW-1 through MW-6) were installed on the site. MW-5 and MW-6 are located 200 feet and 160 feet, respectively, downgradient of the former USTs and were installed to define the boundaries of the MTBE plume in groundwater. According to the most recent groundwater monitoring event, which occurred on January 9, 2013, concentrations of MTBE were reported in MW-1, MW-3 and MW-4 at concentrations of 7.5 micrograms per liter (µg/l), 2.1 µg/l and 4.2 µg/l, respectively. MTBE was not detected in upgradient (with respect to the former USTs) well MW-2 or downgradient wells MW-5 or MW-6. Concentrations of benzene were detected in MW-1, MW-3 and MW-4 at concentrations of 2.0 µg/l, 0.59 µg/l and 0.55 µg/l, respectively. Concentrations of TPHd were detected in all but one monitoring well, at concentrations ranging from 62 to 97 micrograms per liter (µg/l). No detectable concentrations of petroleum hydrocarbon constituents have been detected to date in MW-5, located 200 feet downgradient of the former USTs.

On October 2, 2013, Versar submitted a work plan to conduct a soil vapor survey and to destroy all six groundwater monitoring wells. In a letter dated October 16, 2013, The Central Valley RWQCB approved the soil vapor portion of the work plan, with minor modifications, but did not approve Versar's request to destroy the groundwater monitoring wells. The Central Valley RWQCB set a deadline of February 28, 2014 for Versar to submit the soil vapor survey results and a deadline of March 30, 2014 for Versar to

submit a formal closure request for the site. Copies of Versar's work plan and the Central Valley RWQCB's approval letter are presented in Appendix B.

4.2.2. County Environmental Regulatory Agencies

CCEHD was contacted to review records regarding hazardous materials spills, leaks or incidents for the site addresses. A file review appointment was made and on November 7, 2013, Mr. Peter Sims of Ninyo & Moore conducted the file review at the CCEHD offices in San Andreas, California. Files reviewed included a Hazardous Materials Business Plan (HMBP), UST permit applications, UST removal permits, UST closure inspections, site plans and a variety of groundwater monitoring data. According to the HMBP on file, hazardous materials currently used and stored on-site include transmission fluid, hydraulic fluid, motor oil, antifreeze, propane and diesel fuel. The waste oil was stored in a former 250-gallon AST behind the dozer barn, the diesel fuel was stored in a former 1,000-gallon AST approximately 90 feet west of the office, and the propane was stored in a former 1,000-gallon AST approximately 35 feet north of the kitchen. No formal violations were found in the files; however, the site received two minor violations on June 4, 2007 regarding record keeping and improper mixing of used oil filters with waste oil. According to the inspection report, the violations were corrected on June 27, 2007. Aside from the leak associated with the former USTs, no records of hazardous materials spills, leaks or incidents were found in the site files maintained by the CCEHD.

4.2.3. Fire Department

The City of Angels Camp Fire Department was contacted to review records regarding hazardous materials, USTs, ASTs, or hazardous wastes records associated with the site. The fire department indicated that all of their files were maintained and available for review at the CCEHD. These files were reviewed at the CCEHD on November 7, 2013, as discussed in Section 4.2.2.

4.2.4. Local Agencies

The Calaveras County Air Quality Management District (CCAQMD) was contacted to review records regarding hazardous materials, USTs, ASTs, or hazardous wastes records associated with the site. The CCAQMD indicated that no records exist for the site.

4.3. Site Historical Use Information

Ninyo & Moore conducted an historical record search for the site. This included a review of one or more of the following resources that were found to be both reasonably ascertainable and useful for the purposes of this Phase I ESA: historical aerial photographs, historical fire insurance maps, historical topographic maps, land use records, interviews with property representatives, and reviews of prior environmental assessment reports regarding the site. The following sections summarize information obtained from the historical sources utilized for this assessment. Copies of historical research documentation, such as fire insurance maps, historical aerial photographs, and topographic maps, are provided in Appendix D.

4.3.1. Fire Insurance Maps

Ninyo & Moore requested historic fire insurance rate maps (Sanborn Maps) of the site vicinity from EDR. Sanborn Maps were not available for the site. The Sanborn report indicating the property is unmapped is attached in Appendix D.

4.3.2. Historical Aerial Photographs

Ninyo & Moore reviewed historical aerial photographs of the site provided by EDR. A listing of the photographs reviewed is presented in Table 3. Copies of the historical aerial photographs are provided in Appendix D.

Table 3 – Aerial Photographs Reviewed

Date	Source	Comments
1944	USGS	This photograph is of poor quality. The site appears to be vacant.
1957	Cartwright	Two structures are visible near the center of the site. The driveways appear unpaved.
1962	Cartwright	No significant changes were observed from the previous photograph.
1984	USGS	This photo is of poor quality. No significant changes are apparent from the previous photograph.

Table 3 – Aerial Photographs Reviewed

Date	Source	Comments
1987	USGS	This photo is of very poor quality. No significant changes are apparent from the previous photograph.
1998	EDR	The long, rectangular office/storage building currently near the south-east boundary of the site first appears on this photograph. No other significant changes are apparent from the previous photograph.
2005	EDR	No significant changes were observed.
2006	EDR	No significant changes were observed.
2009	EDR	Several storage containers are visible near the southern site boundary; no other significant changes were observed.
2010	EDR	No significant changes were observed.
2012	EDR	The structures near the center of the site have been demolished and replaced with the current site buildings; a paved driveway and parking area to the east and northwest of the site buildings was observed. The office/storage structure and a variety of small outbuildings and/or vehicles are visible along the southern boundary of the site.

Review of aerial photographs did not reveal RECs for the site.

4.3.3. Historical Topographic Maps

Ninyo & Moore reviewed historical topographic maps of the site provided by EDR. A listing of the maps reviewed is presented in Table 5. Copies of the historical topographic maps are provided in Appendix D.

Table 3 – Topographic Maps Reviewed

Date	Quadrangle	Uses
1902	Jackson	The site is not identifiable on this map, and is located in an undeveloped area of Altaville.
1947	San Andreas	The site appears to be undeveloped on this map.
1948	San Andreas	No significant changes to the site were observed on this map.
1962	Angels Camp	The site driveway and two structures are apparent on this map.
1962	San Andreas	No significant changes to the site were observed on this map.
1973	Angels Camp	No significant changes to the site were observed on this map.

Review of historical topographic maps did not reveal RECs for the site.

4.3.4. City Directories

Ninyo & Moore reviewed city directories of the site provided by EDR. A copy of the city directory report is provided in Appendix D. The site address (125 North Main Street) is not found in any of the City Directory listings. Our review of nearby property listings did not find any tenants or property uses that would be considered a REC to the site.

4.3.5. Building Permits

According to DGS, the State generally does not obtain building permits for work on State property. DGS did provide copies of as-built drawings for the site buildings and improvements. Our review of the as-built drawings provided by DGS did not reveal RECs for the site. Copies of the as-built drawings are provided in Appendix B.

4.3.6. 50-Year Chain of Title Records

A 50-Year Chain of Title Report was not provided to Ninyo & Moore by DGS.

4.3.7. Recorded Environmental Liens and Activity and Use Limitations

An environmental lien and AUL search for the site was conducted by EDR. A copy of the environmental lien and AUL search is provided in Appendix B. Environmental liens or AULs were not found.

4.3.8. Previous Investigations

Reports of previous Phase I ESAs or subsurface investigations at the site were not provided to Ninyo & Moore by DGS. However, copies of previous investigations for the site were obtained by Ninyo & Moore from our review of the GeoTracker database and during our review of CCEHD files. Information obtained from these previous reports is summarized in Sections 4.2.1 and 4.2.2.

4.4. Adjacent Property Historical Use Information

Ninyo & Moore conducted a historical record search for properties adjacent to the site. The following sections summarize information obtained from the historical sources reviewed during this assessment.

4.4.1. Fire Insurance Maps

Ninyo & Moore requested Sanborn Maps of the site and vicinity through EDR. Sanborn Maps were not available for the site vicinity. The Sanborn report indicating the property is unmapped is attached in Appendix D.

4.4.2. Historical Aerial Photographs

Ninyo & Moore reviewed aerial photographs of the site vicinity provided by EDR as described in Section 4.3.2. Surrounding properties were observed to be undeveloped grassland and sparsely populated rural residential to the north (beyond Highway 49), south, east, and west in the 1944 photograph. More rural residential development is visible to the north and west of the site in the 1957 aerial photograph. No significant changes were observed in the 1962, 1984 and 1987 aerial photographs. Highway 4, to the east of the site, appears to have been widened/improved in the 1998 aerial photograph. Commercial development has filled-in the land between Highway 4 and the eastern boundary of the site by 2005. Highway 4, to the east of the site, has been extended northerly, beyond Highway 49 in this photograph. No significant changes to the site vicinity were noted in the 2012 aerial photograph.

4.4.3. Historical Topographic Maps

Ninyo & Moore reviewed historical topographic maps of the surrounding properties provided by EDR. Surrounding properties were mapped as undeveloped land on the 1902 map. Surrounding properties appear as unincorporated rural residential on the 1947 through 1973 topographic maps.

5. PHYSICAL SETTING

The following sections include discussions of topographic, geologic, and hydrogeologic conditions in the vicinity of the site, based upon our document review and our visual reconnaissance of the site and adjoining areas.

5.1. Site Topography

Based on a review of the USGS 7.5-Minute Topographic Quadrangle Map Series of the Angels Camp, 1973, the site is situated at an elevation of approximately 1545 feet above mean sea level. The site topography is relatively flat and slopes to the southwest. Groundwater flow direction is expected to follow topography to the southwest.

5.2. Site Geology

The site vicinity is located within the Western Sierra Nevada Metamorphic Belt, east of the San Joaquin Valley within the Sierra Nevada Geomorphic Province of California. The Western Sierra Nevada Metamorphic Belt is about 180 miles long and 20 to 40 miles wide, and it lies between the Sierra Nevada batholith on the east and overlapping, un-metamorphosed Tertiary strata on the west. The metamorphic belt in the vicinity of the site is divided into structural blocks bounded by northwesterly trending faults of the Foothills Fault System. The site lies within the far easterly portion of these structural blocks, which consists of Paleozoic-Mesozoic gabbroic rocks, greenstone, slates, and tuffs.

Based on our review of the EDR Radius Map Reports, the primary soil types beneath the site are mapped as clay loam and stony loam (EDR, 2013). Generally, the soils within the site area have been formed by the weathering and breakdown of the underlying rocks and minerals including gabbroic rock, greenstone, slates, and tuffs (EDAW, 2002). Boring logs prepared by URS indicated that bed rock was encountered at approximately 4 to 8 feet bgs and contained multiple mentions of turquoise, blue-green, greenish-gray rock and greenstone which are indicative of rocks that may contain naturally occurring asbestos (NOA) (URS, 2007). Because gabbroic rock and greenstone may be a source of asbestos in soil, there is a potential for naturally NOA to be present at the site which represents a REC.

5.3. Site Hydrology

The following sections discuss the site hydrology in terms of both surface waters and groundwater.

5.3.1. Surface Waters

No natural surface water bodies, including ponds, streams, or other bodies of water, were present on or adjoining to the site at the time of the site reconnaissance.

5.3.2. Groundwater

Site-specific groundwater depth information has been gathered since 2003 from a network of groundwater monitoring wells located throughout the site. According to the most recent Semi-Annual Groundwater Monitoring Report for the site, dated January 29, 2013, groundwater beneath the site has ranged from 23.03 to 46.86 feet below ground surface (bgs), with a southwesterly flow direction.

6. ASTM NON-SCOPE CONSIDERATIONS

6.1. Asbestos Containing Materials (ACMs)

An assessment of ACMs in the storage shed and fire pump test pit was performed by Ninyo & Moore and no ACMs were detected (Ninyo & Moore, 2013). In addition, based on the approximate date of construction (2012) of the other site buildings, the presence of ACMs is unlikely, but cannot be ruled out without specific testing and analysis.

6.2. Lead-Based Paint

An assessment of lead-based paint in the storage shed and fire pump test pit was performed by Ninyo & Moore and both lead-containing paint and lead-based paint were detected (Ninyo & Moore, 2013). Based on the approximate date of construction (2012) of the other site buildings, paint observed on the site buildings is unlikely to contain lead..

6.3. Mold

No evidence of microbial growth was observed within the inspected buildings at the time of the site reconnaissance.

6.4. Vapor Encroachment

Ninyo & Moore conducted a preliminary vapor encroachment screen (pVES) for potential constituent of concerns (COCs) that may migrate as vapors onto the site as a result of con-

taminated soil and/or groundwater near the site. The purpose of the pVES is to identify a vapor encroachment condition (VEC), which is the presence or likely presence of COC vapors in sub-surface soils at the site caused by the release of vapors from contaminated soil or groundwater either on or near the site. The potential for VECs beneath the site were evaluated using a Vapor Encroachment Screening Matrix (VESM). The VESM included performing a Search Distance Test to identify if there are any known or suspect contaminated sites surrounding or upgradient of the site within specific search radii, a COC Test (for those known or suspect contaminated sites identified within the Search Distance Test) to evaluate whether or not COC are likely to be present, and a Critical Distance Test to evaluate whether or not COC in a contaminated plume may be within the critical distance of the site (100 feet for non-petroleum hydrocarbon contaminants, and 30 feet for petroleum hydrocarbon contaminants). Based on the completion of the VESM, there is a potential VEC currently existing at the site, due to the former presence of two USTs within pavements along the south side of the apparatus building and a historical release from those USTs. A copy of the VESM is included in Appendix E.

6.5. Radon

Radon is a naturally occurring colorless, odorless, tasteless radioactive gas resulting from the natural decay of uranium- and thorium-bearing minerals in rocks and soil. This gas migrates through the rocks and soil and enters structures through cracks and penetrations in the foundation or slab. Due to the fact that uranium, thorium, and radon occur in varying amounts in rock and soil, radon is present in the ambient air. Elevated radon concentrations may be cumulative due to a lack of proper ventilation in the lowest levels of a building. Any one living in a building with elevated radon concentrations may have an increased risk of contracting lung cancer over a period of years. The USEPA Action Level for radon gas is 4.0 pico curies per liter of air (pCi/l).

In California, the Department of Health Services (DHS), Environmental Management Branch collects radon test data for buildings throughout the state. The DHS Radon Database for California contains both long-term and short-term indoor radon measurements from either an active or a passive measurement device. Currently, there are approximately

16,000 individual radon test results from all 58 California counties in the database. The test records are grouped by the zip code area in which individual measurements were made. According to the 2010 DHS Radon Database for the site zip code (95222), a total of 62 measurements were taken and seven were found to be in excess of the 4.0 pCi/l Action Level.

6.6. Wetlands

Based on our review of the EDR Report, there are no mapped wetlands on the site properties.

6.7. Other

Based on interviews stating that buried airplane and automobile parts are potentially present on the southern portion of the site, a geophysical survey was performed by Advanced Geological Services. The geophysical investigation was carried out using electromagnetic and ground-penetrating radar (GPR) on November 7. 2013. A copy of the Geophysical Investigation Report is included in Appendix F.

The geophysical investigation identified the following features which are identified on Figure 2 of the Geophysical Investigation Report:

- Shallow buried metal debris (areas A-1, A-2, A-6, and A-7,
- A shallow buried metal structure (area A-3),
- The shallow buried monitoring well MW-5 (area A-4),
- A shallow buried metal pipe (area A-5), and
- A large, diffuse area was observed of either buried metal at depth or natural soil or-geological conditions which caused interference (area A-8).

In order to confirm the Geophysical Investigation report findings. trenching was performed by GeoCon Inc. in December 2013 in the above noted areas. The trenching identified buried metallic debris/waste, a drainage pipe, and a buried burn pile. The drainage pipe observed was used to drain water from beneath the nearby asphalt paved driveway and no odors or

stains were noted in the vicinity of the drainage pipe. The presence of the buried metallic debris/waste and burn pile represents a REC.

No other Non-CERCLA issues were addressed as part of this report.

7. INTERVIEWS

Interviews were conducted by Ninyo & Moore with the objective of obtaining information regarding potential RECs in connection with the site. Interviews with present owners, operators, and/or occupants of the site, as well as other knowledgeable parties as appropriate, is mandated by ASTM Practice 1527-05. Results from our interviews are discussed below and throughout this report.

7.1. Owner or Key Site Manager

Mr. Steve Chambers, Associate Civil Engineer with CalFire, was interviewed by Mr. Sims. According to Mr. Chambers, the first use of the site as a school. The use of the site changed in 1950 when a fire station occupied the property in 1950, and no changes to the site use have occurred since then. The current dozer building, apparatus building, storage room, generator room, barracks, and ASTs were constructed in approximately 2012. Mr. Chambers was aware of the release from the former USTs and groundwater monitoring wells, but did not know specific details regarding the release. Mr. Chambers was not aware of any other spills, leaks, investigations, or cleanups of petroleum products or hazardous materials; or hazardous waste storage and disposal on the site.

Mr. Tom Hutchison, Fire Captain with CalFire was interviewed by Mr. Sims. Mr. Hutchison had been stationed at the site since 1996. Mr. Hutchison stated that there was potentially buried airplane and automobile parts on the southern portion of the site. A geophysical survey was conducted based on the potential presence of buried airplane and automobile parts and is discussed in Section 6.7.

7.2. Past Owner Interviews

Past ownership entities were not made available to Ninyo & Moore during the preparation of this ESA. Therefore, interviews with past site owners was not conducted.

7.3. State and/or Local Government Officials

Representatives from the CCEHD were interviewed regarding available records for the site. Results of the interviews are discussed in Sections 4.2 and 4.3.

8. FINDINGS, OPINIONS, CONCLUSIONS, AND RECOMMENDATIONS

Based upon the results of this Phase I ESA, the following findings, opinions, conclusions, and recommendations are provided.

8.1. Finding and Opinions

The following presents a summary of findings and opinions associated with this Phase I ESA performed for the site, including known or suspect RECs, historical RECs and *de minimis* environmental conditions (i.e., conditions that generally do not present a material risk of harm to public health or the environment).

In summary, the following items were noted:

- Historical research regarding the site history compiled during the preparation of this report indicates the site was vacant, undeveloped oak woodlands prior to use as a school in 1858. The school building was located on the southwestern portion of the site until approximately 1985 when it was moved off-site to the northwest adjacent property. The site has been occupied by a fire station comprised of two buildings from approximately 1944 to 2011. A storage shed building was constructed between 1987 and 1998 and is still present at the site. In 2011, the two original fire station buildings were demolished and the current Altaville Forest Fire Station buildings were constructed in 2012.

- Site utilities include potable water and sanitary sewer provided by the City of Angels Camp; PG&E providing electricity, and Ferral Gas providing propane fuel for on-site heating and cooling systems.

- On November 7, 2013, Mr. Peter Sims, Project Environmental Geologist with Ninyo & Moore, conducted a site reconnaissance. At the time of the site reconnaissance, the site was occupied by CalFire. The site structures included a barracks, dozer building, apparatus building, storage room, generator room, and storage shed with office space. The site is mostly paved with asphalt, and the remaining areas contain landscaping and exposed soil. The site buildings are composed of steel or wood frame construction, with the exception of the storage and generator rooms which are constructed with cinder-block.

- Additional site features observed included a combined 500-gallon gasoline and 1,000-gallon diesel AST with dispensers, a 15-foot deep fire-pump test pit, a pad-mounted

transformer, two pole-mounted transformers, and floor drains in the dozer building and apparatus building which drain to a sand/oil separator. These features were observed in good condition with no leaks, stains, or odors.

- Paint and paint thinner were stored in the northern portion of the storage shed. Waste oil was stored in 3-gallon plastic containers and a 30-gallon steel drum in the southern portion of the storage shed. Mixed gasoline and diesel labeled as "torch mix" was stored in 11 3-gallon plastic containers in the southern portion of the storage shed. Paint, lubricants, and paint thinner were stored in flammables cabinets in the dozer building and the apparatus building. Waste oily rags were stored in a flammables can in the dozer building. Quart-size containers of motor oil were stored in the generator room. Paint and lubricant were stored in the storage room. No leaks or stains were observed in connection with use or storage of hazardous substances and petroleum products on the site..

- Records obtained from the CCEHD indicate that the site uses and stores hazardous materials and generates reportable quantities of hazardous waste. Hazardous materials used and stored on-site include diesel fuel, transmission fluid, hydraulic fluid, motor oil and propane. Hazardous waste generated includes approximately 30-40 gallons of waste oil per month and 100 gallons of antifreeze per year. Two minor violations with regard to record keeping and hazardous materials storage were noted during our review of CCEHD files. Violations included failure to maintain three years worth of waste disposal manifests and failure to separate used oil filters from a waste oil container. According to the CCEHD files, the violations were corrected within one week of being received.

- The site is listed on several of the databases searched by EDR, including the LUST site list, the AST site list and listings associated with the site's use and storage of hazardous materials and hazardous waste. A leak was discovered in two former 750-gallon USTs containing gasoline and diesel at the site. Six groundwater monitoring wells (MW-1 through MW-6) we're installed to monitor the release and were observed on site during our reconnaissance. According to the most recent groundwater monitoring event, which occurred on January 9, 2013, concentrations of MTBE were reported in MW-1, MW-3 and MW-4 at concentrations of 7.5 micrograms per liter (µg/l), 2.1 µg/l and 4.2 µg/l, respectively. MTBE was not detected in upgradient (with respect to the former USTs) well MW-2 or downgradient wells MW-5 or MW-6. Concentrations of benzene were detected in MW-1, MW-3 and MW-4 at concentrations of 2.0 µg/l, 0.59 µg/l and 0.55 µg/l, respectively. Concentrations of total petroleum hydrocarbons as diesel (TPHd) were detected in all but one monitoring well, at concentrations ranging from 62 to 97 micrograms per liter (µg/l). No detectable concentrations of petroleum hydrocarbon constituents have been detected to date in MW-5, located 200 feet downgradient of the former USTs. A detailed discussion of the site's database listings is presented in Sections 4.1.1, 4.2.1 and 4.2.2.

- Several off-site facilities were located within the EDR search radius from the site. Based on our review of the listed facilities' regulatory status, distance from the site,

and/or direction relative to groundwater flow, none of the off-site facilities are considered to be a REC to the site at this time.

- Based on review of the EDR Radius Map Reports, the primary soil types beneath the site are mapped as clay loam and stony loam. Generally, the soils within the site area have been formed by the weathering and breakdown of the underlying rocks and minerals including gabbroic rock, greenstone, slates, and tuffs (EDAW, 2002). Boring logs prepared by URS indicated that bedrock was encountered at approximately 4 to 8 feet bgs and contained multiple mentions of turquoise, blue-green, greenish-gray rock and greenstone which are indicative of rocks that may contain NOA (URS, 2007). Because gabbroic rock and greenstone may be a source of asbestos in soil, there is a potential for NOA to be present at the site.

- Based on completion of the VESM, it was determined that the potential for a VEC does exist at the site, due to the presence of petroleum hydrocarbons in groundwater within 30 feet of a site building, as determined in the most recent January 2013 Semi-Annual Groundwater Monitoring Report by Versar, Inc. for the site. The source of the hydrocarbons was two USTs that are known to have leaked petroleum hydrocarbons to the soil and groundwater beneath the site. The USTs were formerly located adjacent to the southern exterior wall of the current garage/apparatus building and were removed in 1998.

- Due to the date of construction (between 1987 and 1998) of the storage shed building located along the southeasterly boundary of the site, there is a possibility that light ballasts containing PCBs may be present in this site building.

- An assessment of ACMs and lead-based paint was conducted by Ninyo & Moore in November 2013 on the storage shed building and fire pump test pit. ACMs were not detected. Lead-based paint and lead containing material were detected on both the storage shed and the fire pump test pit.

- Based on interviews stating that buried airplane and automobile parts are potentially present on the southern portion of the site, a geophysical survey was performed (Appendix F). The geophysical survey identified several areas of subsurface metallic debris, structures and pipes. Trenching was performed by the DGS in these areas to identify potential geotechnical hazards such as voids. The trenching identified buried metallic debris/waste, a drainage pipe, and a buried burn pile.

8.2. Conclusions

Ninyo & Moore has performed this Phase I ESA in accordance with the ASTM Standards on ESAs for Commercial Real Estate E 1527-05, and the EPA proposed rule for AAI standards as set forth in Title 40 of CFR Section 312.10. Any exceptions to, or deletions from, this practice are described in Section 8.4 of this report. This assessment has revealed no *de*

minimis conditions or Historical RECs for the site. This assessment has revealed the following RECs and non-ASTM 1527-05 scope considerations:

RECs:

- The site is an active LUST site with groundwater impacted by MTBE, benzene, and TPHd.
- Buried metallic debris/waste and burn pile may be a source of impacts to site soil.
- There is a potential for the presence of NOA in site soils.

Non-ASTM 1527-05 Scope Considerations:

- Based on the completion of the VESM, there is a potential VEC currently existing at the site, due to the presence petroleum hydrocarbon constituents (diesel, benzene and MTBE) in groundwater within 30 feet of a site building, as determined in the most recent 2013 Semi-Annual Groundwater Monitoring Report by Versar, Inc.
- Due to the date of construction (between 1987 and 1998) of the storage shed building located along the southeasterly boundary of the site, there is a possibility that light ballasts containing PCBs may be present.
- Reported lead containing materials and lead-based paint are present in the storage shed building and the fire pump test pit.

8.3. Recommendations

Ninyo & Moore recommends the following:

- Continue to pursue closure of the site LUST case through monitored natural attenuation.
- Conduct a Phase II ESA to determine if the buried metal debris/waste and burn pile on the southern portion of the site have resulted in a release of hazardous materials to the subsurface.
- In accordance with Calaveras County Air Pollution Control District (CCAPCD) requirements, one of the two options below should be implemented:
    - A workplan to investigate the potential presence of NOA at the site should be prepared and submitted to CCAPCD for approval. The workplan should detail the collection and analysis of soil samples for NOA. Upon approval, the workplan should be implemented and results of the NOA investigation submitted to CCAPCD. If the results of the NOA investigation determine that NOA is not present at the site, then an application for a variance from the requirements to prevent, control, and monitor fugitive dust should be submitted to CCAPCD.

- If the NOA investigation determines that NOA is present in site soil or if a NOA investigation is not performed, then future site activities that disturb soil should be performed in accordance with CCAPCD requirements to prevent, control, and monitor fugitive dust.

- Review the results of Versar's forthcoming soil vapor survey to determine if the potential VEC identified has impacted the site.

- Prior to demolition or renovation activities at the storage shed and fire pump test pit, all lead containing materials and lead-based paint should be repaired or abated by a licensed lead containing material abatement/stabilization removal contractor in compliance with the most recent applicable federal, state, and local laws and regulations. In addition, PCB-containing light ballasts should be removed and properly recycled or disposed of by a licensed contractor according to all applicable federal, state, and local laws and regulations.

8.4. Data Gaps

No significant historical data gaps were noted during the preparation of this Phase I ESA report. Although in some instances, time gaps between various historical sources are greater than 10 years, it is Ninyo & Moore's opinion that based on the site use these gaps are considered insignificant.

8.5. Deviations

This report was prepared in accordance with ASTM Practice E 1527-05. No deviations from this standard occurred in this Phase I ESA. Based on the information gathered by Ninyo & Moore for the purposes of this assessment, it is our opinion that the data obtained from our reconnaissance, records reviewed, and interviews conducted, is adequate to make a conclusion on the environmental condition of the site with respect to the existence or lack of RECs associated with the site, without significant data gaps.

9. ADDITIONAL SERVICES

No additional services were performed during the preparation of this report.

10. REFERENCES

California Department of Conservation, California Geological Survey (CGS), 2002. California Geomorphic Provinces, Note 36.

California Department of Toxic Substances Control, EnviroStor Website, http://www.envirostor.dtsc.ca.gov/public/.

California State Water Resources Board, GeoTracker Website, http://geotracker.swrcb.ca.gov/.

CVRWQCB, 2013, Review of Soil Vapor Survey and Groundwater Monitoring Well Abandonement Work Plan, Altaville Forest Fire Station, 125 N. Main Street, Altaville, Calaveras County, dated October 16.

EDAW, 2002, Initial Study/Mitigated Negative Declaration for the Proposed CDF Altaville Forest Fire Station Replacement Project, dated December 23.

Environmental Data Resources, Inc., 2013, The Environmental Data Resources Sanborn Map Report, dated October 29.

Environmental Data Resources, Inc., 2013, The Environmental Data Resources Aerial Photo Decade Package, dated November 1.

Environmental Data Resources, Inc., 2013, The Environmental Data Resources Topographic Map Report, dated October 30.

Environmental Data Resources, Inc., 2013, The Environmental Data Resources City Directory Abstract, dated November 4.

Environmental Data Resources, Inc., 2013, The Environmental Data Resources Environmental Liens and Activity Use Limitations Search, dated November 7.

Environmental Data Resources, Inc., 2013, The Environmental Data Resources Radius Map Report with GeoCheck®, dated October 30.

Geocon Consultants, Inc., 2003, Additional Site Investigation Report, Altaville Forest Fire Station, Altaville, California, dated August 27.

Geocon Consultants, Inc., 2003, Additional Site Investigation Workplan, Altaville Forest Fire Station, Altaville, California, dated November 6.

Ninyo & Moore, 2013, Hazardous Building Materials Survey, Altaville Forest Fire Station, Permanent Storage Shed and Fire Pump Test Pit, 125 North Main Street, Angels Camp, California, dated December 9, 2013.

State of California, Department of Health Services (DHS), Radon Database for California, October, 2002.

United States Geological Survey, 1973, 7.5-Minute Topographic Quadrangle Map Series, Angels Camp, California.

URS, 2002, Report for Site Investigation at the California Department of Forestry, Altaville Fire Station, 125 North Main Street, Altaville, California, dated January 3.

URS, 2007, Additional Site Investigation Work Plan, California Department of Forestry, Altaville Fire Station, 125 North Main Street, Altaville, California, dated September 14.

Versar, Inc., 2005, Report of Additional Site Investigation of the Fuel Tank Release Site, Altaville Fire Station, 125 North Main Street, Altaville, California, dated January 28.

11. QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

As required by 40 CFR §312.21(d) the following statement is included:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined by §312.10. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Kris M. Larson, PG 8059
Principal Environmental Geologist

The Environmental Professional qualifications, pursuant to 40 CFR §312.10(b)(2), of the persons that prepared and/or reviewed this report are provided in Appendix G.

REFERENCE: CALIFORNIA ROAD ATLAS, THOMAS GUIDE, 2006.

N

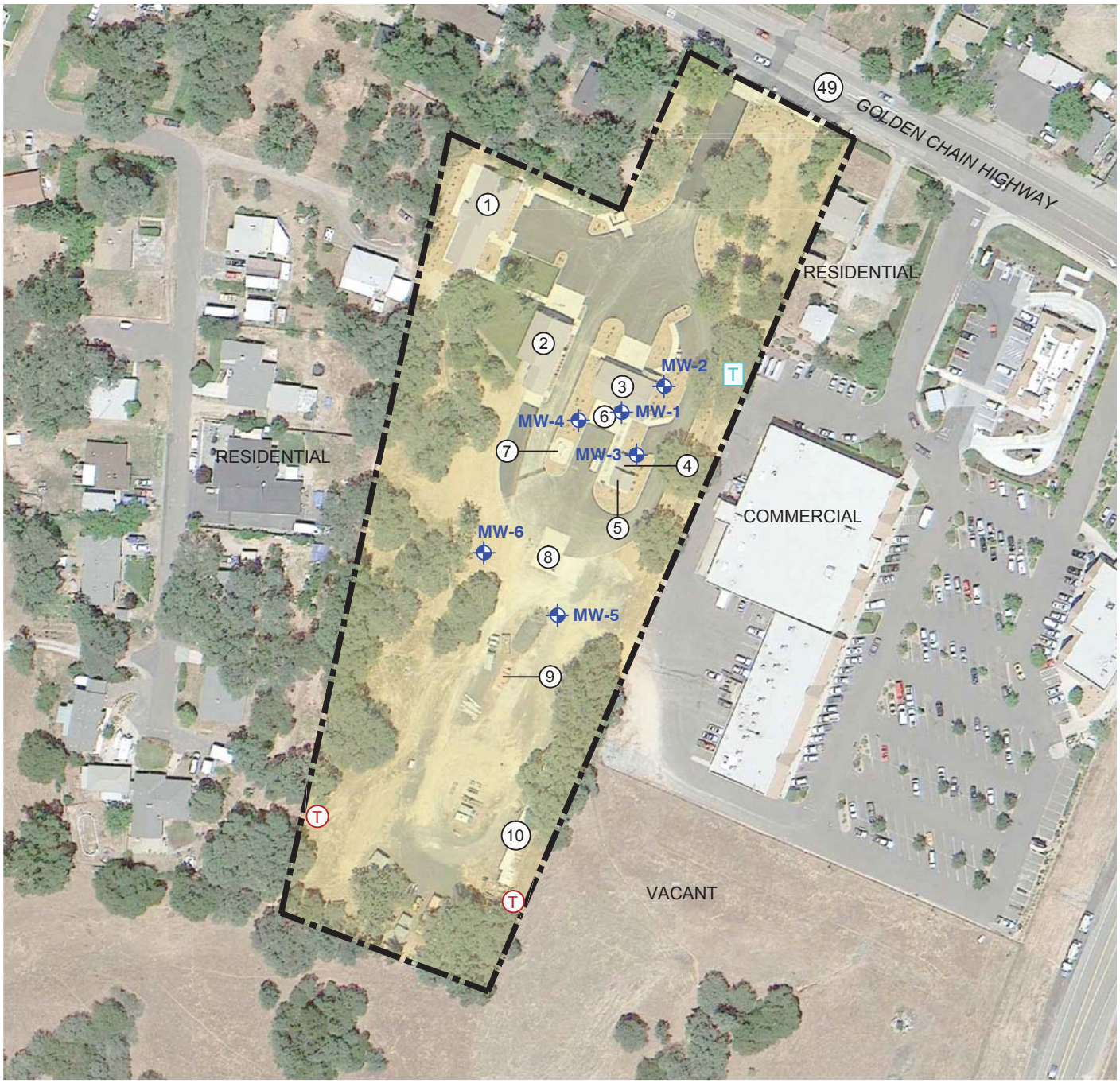
SCALE IN FEET

0 3,000 6,000

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	SITE LOCATION	FIGURE
PROJECT NO. / DATE	125 NORTH MAIN STREET ALTAVILLE, CALIFORNIA	1
402242001 / 12/13		

402242001-SL-1.dwg, Dec 11, 2013, 12:47pm, SN



REFERENCE: GOOGLE EARTH IMAGERY, 2013.

N

SCALE IN FEET

0 150 300

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND

- SITE BOUNDARY
- (T) POLE-MOUNTED TRANSFOMER
- [T] PAD-MOUNTED TRANSFOMER
- MW-6 GROUNDWATER MONITORING WELLS
- (1) BARRACKS
- (2) DOZER BUILDING
- (3) APPARATUS BUILDING
- (4) STORAGE ROOM
- (5) GENERATOR ROOM
- (6) FORMER UNDERGROUND STORAGE TANKS
- (7) PROPANE ABOVEGROUND STORAGE TANK (ASTs)
- (8) GASOLINE/DIESEL ASTs
- (9) FIRE PUMP TEST PIT
- (10) STORAGE SHED AND OFFICE

Ninyo & Moore

PROJECT NO.	DATE
402242001	12/13

SITE VICINITY

125 NORTH MAIN STREET
ALTAVILLE, CALIFORNIA

FIGURE

2

402242001-SV-2.dwg, Dec 11, 2013, 12:48pm, SN

APPENDIX A

SITE PHOTOGRAPHS

Photograph 1: **View south of the driveway entering the site.**

Photograph 2: **View south of the apparatus building.**

Photograph 3: **View of the interior of the apparatus building showing floor drains and a flammable storage cabinet.**

Photograph 4: **View of the contents of the flammable storage cabinet. The contents include paint, paint thinner, and lubricants.**

Photograph 5: **View south of the dozer building.**

Photograph 6: **View of the interior of the dozer building showing floor drain.**

Photograph 7: **View of the interior of the dozer building showing floor drain and maintenance equipment storage.**

Photograph 8: **View of the interior of the dozer building and storage of waste oily rags.**

Photograph 9: **View west of the barracks.**

Photograph 10: **View of the barracks living area.**

Photograph 11: **View of the barracks kitchen area.**

Photograph 12: **View of the barracks restroom.**

Photograph 13: **View of a barracks bedroom.**

Photograph 14: **View east of storage room and generator room.**

Photograph 15: **View of the interior of the storage room and storage of fire hoses, nozzles, and valves.**

Photograph 16: **View of the interior of the storage room and storage of fire valves, paint, and lubricant.**

Photograph 17: **View of the interior the generator room of the propane-fueled emergency generator.**

Photograph 18: **View of the interior of the generator room and storage of motor oil and household cleaners.**

Photograph 19: **View west of the 1,000-gallon and 500-gallon propane aboveground storage tanks.**

Photograph 20: **View west of the combined 500-gallon gasoline and 1,000-gallon diesel above ground storage tank and dispensers.**

Photograph 21: **View south of the southern portion of the site.**

Photograph 22: **View south of the fire pump test pit.**

Photograph 23: **View of the interior of the fire pump test pit.**

Photograph 24: **View east of the storage shed and office.**

Photograph 25: **View of paint and paint thinner stored in the northern portion of the storage shed.**

Photograph 26: **View of exercise and maintenance equipment stored in the central portion of the storage shed.**

Photograph 27: **View of empty 55-gallon drums stored in the southern portion of the storage shed.**

Photograph 28: **View of waste oil stored in plastic basins and a 30-gallon steel drum in the southern portion of the storage shed.**

Photograph 29: **View of "torch mix" (mixed gasoline and diesel fuel) stored in 11 3-gallon plastic containers in the southern portion of the storage shed.**

Photograph 30: **View of non-hazardous firefighting foam concentrate in the southern portion of the storage shed.**

Photograph 31: **View of three empty 55-gallon drums stored on the southeastern portion of the site.**

Photograph 32: **View of an empty and unused former aboveground storage tanks.**

Photograph 33: **View north of the monitoring well MW-6 well monument, beyond which are the dozer building and apparatus building.**

Photograph 34: **View south of the adjacent vacant property to the south.**

Photograph 35: **View west of the adjacent residential properties.**

Photograph 36: **View west of the adjacent historic school house property.**

Photograph 37: **View east of the adjacent commercial property.**

Photograph 38: **View north of Route 49 and adjacent commercial properties.**

APPENDIX B

SITE DOCUMENTATION

PHASE I ESA/AAI REQUIREMENTS

According to the All Appropriate Inquiry (AAI, 40 CFR 312) requirements and ASTM (E 1527-05) guidance on conducting Phase I Environmental Site Assessments, the "user" of the assessment must provide the following information, if available, to the environmental professional in order to qualify for Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001. Please check yes or no and provide any additional information you may have regarding the site. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

(1) Environmental cleanup liens that are filed or recorded against the site (40 CFR 132.25).
Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law?

☐ Yes ☑ No

If yes, please explain:

(2) Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).
Are you aware of any activity use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

☑ Yes ☐ No

If yes, please explain: There are excavation requirements while working in or around the Historical School House site. DGS has copy of the Arch Report.

(3) Specialized knowledge or experience of the person/department requesting the Phase I ESA and seeking to qualify for the landowner liability protections (40 CFR 312.28).
As the user of this ESA, do you have any specialized knowledge or experience related to the property or adjoining properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

☑ Yes ☐ No

If yes, please explain: We currently occupy the property and have since the 1950's.

(4) Relationship of the purchase price to the fair market value of the property, if it were not contaminated (40 CFR 312.29).
Does the purchase price offered for this property reasonably reflect the fair market value of the property? If there is a difference between the purchase price and the fair market value, have you considered whether the lower purchase price is because contamination is known or believed to be at the property?

Please discuss: We currently own this property and have since the 1950's.

(5) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).
Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,
(a) Do you know the past uses of the property? Yes
(b) Do you know of specific chemicals that are present or once were present at the property? Yes
(c) Do you know of spills or other chemical releases that have taken place at the property? Yes
(d) Do you know of any environmental cleanups that have taken place or are ongoing at the property? Yes

☑ Yes ☐ No

If yes, please explain: There have been multiple Hazardous materials used at this site. The underground fuel storage tanks leaked and have been monitored for years at this site.

(6) The degree of obviousness of the presence or likely presence of contamination at the property and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).
As the user of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

☑ Yes ☐ No

If yes, please explain: Supposedly there were previous investigations prior to the construction of the Fire Station (2012) that would be more accurate than information I have. DGS should have all those reports.

Mario H Hernandez		11/25/13
Mario Hernandez		11/25/13
Print Name	Signature	Date

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

16 October 2013

Chief Candice Gregory
Calif. Department of Forestry and Fire Protection
Region Chief Sierra South
1234 East Shaw Avenue
Fresno, CA 93710

REVIEW OF SOIL VAPOR SURVEY AND GROUNDWATER MONITORING WELL ABANDONMENT WORK PLAN, ALTAVILLE FOREST FIRE STATION, 125 N. MAIN STREET, ALTAVILLE, CALAVERAS COUNTY – CASE 050085

Central Valley Regional Water Quality Control Board staff reviewed the 2 October 2013 *Work Plan to Conduct Soil Vapor Survey and Groundwater Monitoring Well Abandonment* (*Work Plan*) submitted by Versar on your behalf for the subject site (Site).

In the *Work Plan*, Versar is proposing to conduct a soil vapor survey at the Site in order to assess the potential risk for petroleum vapor intrusion into onsite buildings. Additionally, Versar is proposing to abandon all six (6) site groundwater monitoring wells. The soil vapor survey work is proposed to include installation and sampling of five (5), temporary, five foot deep soil vapor sampling probes, utilizing direct push methodology and isopropyl alcohol as a leak detection compound. Soil vapor samples are proposed to be analyzed for gasoline-range hydrocarbons (TPH-g) and volatile organic compounds (VOCs) utilizing EPA Method TO-15.

Site monitoring wells are proposed to be abandoned under Calaveras County permitting by pressure grouting and over-excavating the top 5 feet of each well. However, monitoring wells cannot be abandoned until: 1) a public notification of the Sites potential closure, along with a 60-day public comment period, has been performed and all comments are adequately addressed; and 2) closure of the Site has been approved by our office and a well abandonment directive has been issued. As of this date, no public notification and comment period has been performed and our office has not concurred that the Site meets the criteria for closure. Therefore the Sites monitoring wells should not to be abandoned at this time.

Based on my review of the proposed soil vapor survey work, the proposed work is reasonable and appropriate, with the following conditions:

1. Due to the Sites deeper groundwater depth and per DTSC's Soil Vapor Guidance, each of the proposed vapor probe locations is to have two (2) samples collected, one at 5-feet below ground surface (bgs) and one at 15 feet bgs.

2. Soil vapor analyses are to include fuel oxygenates (MTBE, TBA, DIPE, ETBE and TAME), and naphthalene, in order to properly assess vapor intrusion risk.

Please implement the proposed soil vapor data collection with the above modification and submit a Soil Vapor Results report by **28 February 2014**.

In order to help initiate the required public notification process, I e-mailed a copy to your consultant on 16 October and have included an example site notification fact sheet for your use. Please have the fact sheet modified to reflect the Site specifics and e-mail a copy of the draft fact sheet to me for my review and approval. Once I approve the fact sheet, you are to mail it out to all property owners, businesses and residents within 500 feet of the Site, the County Environmental Management Department and the City of Angels Camp water purveyor. Once the fact sheet is mailed, e-mail me copies of the mailing receipts, along with the final fact sheet, so that the required 60 day public comment period can be started.

Moreover, as part of the risk assessment work, you were previously requested to assess dermal exposure risk in addition to the soil vapor risk in my letter dated 12 February 2013. Please see that risks from dermal contact is evaluated and included in the Soil Vapor Results report.

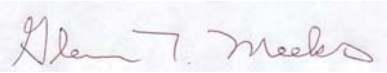
In addition, please prepare and submit a formal Closure Request report by **30 March 2014**. The closure request report should include a brief summary of the work performed at the Site, a description of the Site geology, an estimate of the initial contaminant mass released, an estimate of the remaining contaminant mass, an estimate of when water quality objectives (WQOs) will be met in groundwater (Use Primary MCLs as WQOs), and a comparison of the Site conditions to the State Boards Low Threat Closure Policy criteria.

In summary please submit the following:

1. A Soil Vapor Results report by **28 February 2014;** and

2. A Closure Request report by **30 March 2014**.

Should have any questions, please contact me by phone at (916) 464-4708 or by e-mail at gmeeks@waterboards.ca.gov.



Glenn T Meeks, PG
Engineering Geologist
UST Enforcement Unit II

Attachment: Example Notification Fact Sheet

cc: Mr. Jason Boetzer, Calaveras County Environmental Health Department, San Andreas
Mr. A. K. Jain, DGS, Sacramento
Mr. Curt Karlin, CDF, Sacramento
Mr. Luke Serpa, CDF, Fresno
Mr. Mike Dugan, CDF, Sacramento
Mr. Tim Berger, Versar, Fair Oaks

October 2, 2013

California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, California 95670

Subject: Work Plan to Conduct Soil Vapor Survey and Groundwater Monitoring Well Abandonment for an Underground Storage Tank Release at the California Department of Forestry, Altaville Forest Fire Station, 125 North Main Street, Angels Camp, California.
Versar Project No. 110280.5000.013

Dear Mr. Meeks:

Versar, Inc. (Versar) has prepared this work plan for a soil vapor survey and groundwater monitoring well abandonment, as directed in your letter dated February 12, 2013. The work described in this work plan will be conducted in accordance with the California EPA, Department of Toxic Substances Control, *G*□□□□□□ □□□□□□ *E*□□□□□□□□ □□□ □ □□□□□□□ □□□□□□□□□□ □□□□□ /□□□□□□□ □□ /□□□□□*A*□□□□□□□/□□□□□□□ *G*□□□□□□□□(October 2011). The work will be performed at the Altaville Forest Fire Station, 125 North Main Street, Angels Camp, California (Site). The Site location is depicted in Figure 1, the Site layout; including building, former underground storage tank (UST) and monitoring well locations; is depicted in Figure 2.

□□C□□□□□ND

In January 1998, a leak was discovered during the removal of one 750-gallon gasoline underground storage tank (UST) and one 750-gallon diesel fuel UST. Soil samples collected from beneath the gasoline UST location contained concentrations of total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, and xylenes (BTEX); and TPH as diesel fuel (TPH-d). The location of the USTs were below the former Gas House.

In November 2001, URS Corporation (URS) advanced four soil borings around the former UST locations and collected soil samples for laboratory analysis. TPH-g, TPH-d and BTEX were detected to a depth of 22 feet below ground surface (bgs). Fuel oxygenates were not detected in the soil samples.

In July 2003, Geocon Consultants, Inc. (Geocon) advanced another three borings at the Site, and converted one boring to a groundwater monitoring well, located adjacent to the former gasoline UST. Near the former USTs, soil samples to 50 feet bgs contained TPH-d and some BTEX components. More distal borings contained TPH-d to a depth of 14 feet bgs (deeper samples were not collected). The groundwater sample collected from the monitoring well, MW-1, contained 14,000 micrograms per liter (μg/L) of TPH-d, and 210 μg/L TPH-g, and 540 μg/L of methyl tertiary butyl ether (MTBE). Relatively low concentrations of BTEX and other fuel oxygenating compounds (FOCs) were also detected in the sample.

In January 2005 an additional Site investigation was completed by Versar. The investigation included the installation of three groundwater monitoring wells, and sampling of the three new wells and existing well, MW-1. MTBE was detected in three of the monitoring wells, ranging in concentration from 4.2 μg/L to 120 μg/L; MTBE was not detected in the upgradient well, MW-2. The investigation concluded that MTBE-contaminated groundwater was flowing southwesterly down the length of the Site, and the plume was likely contained within the Site.

In a letter dated 7 March 2005, the California Regional Water Quality Control Board, Central Valley Region (CVRWQCB) requested a work plan for three additional groundwater monitoring/sampling locations to complete the plume definition in soil and groundwater. A work plan was submitted on 14 September 2007 and approved on 3 October 2007.

In December 2007 and February 2008, URS installed two additional monitoring wells (MW-5 and MW-6) at the Site. These two wells were sampled in February and May 2008. All constituents of concern were non-detect in these two wells.

In 2011, the Altaville Forest Fire Station was demolished and new facilities were constructed. No monitoring wells were destroyed during the construction. On December 6, 2011, the CVRWQCB observed the extension of monitoring wells to the new grade, performed by the Department of General Services Site contractor. The wells were then re-surveyed before being sampled by Versar in June 2012.

Versar conducted semiannual groundwater monitoring in June 2012 and January 2013 and requested No Further Action based on Low Threat policy for case closure. The CVRWQCB requested that a soil vapor survey be conducted before the Site can be reviewed for closure.

SC□□E □□ □ □□□

In response to the CVRWQCB request to perform a soil gas survey at the Site, Versar will perform the tasks outlined below. Also, in anticipation of Site closure, Versar has included monitoring well abandonment as part of this work plan, to be completed after a public review period, with approval of the CVRWQCB.

- Obtain required permits and notify Underground Service Alert (USA), as well as clear the investigation area using a private subsurface utility locator.

- Using direct push technology (DPT), install five (5) temporary vapor sampling points to a depth of five feet bgs at locations within the potentially impacted soil area and adjacent to nearby buildings shown on Figure 3. The samples will be analyzed for TPH-g and VOCs by EPA Method TO-15. The results of the survey will be used to assess applicability of case closure to the UST release at the Site.

- With the approval of the CVRWQCB and per Calaveras County requirements, six (6) groundwater monitoring wells will be abandoned by pressure grouting and overdrilling the top five feet of the well.

5330 Primrose Drive, Suite 147
Fair Oaks, CA 95628
916.962.1612
www.versar.com

- Investigation-derived wastes (IDW) will be placed on Site into 55-gallon steel drums. The containers will be appropriately labeled and stored in a secure area pending the results of the laboratory testing. IDW will be removed from the Site within 90 days of the field work.

Versar will document the findings of the field and analytical investigation activities in a summary report. The report will include the investigation methodologies, observations, findings, and conclusions. Scaled figures will be provided depicting the Site location and layout, boring logs, and groundwater flow direction and gradient. Tables will be provided summarizing the analytical data. The laboratory analytical report and chain of custody documentation will be included with the report as an appendix.

IE D INVETI TI N

e m g d S ce c

Permits for soil vapor sample borings will be obtained if required from the Calaveras County Environmental Health Department. Prior to intrusive work, a private underground utility locator will locate and identify utilities in the proposed investigation areas at the Site. Once the utilities have been located, the locations of soil vapor sampling points will be marked with white paint. Underground Service Alert (USA) will be contacted a minimum of 48 hours before field activities, as required by law.

ec e d S e

A project-specific health and safety plan, included as Attachment III, has been prepared for the investigation activities at the Site. The plan will be reviewed by Versar field personnel and subcontractor staff prior to the start of field activities.

Dec m ced e

Down-hole equipment including drilling rods, bits, and sampling equipment will be thoroughly cleaned before and after drilling each borehole. Equipment will be cleaned with water and laboratory-grade, non-phosphate surfactant, and double-rinsed. Wastewater generated during this process will be stored on-Site in appropriate containers pending disposal. Clean, disposable gloves will be worn by all field personnel when handling decontaminated equipment

e d e eme

Measurements to objects in the field will be made using a rolling wheel or flat measuring tape. Graduations will be in the standard system to an accuracy of one-half foot. Directions may be determined using a hand-held compass, accurate to one-half degree. The locations of objects, such as buildings, pads, and borings, will be oriented with respect to distances and directions from permanent Site objects such as building or curb corners and survey monuments.

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Vapor sampling points will be advanced using DPT. Temporary soil gas monitoring points will be constructed using the Geoprobe Systems Post-Run Tubing System (PRT). Soil gas samples will be collected from a depth of approximately five (5) feet below present grade (bpg) in one-liter summa canisters (batch certified). The leak check gas will be isopropyl alcohol. Sampling depths may change based on depth to groundwater, soil saturation, and encountered subsurface conditions. The prospective sample point locations are shown in Figure 3, Soil Vapor Sample Location Map. Versar's SOP for vapor sampling is included in Attachment IV.

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There are six monitoring wells on-Site; MW-1 – MW 6. Each well is constructed of 2-inch diameter PVC with flush mounted covers, with the exception of MW-6 which is a standup construction. The following table presents the depth to bottom for each well and original borehole diameter.

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Each well will be abandoned by pressure grouting to within a few feet of the surface and tremie-backfilled with neat cement containing less than 5% bentonite as an admixture. The well box will also be removed from each monitoring well location. One monitoring well is located on a paved surface and will be completed with concrete. Five monitoring wells are located in unpaved areas and will be completed at surface with dirt and vegetation to match the area. All work will be conducted by a C-57-licensed water well driller.

S□□□□ge □□d D□□p□□□□□□□ □□□e□

Drill cuttings and related wastes generated during this investigation will be stored in steel, Department of Transportation-approved, 55-gallon drums. The containers will be stored in a secure location on-Site. The contents of the drums and the dates of collection will be clearly marked on appropriate labels. All equipment, decontamination material, and disposable personal protective gear will also be placed in appropriate containers. The characteristics of these materials will be determined so that they may be properly disposed.

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Soil gas samples will be submitted to a California state-certified laboratory for the following analyses: TPH-g and VOCs by EPA Method TO-15.

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A matrix of the proposed sample analytical methods, holding times, containers, and preservatives is provided in Attachment II, Table 1.

REPORTING

Upon completion of the field investigations and receipt of the laboratory findings, Versar will prepare a summary report. Reporting of the soil vapor survey investigation and findings will include conclusions and recommendations, pertinent figures, and the laboratory analytical report and project chain of custody. Reporting for the monitoring well abandonment is anticipated to be submitted within four weeks of completion of the field work. Documentation of well destruction waste disposal will be included in the report, as well as Department of Water Resources (DWR) Form 188 for well abandonment.

WORK SCHEDULE

The field work is anticipated to be completed within four weeks of acceptance of the work plan, depending on weather conditions and the availability of subcontractors.

This work plan was prepared by Ms. Nicole Hastings-Bethel, Environmental Scientist, and reviewed by Mr. Tim Berger, Program Manager, and Professional Geologist and Hydrogeologist in the State of California.

Prepared by:

Nicole Hastings-Bethel
Environmental Scientist

Reviewed by:

Tim Berger, P.G. No 5225
Program Manager

PROFESSIONAL GEOLOGIST
TIM BERGER
No. 5225
Exp. 10/31/13
STATE OF CALIFORNIA

Attachment I	Figures
Attachment II	Table
Attachment III	Health and Safety Plan
Attachment IV	Standard Operating Procedures

cc: Mr. Daniel O'Brien, Department of General Services, RESD – ESS, West Sacramento
Mr. Michael Duggan/ A.K. Jain, California Department of Forestry and Fire Protection
State Water Resources Board GeoTracker – (upload)

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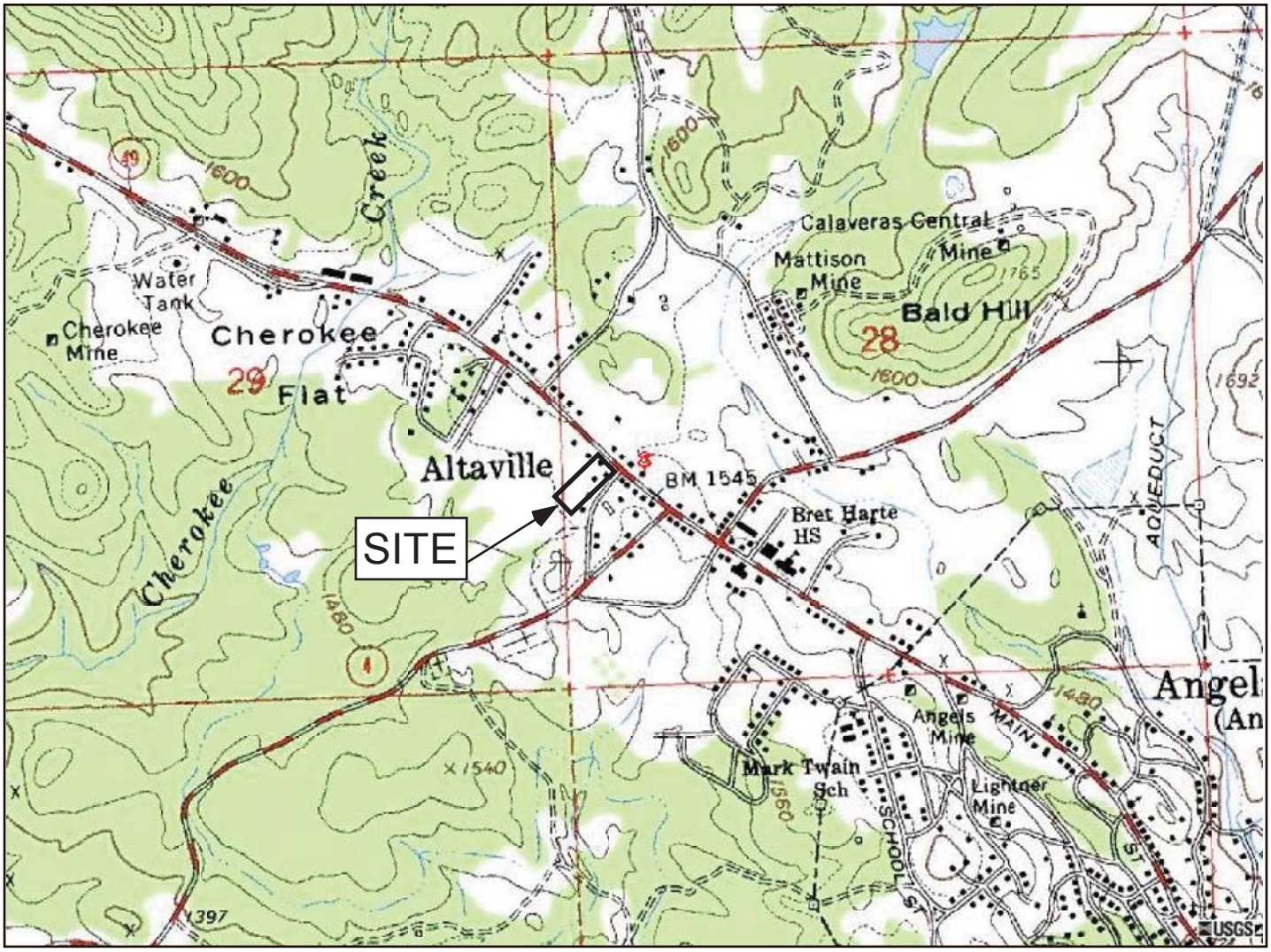
NORTH



Ref. USGS 7.5 Minute Topographical Quadrangle Maps; Angels Camp, Calif. c. 1981

Dr. By: T. Berger	
Date: 8/10/2012	
Scale: 1 inch = 2000 feet	
Versar Project No.: 110280.5000.013	

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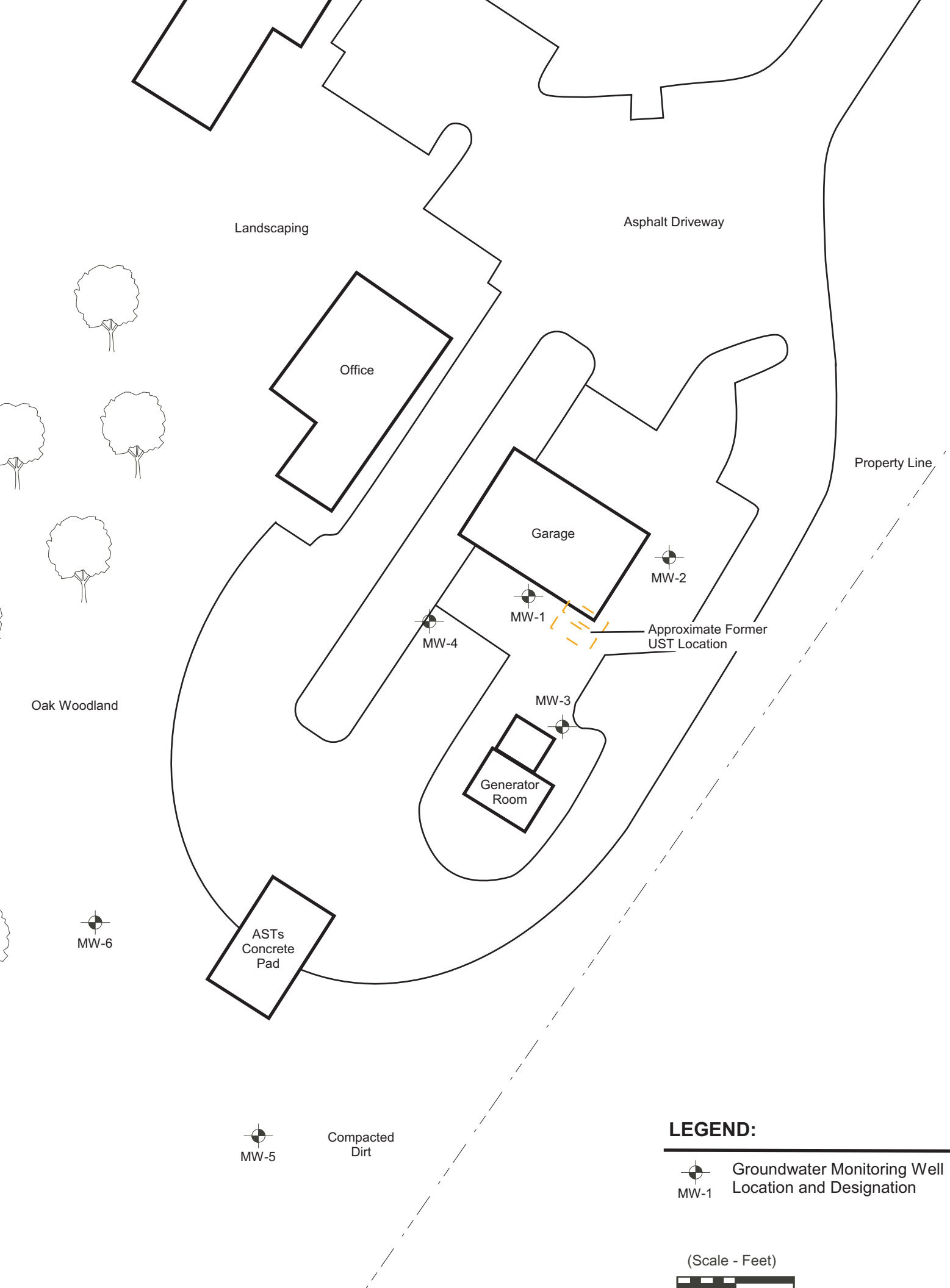
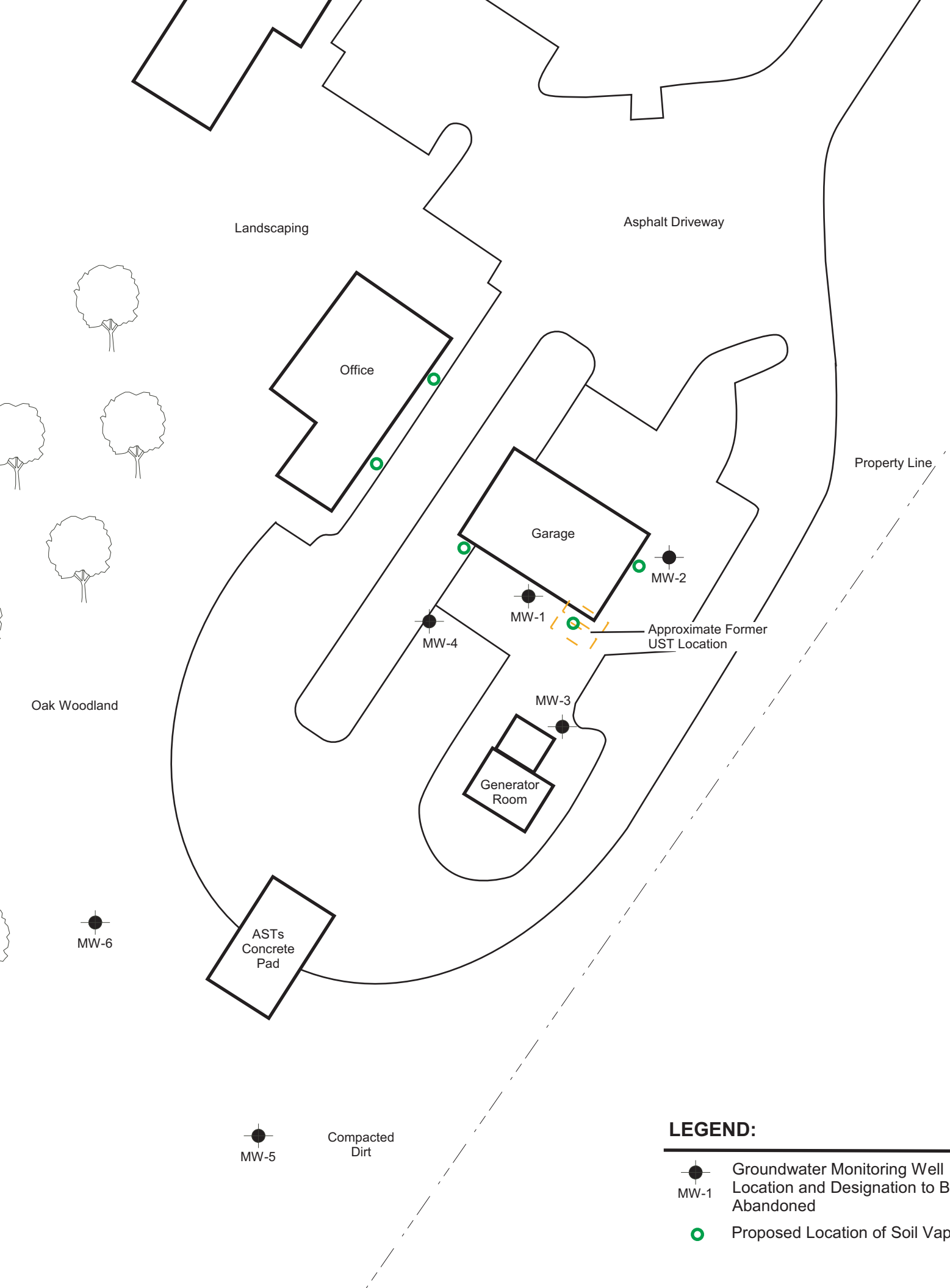
SITE LOCATION MAP
CDF ALTAVILLE
125 MAIN STREET NORTH
ANGELS CAMP, CALIFORNIA

Figure 1


Landscaping
Asphalt Driveway
Office
Property Line
Garage
MW-2
MW-1
MW-4
Approximate Former
UST Location
Oak Woodland
MW-3
Generator
Room
MW-6
ASTs
Concrete
Pad
MW-5
Compacted
Dirt
LEGEND:
MW-1
Groundwater Monitoring Well
Location and Designation
(Scale - Feet)


Landscaping
Asphalt Driveway
Office
Property Line
Garage
MW-2
MW-1
MW-4
Approximate Former
UST Location
Oak Woodland
MW-3
Generator
Room
MW-6
ASTs
Concrete
Pad
MW-5
Compacted
Dirt
LEGEND:
MW-1
Groundwater Monitoring Well
Location and Designation to Be
Abandoned
Proposed Location of Soil Vapor Poi

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T□□□E 1
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TPH-g & VOCs TO-15	soil vapor	1 L Summa canister	none	30 days	SVP 1 – SVP 5

TPH-g Total Petroleum Hydrocarbons as Gasoline
VOCs Volatile Organic Compounds
L liter

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HEALTH AND SAFETY PLAN

for

SOIL VAPOR SAMPLING AND WELL ABANDONMENT
CAL FIRE ALTAVILLE FOREST FIRE STATION
125 NORTH MAIN STREET
ANGELS CAMP, CALIFORNIA

Prepared for:

California Department of General Services
Real Estate Services Division,
Environmental Services Section
707 Third Street, 3rd Floor
West Sacramento, California 95605

Prepared by:

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FIGURE

Figure 1 Hospital Route Map

1.0 INTRODUCTION

1.1 Background

Versar, Inc. (Versar), on behalf of California Department of General Services, Real Estate Services Division (RESD), has prepared this Health and Safety Plan to perform soil vapor sampling and well abandonment at the Cal Fire Altaville Forest Fire Station, 125 North Main Street, Angels Camp, California (Site). Historical operations resulted in releases of fuel compounds from underground storage tanks (UST) at the Site; a ruling of No Further Action Required is being pursued for the Site.

1.2 Site Characterization

Client Name: Real Estate Services Division

Location of Site: 125 North Main Street, Angels Camp, California

Client Contact Person(s):

Name: Mr. Michael Duggan, Cal Fire Technical Services Unit

Topography of the area surrounding the site:

Hilly _X__ Flat ____ Hummocky ____ Marshy ____ Mountainous ___ Other ____

Area affected:

Urban _____Rural __X__ Residential ____ Industrial____ Commercial ___
Other ____

Types of bodies of water bordering the site, if any:

Stream ____ River ____ Pond ____ Lake ____ Bay __ _
Ocean ____ Other ____ None _X_

Are the services being provided as a consequence of orders from local, state, or federal officials?

Yes _X__ No ___

1.3 Purpose

The primary purpose of the site safety plan is to provide Versar field personnel and subcontractors with an understanding of the potential chemical and physical hazards that exist or may arise while the tasks of this project are being performed. The site safety plan follows the guidelines set forth in the Corporate Health and Safety Manual; the Injury and Illness Prevention Program (IIPP); and the Medical Monitoring Program. Additionally, the information contained herein will define the safety precautions necessary to respond to such hazards should they occur.

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1.4 Objective

The primary objective is to ensure the well-being of all field personnel and the community surrounding the site. In order to accomplish this, project staff and approved subcontractors shall acknowledge and adhere to the policies and procedures established herein. Accordingly, all personnel assigned to this project shall read this site safety plan and sign the Agreement Statement in Section 8.1 to certify that they have read, understood, and agreed to abide by its provisions. All Versar personnel shall perform work in compliance with standards set forth in the Corporate Health and Safety Manual and the IIPP.

1.5 Hazard Determination

Serious ____ Moderate ___ Low __X_ Unknown ____

1.6 Level of Protection

__X_ Modified level D

The minimum acceptable level of protection at this site is a Modified Level D, as described in Section 5.0 entitled "Health and Safety Requirements."

1.7 Amendments

Any change in the scope of this project and/or site conditions must be amended in writing in Section 8.2 entitled Site Safety Plan Amendment Sheet and approved by the Regional Health and Safety Officer.

Proposed time frame for site work: Fall/Winter 2013

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2.0 PROJECT PERSONNEL

The following management structure will be implemented for the purpose of successfully and safely completing this project.

2.1 Project Manager: Tim Berger

The Project Manager will be responsible for implementing the project, the site safety plan, and the IIPP, and obtaining any necessary personnel or resources for the completion of the project. Specific duties will include:

- providing authority and resources to ensure that the Site Safety Officer is able to implement and manage safety procedures;
- preparing reports and recommendations about the project to clients and affected Versar personnel;
- ensuring that all persons allowed to enter the site (i.e. EPA, contractors, state officials, visitors) are made aware of the potential hazards associated with the substances known or suspected to be on site and are knowledgeable as to the on-site copy of the specific site safety plan;
- ensuring that the Site Safety Officer is aware of all of the provisions of this site safety plan and is instructing all personnel on site about the site practices and emergency procedures defined in the plan; and
- ensuring that the Site Safety Officer is making an effort to monitor the site safety and has designated a Field Team Leader to assist with the responsibility when necessary.

2.2 Regional Health and Safety Officer: Larry Kleinecke

The Regional Health and Safety Officer shall be responsible for the overall coordination and oversight of the site safety plan. Specific duties will include:

- approving the selection of the types of personal protective equipment (PPE) to be used on site for specific tasks;
- monitoring the compliance activities and the documentation processes undertaken by the Site Safety Officer as required in the Corporate Health and Safety Manual, the IIPP, and the Medical Monitoring Program;
- evaluating weather and chemical hazard information and making recommendations to the Project Manager about any modifications to work plans or personal protection levels in order to maintain personal safety;
- coordinating upgrading or downgrading of PPE with Site Safety Officer, as necessary, due to changes in exposure levels, monitoring results, weather, other site conditions;

- approving all field personnel working on site, taking into consideration their level of safety training, their physical capacity, and their eligibility to wear the protective equipment necessary for their assigned tasks (i.e. respirator fit testing results and Medical Monitoring Program requirements); and

- overseeing the air-monitoring procedures as they are carried out by site personnel for compliance with all company health and safety policies.

2.3 Site Safety Officer: Nicole Hastings

The Site Safety Officer shall be responsible for the implementation of the site safety plan and IIPP on site. Specific duties will include:

- monitoring the compliance of field personnel for the routing and proper use of the PPE that has been designated for each task;

- routinely inspecting PPE and clothing to ensure that it is in good condition and is being stored and maintained properly;

- stopping work on the site or changing work assignments or procedures if any operation threatens the health and safety of workers or the public;

- monitoring personnel who enter and exit the site and all controlled access points;

- reporting any signs of fatigue, work-related stress, or chemical exposures to the Project Manager and the Regional Health and Safety Officer within 24 hours, as directed in the Corporate Health and Safety Manual and the IIPP;

- dismissing field personnel from the site if their actions or negligence endangers themselves, co-workers, or the public and reporting the same to the Project Manager and the Regional Health and Safety Officer within 24 hours, as directed in the Corporate Health and Safety Manual and IIPP;

- reporting accidents or violations of the site safety plan to the Project Manager and/or Regional Health and Safety Manager within 24 hours, as directed by the Corporate Health and Safety Manual and the IIPP;
- knowing emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire and police departments, per the site safety plan;

- ensuring that all project-related personnel have signed the personnel agreement and acknowledgments form contained in this site safety plan;

- coordinating, upgrading, and downgrading of PPE with the Regional Health and Safety Officer, as necessary, due to changes in exposure levels, monitoring results, weather, and other site conditions; and

- performing air monitoring with approved instruments in accordance with requirements stated in this site safety plan.

2.4 Field Team Leader: Nicole Hastings

In the event that the Project Manager and the Site Safety Officer are not on the site, the Field Team Leader will assume all responsibility for enforcing safety procedures, as covered in this site safety plan, the Corporate Health and Safety Manual, and the IIPP.

2.5 Field Personnel

All field personnel shall be responsible for acting in compliance with all safety procedures outlined in this site safety plan, the Corporate Health and Safety Manual, and the IIPP. Any hazardous work situations or procedures should be reported to the Site Safety officer so that corrective steps can be taken. The Regional Health and Safety Officer and/or Site Safety Officer has the authority to halt any operation that does not follow the provisions of this site safety plan.

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3.0 EMERGENCIES

In the event of an accident or emergency situation, immediate action must be taken by the first person to recognize the event. First aid equipment is located on site inside the Versar vehicle. Immediately after emergency procedures are implemented, notify (1) the Site Safety Officer and (2) the Project Manager and the Regional Health and Safety Officer about the situation.

3.1 Emergency Telephone Numbers

Immediate Emergencies:

Local Police:	911
Fire:	911
Ambulance:	911
Medical:	911

Medical Emergency (see attached figure for route to hospital):

Sonora Regional Medical Center
1000 Greenley Road
Sonora, CA 95370 (209) 536-5000
(See attached map and driving directions at back of health and safety plan)

Environmental Emergency:

Versar, Inc., Tim Berger	(916) 863-9323
Cal Fire, A.K. Jain	(916) 445-5373
OSHA	(800) 648-1003
Poison Control Center	(800) 532-2222
National Response Center	(800) 424-8802

3.2 Encountering Hazardous Situations (requiring evacuation)

Personnel encountering a hazardous situation shall **instruct others on site to evacuate the vicinity IMMEDIATELY** and call the (1) Site Safety Officer, (2) the Project Manager, and (3) the Regional Health and Safety Officer for instructions.

The site <u>must not</u> be re-entered until the situation has been corrected (i.e. appropriate back-up help, monitoring equipment, personal protective equipment is at the site).

Usual Procedures for Injury

A. Call for ambulance/medical assistance if necessary. Notify the receiving hospital of the nature of the physical injury or chemical overexposure. If a telephone is not available transport the person to the nearest hospital and have another person inform the hospital, at the nearest phone, of the route taken to the hospital and description of transporting vehicle.

B. Send/take this site safety plan, with the attached Material Safety Data Sheet (MSDS) if available, to the medical facility with the injured person. Complete the required forms.

C. If the injury is minor, proceed to administer first aid, and notify the Site Safety Officer, the Project Manager, and the Regional Health and Safety Officer. Complete the required forms.

D. Notify the Site Safety Officer, Project Manager, and Regional Health and Safety Officer of all accidents, incidents, or near miss situations. Ensure that all required procedures in the Corporate Health and Safety Manual and IIPP are followed.

3.3 Emergency Treatment

When transporting an injured person to a hospital, bring this site safety plan to assist medical personnel with injury diagnosis and treatment. In all cases of chemical overexposure, follow standard procedures as outlined below for poison management, first aid, and if applicable, cardiopulmonary resuscitation. Four different routes of exposure and their respective first aid/poison management procedures are outlined below:

A. Ingestion:

IMMEDIATELY transport the person to the nearest medical facility, or call **911**

B. Inhalation/Confined Space:

DO NOT ENTER A CONFINED SPACE TO RESCUE A PERSON WHO HAS BEEN OVERCOME UNLESS PROPERLY EQUIPPED <u>AND</u> A STANDBY PERSON IS PRESENT.

C. Inhalation/Other:

Move the person from the containment environment. Initiate CPR, if necessary. Call, or have someone call, for medical assistance. Refer to Material Safety Data Sheet for additional specific information. If necessary, transport the victim to the nearest hospital as soon as possible and have someone contact the hospital with the description of the transporting vehicle and route taken to the hospital.

D. Skin Contact:

IMMEDIATELY wash off skin with a large amount of water. Remove any contaminated clothing and rewash skin. Transport person to a medical facility, if necessary.

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E. Eyes:

Hold eyelids open and rinse the eyes IMMEDIATELY with copious amounts of water for 15 minutes. If possible, have the person remove his/her contact lenses (if worn). Never permit the eyes to be rubbed. Transport the person to a hospital as soon as possible and notify the hospital of the route taken to their facility and the description of the transport vehicle.

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4.0 CHEMICALS OF CONCERN

4.1 Chemical Hazards

Potential effects of any exposure are dependent on several factors such as: toxicity of substance, time frame of exposure, concentration of substance producing the exposure, general health of person exposed, and individual use of hazardous reduction methods.

4.1.1 Diesel fuel

Diesel fuel is a complex mixture of paraffinic, olefinic, napthenic and aromatic hydrocarbons. Diesel fuel oil is a dark semi-opaque liquid with a mild petroleum odor. Inhalation of excessive concentrations of vapor or mist can be irritating to the respiratory passages and can cause the following symptoms: headache, dizziness, nausea, vomiting, and loss of coordination. Prolonged or repeated skin contact may cause irritation of the hair follicles and block the sebaceous glands. This produces a rash of acne pimples and spots, usually on the arms and legs.

4.1.2 Gasoline

Gasoline is a complex mixture of hydrocarbons and additives. Chronic exposures or exposures to a high concentration of gasoline vapor may cause unconsciousness, coma and possibly death from respiratory failure. Exposure to low concentrations of gasoline vapor may produce flushing of the face, slurred speech, and mental confusion.

Gasoline constituents can be divided into five major groups: alkanes, alkenes, cycloalkenes, aromatics, and additives. The aromatics are the constituents generally regarded to be of the greatest toxic concern. The major aromatics in gasoline i.e. benzene, toluene, and xylenes. Of these, benzene is considered to be the most potent. All of these chemicals can also irritate the skin if repeated or prolonged skin exposure occurs.

4.1.3 Benzene

Benzene can enter the body through inhalation, ingestion, and skin contact. Studies have noted that chronic exposure to benzene vapor can produce neurotoxic and hemopoietic (blood system) effects. Other effects can include headache, dizziness, nausea, convulsions, coma, and possible death if exposure is not reversed. The most significant chronic effect of benzene is bone marrow toxicity. Although the cause-effect relationship is not fully understood, it is believed that there might be a strong association between chronic exposures to benzene and the development of leukemia.

4.1.4 Toluene

Inhalation exposure to toluene vapor can produce effects such as central nervous system depression. Depending on exposure factors, signs and symptoms can include headache, dizziness, fatigue, muscular weakness, lack of coordination, drowsiness, collapse, and possible

coma. Studies have noted anemia could be a possible effect of chronic exposure to toluene. Toluene can be a skin and mucous membrane irritant and has been shown to cause liver and kidney damage when overexposure is significant.

4.1.5 Ethylbenzene

Ethylbenzene is an eye, mucous membrane, respiratory tract, and skin irritant. High air levels can cause central nervous system depression, sense of chest constriction, headache and dizziness. Skin contact may cause irritation, inflammation and first or second degree burns.

4.1.6 Xylenes

Depending on exposure factors, inhalation of xylenes vapor may produce central nervous system excitation followed by depression. Exposure to xylene vapor can produce dizziness, staggering, drowsiness, and unconsciousness. At very high concentrations, xylenes vapor may produce lung irritation, nausea, vomiting, and abdominal pain. Xylene is not known to possess the chronic bone marrow toxicity of benzene, but liver enlargement and nerve cell damage have been noted from chronic overexposure. Ingestion exposures to xylenes can produce temporary liver damage and should be avoided.

4.1.7 Methyl tert-butyl ether (MTBE)

MTBE is an irritant to the nose and throat. Signs and symptoms of possible exposure can include headaches, nausea, dizziness and metal confusion. Studies on rats and mice, with exposure by drinking and breathing high levels of MTBE for long periods, found that MTBE may cause liver and kidney damage and or cancer. Other effects on rats and mice were gastrointestinal irritation, and nervous system effects.

4.2 Physical Hazard

The physical hazards are those typically associated with general construction. Slips, trips, and falls are of primary concern in accident prevention. The contractor will exercise care to maintain good housekeeping practices within the work area. Each drill site will be closed off with caution tape and barricades when work is not in progress.

4.2.1 Heavy Equipment

The more severe accidents will be related to the use of heavy equipment. During activities, drilling and steam cleaning equipment will be used. All heavy equipment used on this project will be in good working order and operated in accordance with recognized industry standard and Cal-OSHA Title 8, Subchapter 4, Construction Safety Orders. Safety maintenance checks of all equipment shall be conducted just prior to the start of each work day. All chains, cables, grounding equipment, lifting machinery shall be of sufficient grade or rating to handle the weights and conditions at the site. Employers and workers at the site shall comply with all Cal/

OSHA requirements including personal protection, safety, training, and safety planning rules. Drilling activities that pose imminent hazard to site personnel will not be permitted. All cables,

slings, and locks will be inspected daily by the contractor to insure that they are in safe working order.

4.2.2 Heat and Cold Stress

Heat Stress - Heat stress results when the ability of the body to internally regulate heat buildup is exceeded. Heat stress can range from a rash to death. Symptoms of heat stress begin with malaise, weakness, mental fatigue, and sometimes rashes in moist areas of the body such as under arms. Symptoms progress to increased physical and mental fatigue, irritability, irrational behavior, and muscle cramps. A critical condition is signaled by cessation of sweating, cool dry skin, and fainting.

Workers will guard against heat stress by monitoring fluid intake and pulse, and incorporating body temperature monitoring and rest periods as the need arises. If prolonged or unusually hot conditions persist, work may be performed during evening and night hours.

Cold Stress - Workers who are exposed to extreme cold or work in cold environments may be at risk of cold stress. The result may be hypothermia, or abnormally low body temperature, and/or frostbite. A body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know it is happening. Typical early symptoms of hypothermia are shivering, fatigue, loss of coordination, confusion and disorientation. Late symptoms include no shivering, blue skin, dilated pupils, slowed pulse and breathing and loss of consciousness. A victim can be moved into a warm room or shelter. Remove their wet clothing. Warm the center of their body first-chest, neck, head, and groin-using an electric blanket, if available; or use skin-to-skin contact under loose, dry layers of blankets, clothing, towels, or sheets. Warm beverages may help increase the body temperature.

Frostbite is an injury to the body that is caused by freezing. Frostbite causes a loss of feeling and color in the affected areas. It most often affects the nose, ears, cheeks, chin, fingers, or toes. Frostbite can permanently damage body tissues, and severe cases can lead to amputation. In extremely cold temperatures, the risk of frostbite is increased in workers with reduced blood circulation and among workers who are not dressed properly.

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5.0 HEALTH AND SAFETY REQUIREMENTS

5.1 Work Zone Access

Access in the situation that significant contamination is encountered within a 30-foot radius of any on-site operation is prohibited to all but Versar field personnel and subcontractors. Standard work practices, such as performing field activities in the upwind position, will be observed whenever possible. Personal protective equipment indicated in Section 5.4 will be worn by all onsite field personnel, including the subcontractor's personnel.

Exclusion Zones

Formal exclusion zones are not expected to be required. Unauthorized personnel will not be permitted near the work zone area.

Decontamination Zone

A formal decontamination zone may be required. It would be sited in the upwind direction from the work zone area. Decontamination procedures are covered in Section 5.5. All site personnel will be required to follow the procedures as reported in the corporate Health and Safety Manual.

Support Zones

No formal requirements will be necessary for the support zone area, although the general practice of locating the zone in the upwind direction will be followed.

5.2 Air/Gas/Vapor Monitoring Procedures

The greatest potential hazards to safety and health at this site include:

1) Exposure to petroleum vapors and/or airborne dust through inhalation; and

2) Exposure to chemical contamination and/or airborne dust - through skin contact and ingestion.

In the event that soil and/or groundwater contamination is encountered, ongoing air monitoring during project tasks will provide data to ensure that vapor concentrations are within acceptable ranges and will provide adequate selection criteria for respiratory and dermal protection.

- Versar will calibrate the PID Response Factor (RF) to 100 ppm and use 10% of that number as the initial warning level, and 20% of this number over five minutes in the occupational breathing zone (OBZ) as the threshold for donning respiratory protection.

- Respirator cartridges will be changed once per day as a minimum. This can be accomplished at the end of the work day during respirator decontamination. If odor breakthrough is detected while wearing the respirator or breathing becomes difficult, change cartridges immediately.

5.3 Action Levels/Level of Personal Protection Equipment (PPE)

Air monitoring instrument	LEVEL D <100 ppm	LEVEL C 100-500 ppm	LEVEL B >500 ppm

5.4 PPE

Modified Level D is the minimum acceptable level for this site. Modified Level D provides minimal dermal protection. Respiratory protection is optional unless air monitoring data indicates otherwise.

Modified Level D includes:

- coveralls/work uniform
- Tyvek (optional)
- Nitrile butyl-rubber or Viton gloves with disposable nitrile liner (optional)
- boots/shoes, leather or chemical resistant, with steel shank and approved toe protection
- approved safety glasses or chemical splash goggles if the potential for splash exists
- hard hat
- reflective traffic vest (if traffic, construction, or other related activities are present)
- hearing protection (as appropriate)
- respiratory protection (as necessary)

B. Additional equipment upgrade:

1. Protocols for upgrading

   Once air monitoring data are complete and results are tabulated on the initial site entry, the Site Safety Officer and/or Regional Health and Safety Officer will determine if changes in PPE are needed.

2. Upgraded equipment

   a. Respirators
      - Respirators with organic vapor cartridges shall be worn by all personnel if ionization detector readings exceed 100 ppm.

   b. Other
      - Tyvek suits and appropriate gloves shall be worn if potential for dermal exposure exists while performing job tasks.

C. First Aid Equipment

First aid equipment for this site is the responsibility of the Site Safety Officer.

Vehicles used for site work will be equipped with a first aid kit and safety equipment including:
- cones and flags
- barricades

- fire extinguisher
- water, suitable for drinking
- portable eye wash
- complete first aid kit

5.5 Decontamination Procedures

All operations conducted at this site have the potential to contaminate field equipment and PPE. To prevent the transfer of any contamination to vehicles, administrative areas, and other personnel, the following procedures must be followed:

1. Whenever possible, field equipment should be decontaminated with a solution of Alconox or Green Soap and thoroughly rinsed with water prior to leaving the site. This must be done outside a 10-foot radius of any work area or the hot zone.

2. Disposable PPE (for example, Tyvek suits, respirator cartridges) must be bagged and disposed of at the site.

Personal Decontamination

Level D: Segregated Equipment Drop
- wash/rinse outer boot (as appropriate)
- wash/rinse chemical resistant outer glove, then remove as appropriate
- remove and throw out inner disposable nitrile liner gloves in designated, lined receptacles

Level C: Segregated Equipment Drop
- wash/rinse outer boots
- wash/rinse chemical resistant outer gloves, then remove tape and gloves
- remove chemical resistant suit (remove by rolling down suit from the inside)
- remove outer boots
- remove first pair(s) of disposable gloves
- remove respirator, hard hat/faceshield and properly dispose of cartridges; wash respirator
- remove last pair of disposable nitrile liner gloves

Level B: Segregated Equipment Drop
- wash/rinse outer boots
- wash/rinse chemical resistant outer gloves
- cross hotline (into clean area) and change air tanks, then redress <u>or</u>
- cross hotline (into clean area)
- remove boots and gloves
- remove SCBA, if worn over chemical resistant suit
- if SCBA is worn under the suit, remove the chemical resistant suit, then the SCBA
- remove hard hat
- remove disposable nitrile liner gloves

5.6 Well Abandonment and Drilling Procedures

A digsafe number (Underground Service Alert - USA) must be obtained from appropriate agency prior to drilling, excavation or trenching. To determine presence of subsurface metal utility lines, tanks and/or drums, a metal detector should be used before drilling on a site.

During the operation, two persons (one designated as "operator" and the other as the "helper") must be present at all times. The helper (whether Versar, Inc. personnel or subcontractors) must be instructed as to the whereabouts of the emergency shut-off switch. Every attempt must be made to keep unauthorized personnel from entering the work area. If this is not possible, the operation should be shut down until the area is cleared. The Site Safety Officer or the Field Team Leader has the authority and responsibility to shut down the drilling operations whenever a hazardous situation is deemed present.

The arm of any equipment should maintain a preferred clearance of 20 feet from any overhead electrical cables, with 10 feet being the minimum. All operations will immediately cease during any hazardous weather conditions. Hard hats and safety boots shall be worn at all times.

5.7 Electrical Equipment and Ground Fault Circuit Interrupters

All electrical equipment and power cables used in and around wells or structures containing chemical contamination must be explosion-proof and/or intrinsically-safe and equipped with a three-wire ground lead that has been rated as explosion-proof for hazardous atmospheres (Class 1 Div 1&2). In accordance with OSHA 29 CFR 1926.404, approved ground fault circuit interrupters (GFCI) must be utilized for all 120 vault, single-phase, 15 and 20 amp receptacle outlets on the site that are in use by employees and that are not part of the permanent wiring as defined by the NEC 1987. Receptacles on the ends of the extension cords are not part of the permanent wiring and therefore, must be protected by GFCI's whether or not the extension cord is plugged into permanent wiring.

The GFCI is a fast-acting circuit breaker that senses small imbalances in the circuit caused by current leakage to ground, and in a fraction of a second, shuts off the electricity. However, the GFCI will not protect the employee from line-to-line contact hazards such as a person holding two "hot" wires or a hot and neutral wire in each hand. The GFCI does provide protection against the most common form of electrical hazard - the ground fault. It also provides protection against fires, overheating, and destruction of wire insulation.

GFCI's can be used successfully to reduce electrical hazards on construction sites. Tripping of GFCI's interruption of current flow is sometimes caused by wet connectors and tools. It is good practice to limit exposure of connectors and tools to excessive moisture by using watertight or sealable connectors. Providing more GFCI's on shorter circuits can prevent tripping caused by the cumulative leakage from several tools or by leakages from extremely long circuits. (Adapted from OSHA 3007; Ground-Faulting Protection on Construction Sites - 1987.)

5.8 Fire Protection

Only approved metal cans will be used to transport and store flammable liquids. All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool before filling. No open flame or spark is allowed in any area containing petroleum products or other flammable liquids.

Smoking is not allowed during any operations within the work area in which petroleum products or solvents in free-floating, dissolved or vapor forms, or other flammable liquids may be present.

5.9 General Health

Medicine and alcohol can increase the effects of exposure to toxic chemicals. Unless specifically approved by a qualified physician, prescription drugs should not be taken by personnel assigned to operations where the potential for absorption, inhalation, or ingestion of toxic substances exists.

Drinking and driving is prohibited at any time. Driving at excessive speeds is always prohibited. Skin abrasions must be thoroughly protected to prevent chemicals from penetrating the abrasion. It is recommended that contact lenses not be worn by persons working on the Site.

5330 Primrose Drive, Suite 147
Fair Oaks, CA 95628
916.962.1612
www.versar.com

6.0 EMPLOYEE TRAINING

All Versar employees with the potential for hazardous exposures are required to participate in an initial minimum of 40 hours of training to recognize, evaluate, and control site hazards. Three days of supervised field-training is also included within the initial training program. Project manager level and above must also participate in an additional eight-hour supervisory training course. Once employees have received the above training, they receive a certificate of completion and are scheduled for an eight-hour refresher training session within one year of their initial training. Versar training includes specific details on the following:

- regulatory requirements
- confined space entry
- respiratory protection
- hazard communication
- decontamination procedures
- incident command system
- first aid/CPR
- air monitoring
- toxicology
- Prop. 65 (California)
- fire technology
- PPE
- IIPP

7.0 MEDICAL MONITORING PROGRAM

All Versar field personnel are required to have annual medical evaluations in accordance with the company's Health and Safety Program policy. Additional re-evaluation will be considered in the event of chemical over-exposure while working on this site.

The chemicals typical of this site can affect specific organ systems producing characteristic health effects. The medical evaluation will, therefore, focus on the liver, kidney, nervous system, blood systems, and skin and lung function. Laboratory testing will include complete blood count, and applicable kidney and liver function tests. Other tests include skin examination.

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8.0 DOCUMENTATION

8.1 Site Safety Plan Agreement

In the situation that contamination is encountered which could come into contact with site development personnel, all details of this site safety plan will be implemented. Versar personnel have the authority to stop work performed by our subcontractors at this site if any work is not performed in accordance with the requirements of this site safety plan.

All Versar project personnel and subcontractor personnel are required to sign the following agreement prior to conducting work at the site.

A. I have read and fully understand the site safety plan and my individual responsibilities.

B. I agree to abide by the provisions of the site safety plan.

Name	Company	Date	Signature

8.2 Site Safety Plan Amendment Sheet

Project Name: _____

Project Number: _____

Location: _____

Changes in field activities or hazards:

Proposed Amendment:

Proposed By:_____ Date _____

Approved By:_____ Date _____
Project Manager

_____ Date _____
Regional Health & Safety Officer

Declined By:_____ Date _____

Amendment Effective Date _____

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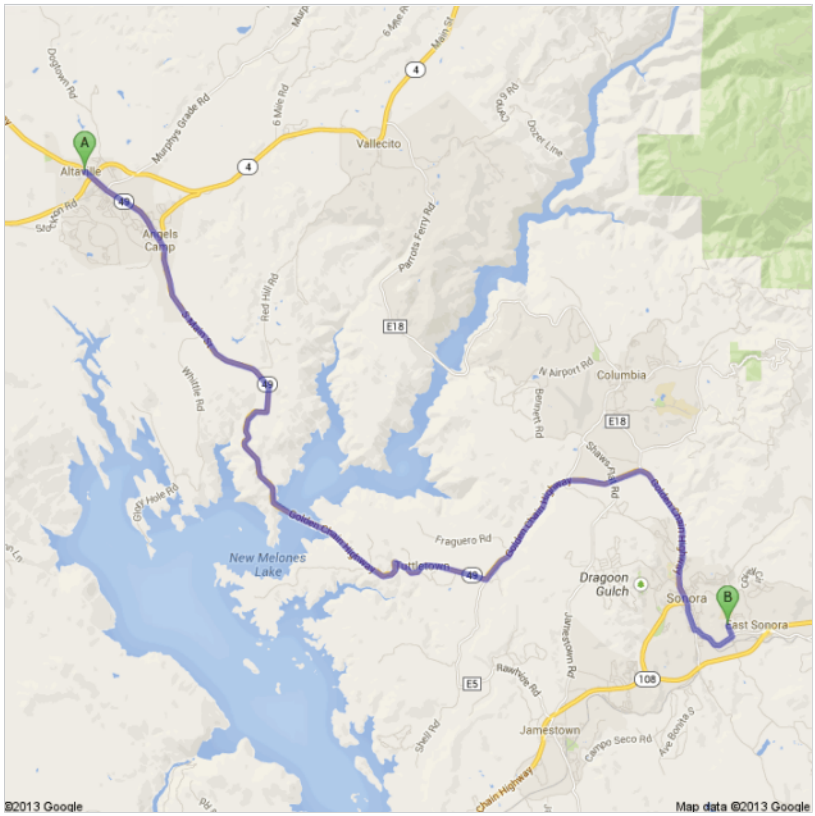
FIGURE 1

Hospital Route Map

Google

Directions to 1000 Greenley Rd, Sonora, CA 95370
18.6 mi – about **30 mins**



125 N Main St, Angels Camp, CA 95222

1.	Head **southeast** on **CA-49 S/Golden Chain Highway S/N Main St** toward **Dogtown Rd** Continue to follow CA-49 S/Golden Chain Highway S About 26 mins	go 17.2 mi total 17.2 mi
2.	Continue onto **S Washington St** About 1 min	go 0.5 mi total 17.7 mi
3.	Turn left onto **Restano Way**	go 213 ft total 17.7 mi
4.	Turn right onto **Mono Way** About 2 mins	go 0.7 mi total 18.4 mi
5.	Take the 3rd left onto **Greenley Rd** Destination will be on the left About 53 secs	go 0.2 mi total 18.6 mi

1000 Greenley Rd, Sonora, CA 95370

□TT□C□□ENT IV

ST□ND□□D □□E□□TIN□ □□□CED□□ES

ST□ND□□D □□E□□TIN□ □□□CED□□E:
S□I□ □□S S□□ □□IN□

□□□□□SE

The purpose of this Standard Operating Procedure (SOP) is to establish protocol for the collection of soil gas samples. The following guidelines will ensure that the soil vapor samples are collected in a high quality and consistent manner. However, this is a standard operating procedure that may be varied or changed as required depending on site conditions, equipment limitations, or limitations imposed by the procedure. If changes are required, field personnel will contact the task manager and document and justify the deviation.

□□□CED□□ES

1. Using the least disruptive method appropriate, drill borehole to the maximum desired sampling depth using direct push method, rotary hammer, hand auger or hollow stem auger.

2. At least 6 vertical inches of sand pack will used for each vapor point, with the probe tip placed midway in the sand pack. For wells greater than 15 feet or in loose soils, a tremie pipe will be utilized to set the well. Probe tip filters will be new and made of stainless steel or high density polyethylene. Small diameter ($^{1}/_{8}$ to ¼ inch) Nylaflow or Teflon tubing will be attached to the probe tip and extend approximately two feet above ground.

3. Place approximately 6 vertical inches of dry bentonite above the sand pack in shallow wells and approximately 1 vertical foot of bentonite in wells greater than 10 feet above the sand pack. Complete the well construction with pre-hydrated bentonite to the surface or to the next sand layer if placing vapor points at multiple depths. A hydrated bentonite/cement seal may be used on the surface.

4. Sample tubing will extend out of the ground approximately 2 feet and fitted with a stainless steel or brass compression-fit valve, or food-grade plastic two-way valve, to prevent ambient pressure differences between purging and sampling events.

5. For direct push well installation methods, the subsurface will be allowed to equilibrate to background conditions for 2 hours after the well has been set, before any sampling actives take place. A period of 48 hours will be allowed to pass for hollow stem and hand auger well installation methods before any sampling activities take place.

6. Using a brass or stainless steel compression fitting, connect well to a laboratory-supplied sampling manifold fitted with a 100 to 200 milliliter per minute (ml/min) flow regulator and pressure gauge.

7. Connect Summa canister to manifold. Vacuum test the connections between the Summa canister and vapor tight valve on the down-hole side of the flow regulator for 1 minute by opening and closing the purge canister valve to place a vacuum on the assembly (terminate further work if gauge vacuum can not be maintained for 1 minute).

8. If gauge vacuum was maintained for at least 1 minute and the proper amount of time has passed for equilibrium since the surface of the well was sealed with bentonite, then open the purge canister valve and the valve on the down hole side of the regulator to begin purging ambient air from the sampling apparatus and borehole (record the time purging commenced).

9. Unless a mobile lab is being utilized at the Site, a default of three purge volumes will be calculated and purged from the well at the same rate as sample collection, typically between 100 to 200 milliliters per minute. A vacuum of less than 100 inches of water should be maintained during purging and sampling. If vacuum exceeds 100 inches of water for three minutes, sampling activities at that well will stop and a site specific evaluation for moving forward will be assessed which may include Low Permeability Soil Gas Sampling Methods.

10. Prior to opening the sample collection canister (Summa canister), the liquid tracer compound isopropyl alcohol will be applied to a cloth or paper towel and placed on the ground next to the sampling manifold.

11. Open the sampling canister valve to begin sample collection (record the time sample collection begins) and place the sampling hood over the sample train and canisters.

12. Close the sample canister valve when the sample canister gauge indicates approximately 5 inches Hg of vacuum remain in the canister (this typically takes approximately 5 minutes for a 1L Summa canister connected to a 200 milliliters/minute flow regulator).

13. Record the time sample collection was terminated and replace the tee fitting on the sample canister with the laboratory supplied brass plug.

14. Label the sample and record on the chain of custody form the sample name, final vacuum, and the canister and flow controller serial numbers.

15. Store the sample in a container that blocks sunlight, do not subject the sample to significant changes in pressure and temperature, and do not chill the samples (discard if condensation is observed in the sample tubing).

16. Laboratory analyses will be performed by a state-certified mobile or fixed laboratory.

17. After sampling is completed, dig out the top 6-12 inches of bentonite/cement, cut the tubing if it cannot be pulled out of the ground, fill tubing with a thin cement mixture, seal the boring with neat cement grout and finish to grade level to match the surrounding area.

□E□E□ENCES

California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), California Regional Water Quality Control Board – Los Angeles Region (LARWQCB) and San Francisco Bay Region (SFBRWQCB), 2012, Advisory – Active Soil Gas Investigations, April.

APPENDIX C

ENVIRONMENTAL DATA RESOURCES REPORT

Altaville Forest Fire Station
125 North Main Street
Angels Camp, CA 95222

Inquiry Number: 3771577.2s
October 30, 2013

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

FORM-STD-ASH

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GEOCHECK ADDENDUM

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

125 NORTH MAIN STREET
ANGELS CAMP, CA 95222

COORDINATES

Latitude (North):	38.0828000 - 38˚ 4' 58.08''
Longitude (West):	120.5619000 - 120˚ 33' 42.84''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	713838.7
UTM Y (Meters):	4217603.5
Elevation:	1543 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	38120-A5 ANGELS CAMP, CA
Most Recent Revision:	1973

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
CDF ALTAVILLE STATION 125 N MAIN ST ANGELS CAMP, CA 95221	SWEEPS UST	N/A
CAL FIRE - ALTAVILLE 125 MAIN ANGELS CAMP, CA	CUPA Listings	N/A
CDF ALTAVILLE 125 NORTH MAIN STREET ALTAVILLE, CA 95221	AST	N/A
ALTVILLE FOREST FIRE STATION 125 MAIN ST N ALTAVILLE, CA 95249	HIST CORTESE LUST Status: Open - Verification Monitoring	N/A

EXECUTIVE SUMMARY

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

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls
LUCIS ..... Land Use Control Information System

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST..... Active UST Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
WMUDS/SWAT..... Waste Management Unit Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
Toxic Pits..... Toxic Pits Cleanup Act Sites
CDL..... Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens Listing
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing

MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators
DOT OPS	Incident and Accident Data
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
CA BOND EXP. PLAN	Bond Expenditure Plan
UIC	UIC Listing
NPDES	NPDES Permits Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
Notify 65	Proposition 65 Records
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
ENF	Enforcement Action Listing
HAZNET	Facility and Manifest Data
EMI	Emissions Inventory Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
HWT	Registered Hazardous Waste Transporter Database
HWP	EnviroStor Permitted Facilities Listing
Financial Assurance	Financial Assurance Information Listing
LEAD SMELTERS	Lead Smelter Sites
2020 COR ACTION	2020 Corrective Action Program List
US AIRS	Aerometric Information Retrieval System Facility Subsystem
PRP	Potentially Responsible Parties
WDS	Waste Discharge System
EPA WATCH LIST	EPA WATCH LIST
US FIN ASSUR	Financial Assurance Information
PCB TRANSFORMER	PCB Transformer Registration Database
PROC	Certified Processors Database
MWMP	Medical Waste Management Program Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR US Hist Cleaners..... EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 07/11/2013 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAL TRANS	***163 MONTE VERDE***	***SE 1/8 - 1/4 (0.241 mi.)***	***C12***	***24***

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 09/05/2013 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
SAVE MART #46 Status: Active	***260 MAIN***	***ESE 1/2 - 1 (0.541 mi.)***	***21***	***37***

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 09/16/2013 has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
B.H. SCHOOL DIST. BUS GARAGE	218 PERI ST	ESE 1/8 - 1/4 (0.197 mi.)	C7	15
ALTAVILLE MAINTENANCE STN Status: Open - Remediation	***154 MONTE VERDE RD***	***ESE 1/8 - 1/4 (0.203 mi.)***	***C10***	***16***
CITY OF ANGELS PUBLIC SAFETY C Status: Completed - Case Closed	***200 MONTE VERDE ST***	***SE 1/8 - 1/4 (0.245 mi.)***	***D14***	***26***
C & L CYCLE	***238 ST CHARLES ST***	***ESE 1/4 - 1/2 (0.365 mi.)***	***E19***	***32***

Lower Elevation	Address	Direction / Distance	Map ID	Page
ALTAVILLE MOBILE Status: Completed - Case Closed	***273 MAIN ST N***	***NNW 0 - 1/8 (0.090 mi.)***	***5***	***13***
BRET HARTE HIGH TRANSPORTATION Status: Completed - Case Closed	***218 PERI***	***SE 1/4 - 1/2 (0.315 mi.)***	***18***	***29***

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 09/16/2013 has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAVE MART SUPERMARKET #46	260 MAIN ST S	SE 1/4 - 1/2 (0.380 mi.)	E20	37

State and tribal registered storage tank lists

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, and dated 08/01/2009 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BRET HARTE TRANSPORTATION DEPT	219 PERI STREET	ESE 1/8 - 1/4 (0.244 mi.)	C13	26

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 09/16/2013 has revealed that there is 1

SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
REPLANET LLC	396 N MAIN ST	NW 1/4 - 1/2 (0.295 mi.)	17	29

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, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HYDROX INC	200 MONTE VERDA ST	SE 1/8 - 1/4 (0.245 mi.)	D16	28

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALTAVILLE	154 MONTE VERDE ST	SE 1/8 - 1/4 (0.239 mi.)	C11	23

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HYDROX INC	200 MONTEVERDA ST	SE 1/8 - 1/4 (0.245 mi.)	D15	28

Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALTAVILLE MAINTENANCE STN	***154 MONTE VERDE RD***	***ESE 1/8 - 1/4 (0.203 mi.)***	***C10***	***16***

Lower Elevation	Address	Direction / Distance	Map ID	Page
ALTAVILLE MOBILE	***273 MAIN ST N***	***NNW 0 - 1/8 (0.090 mi.)***	***5***	***13***

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
BRET HARTE HIGH TRANSPORTATION	***218 PERI***	***SE 1/4 - 1/2 (0.315 mi.)***	***18***	***29***

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 3 CUPA Listings sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALTAVILLE MAINTENANCE STN	***154 MONTE VERDE RD***	***ESE 1/8 - 1/4 (0.203 mi.)***	***C10***	***16***
CITY OF ANGELS PUBLIC SAFETY C	***200 MONTE VERDE ST***	***SE 1/8 - 1/4 (0.245 mi.)***	***D14***	***26***

Lower Elevation	Address	Direction / Distance	Map ID	Page
ALTAVILLE MOBILE	***273 MAIN ST N***	***NNW 0 - 1/8 (0.090 mi.)***	***5***	***13***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 3 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

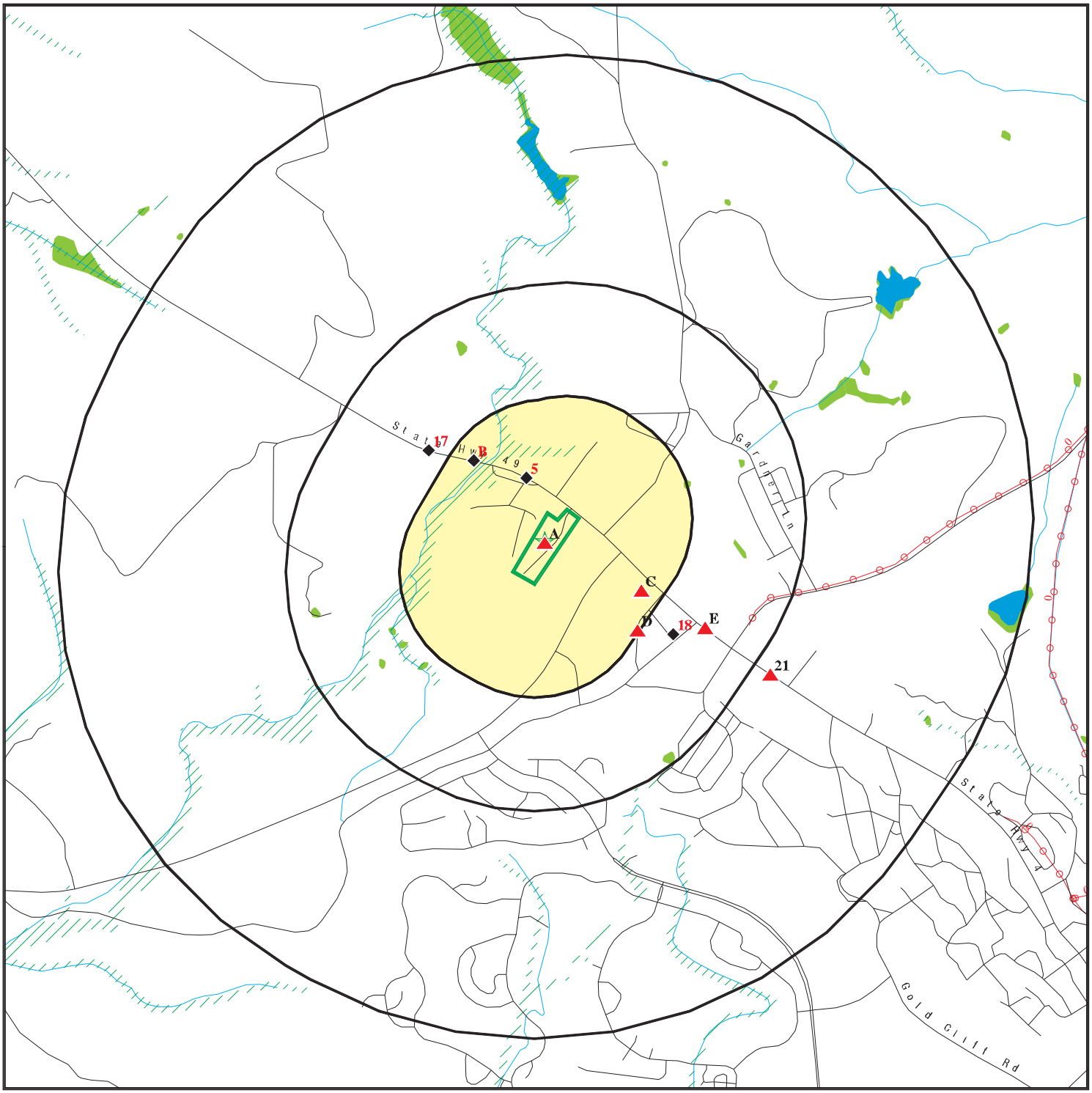
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	300 N MAIN	NW 1/8 - 1/4 (0.177 mi.)	B6	15
Not reported	320 N MAIN	NW 1/8 - 1/4 (0.199 mi.)	B8	16
Not reported	320 N MAIN ST	NW 1/8 - 1/4 (0.199 mi.)	B9	16

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 22 records.

Site Name	Database(s)
ALTAVILLE CAL TRANS MAINT YARD	SWEEPS UST
CABBAGE PATCH MAINTENANCE STA	SWEEPS UST
AMERICAN TOWER CORP-FOWLER PEAK	CUPA Listings
TEICHERT CONSTRUCTION	CUPA Listings
BAYLOR'S	CUPA Listings
SUBURBAN PROPANE - ANGELS	CUPA Listings
OARS	CUPA Listings
PG & E / FROG TOWN	CUPA Listings
O'REILLY AUTO PARTS #3509	CUPA Listings
CALAVERAS LUMBER - AST	CUPA Listings
CVS #9539	CUPA Listings
THE PAINT & BODY SHOP	CUPA Listings
FROGGY'S AUTO WASH & LUBE	CUPA Listings
CALAVERAS LUMBER	CUPA Listings
FORTY NINER BODY AND FRAME	CUPA Listings
AMERIGAS	CUPA Listings
WAYNE & SON AUTOMOTIVE, INC.	CUPA Listings
CAL FIRE - VALLECITO	CUPA Listings
RED HILL LDFL	CERC-NFRAP
O.A.R.S., INCORPORATED	HIST UST
CALAVERAS COUNTY FAIRGROUNDS	HIST UST
CALTRANS D10 MAINTENANCE ALTAVILLE	HAZNET

OVERVIEW MAP - 3771577.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Altaville Forest Fire Station	CLIENT: Ninyo & Moore
ADDRESS: 125 North Main Street Angels Camp CA 95222	CONTACT: Peter Sims INQUIRY #: 3771577.2s
LAT/LONG: 38.0828 / 120.5619	DATE: October 30, 2013 3:14 pm

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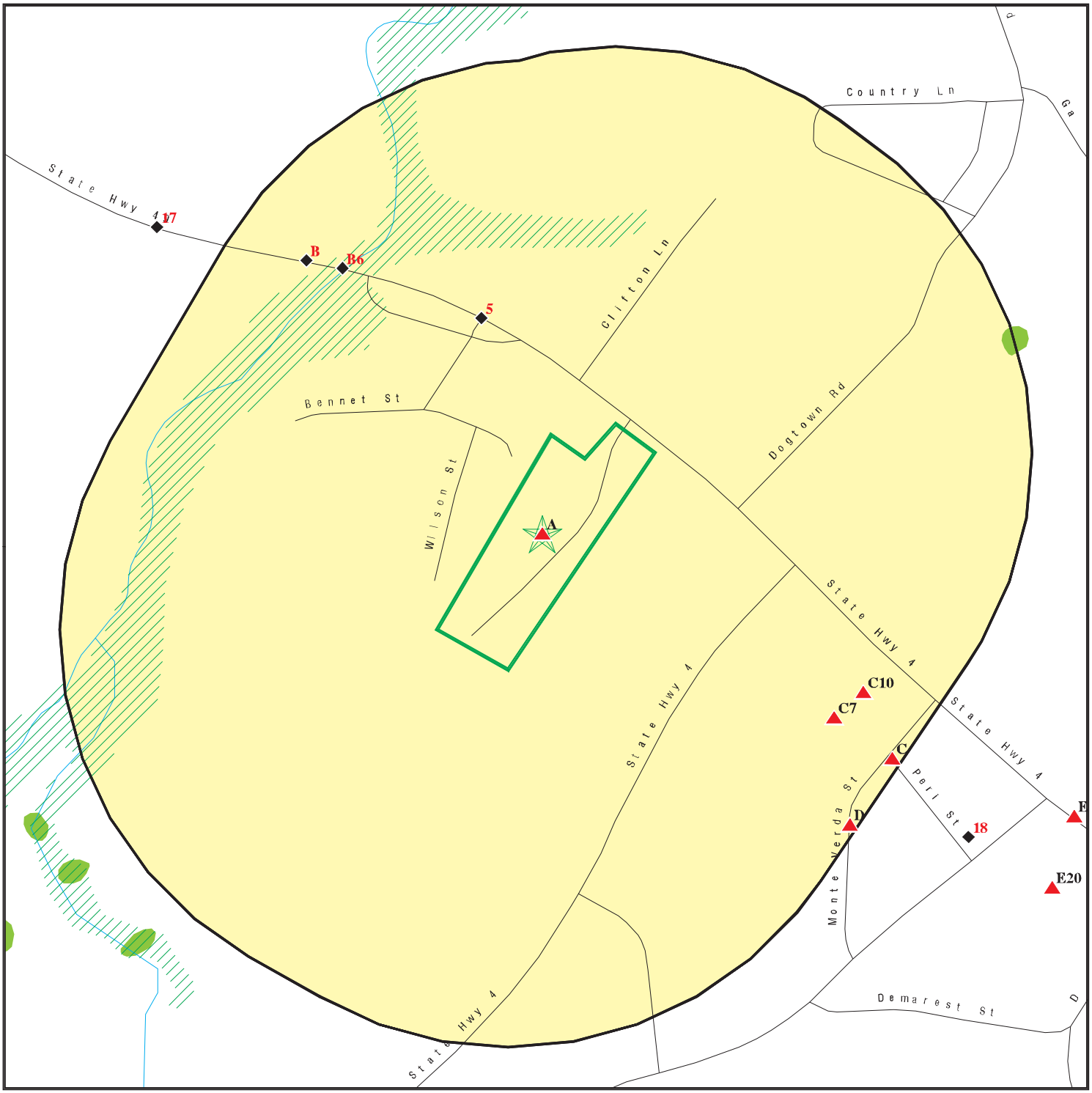
DETAIL MAP - 3771577.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Altaville Forest Fire Station	CLIENT: Ninyo & Moore
ADDRESS: 125 North Main Street Angels Camp CA 95222	CONTACT: Peter Sims INQUIRY #: 3771577.2s
LAT/LONG: 38.0828 / 120.5619	DATE: October 30, 2013 3:17 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500	1	1	3	2	NR	NR	7

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		0	0	1	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0
AST	0.250	1	0	1	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	1	NR	NR	1
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		0	1	NR	NR	NR	1
HIST UST	0.250		0	1	NR	NR	NR	1
SWEEPS UST	0.250	1	0	1	NR	NR	NR	2
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500	1	1	1	1	NR	NR	4
CUPA Listings	0.250	1	1	2	NR	NR	NR	4
Notify 65	1.000		0	0	0	0	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PROC	0.500		0	0	0	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	3	NR	NR	NR	3
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **CDF ALTAVILLE STATION** | **SWEEPS UST** | **S106924097**
125 N MAIN ST | **N/A**
ANGELS CAMP, CA 95221

Site 1 of 4 in cluster A

Actual: 1543 ft.

SWEEPS UST:

Status:	Active
Comp Number:	20062
Number:	6
Board Of Equalization:	44-032062
Referral Date:	07-20-92
Action Date:	05-23-94
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	431
Swrcb Tank Id:	05-000-020062-000001
Actv Date:	04-26-94
Capacity:	500
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	2

Status:	Active
Comp Number:	20062
Number:	6
Board Of Equalization:	44-032062
Referral Date:	07-20-92
Action Date:	05-23-94
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	432
Swrcb Tank Id:	05-000-020062-000002
Actv Date:	04-26-94
Capacity:	500
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

A2 Target Property | **CAL FIRE - ALTAVILLE** | **CUPA Listings** | **S112437543**
125 MAIN | **N/A**
ANGELS CAMP, CA

Site 2 of 4 in cluster A

Actual: 1543 ft.

CUPA CALVERAS:

Facility Id:	FA0000401
PE:	5311
Description:	HAZ WASTE GENERATOR / WASTE OIL & ANTIFREEZE

Facility Id:	FA0000401
PE:	5214
Description:	HAZ MAT RELEASE RESPONSE PLAN 6-10 CHEMICALS

A3 Target Property | **CDF ALTAVILLE** | **AST** | **A100339949**
125 NORTH MAIN STREET | **N/A**
ALTAVILLE, CA 95221

Site 3 of 4 in cluster A

Actual: 1543 ft.

AST:

Owner:	State of California
Total Gallons:	3,250
Certified Unified Program Agencies:	Calaveras

A4 Target Property | **ALTVILLE FOREST FIRE STATION** | **HIST CORTESE** | **S103479850**
125 MAIN ST N | **LUST** | **N/A**
ALTAVILLE, CA 95249

Site 4 of 4 in cluster A

Actual: 1543 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	05
Reg By:	LTNKA
Reg Id:	050085

LUST:

Region:	STATE
Global Id:	T0600900079
Latitude:	38.0834833608038
Longitude:	-120.560896396637
Case Type:	LUST Cleanup Site
Status:	Open - Verification Monitoring
Status Date:	02/24/2011
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	CALAVERAS COUNTY
RB Case Number:	050085
LOC Case Number:	058-012-023
File Location:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	The case was opened following an unauthorized release from an underground storage tank system at the subject site. Corrective action is underway as directed by the CVRWQCB. Corrective action may consist of preliminary site investigation, planning and implementation of remedial action, verification monitoring, or a combination thereof. A summary of the site history is available by clicking on either the "Cleanup Status History", "Regulatory Activities" or the "Site Maps/Documents" tab. For a complete site history the case file at the CVRWQCB should be consulted.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0600900079
Contact Type:	Local Agency Caseworker
Contact Name:	TONY MARIS
Organization Name:	CALAVERAS COUNTY
Address:	ENV. HEALTH, 891 MOUNTAIN RANCH RD.
City:	SAN ANDREAS
Email:	tmaris@co.calaveras.ca.us
Phone Number:	Not reported

ALTVILLE FOREST FIRE STATION (Continued) **S103479850**

Global Id: T0600900079
Contact Type: Regional Board Caseworker
Contact Name: GLENN T. MEEKS
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: gmeeks@waterboards.ca.gov
Phone Number: Not reported

Status History:

Global Id: T0600900079
Status: Open - Case Begin Date
Status Date: 01/14/1998

Global Id: T0600900079
Status: Open - Site Assessment
Status Date: 01/14/1998

Global Id: T0600900079
Status: Open - Site Assessment
Status Date: 07/17/2001

Global Id: T0600900079
Status: Open - Site Assessment
Status Date: 10/03/2007

Global Id: T0600900079
Status: Open - Verification Monitoring
Status Date: 02/24/2011

Regulatory Activities:

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 06/08/2001
Action: Clean-up and Abatement Order

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 08/27/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900079
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 08/19/2004
Action: Staff Letter

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 02/18/2009
Action: Technical Correspondence / Assistance / Other

ALTVILLE FOREST FIRE STATION (Continued) **S103479850**

Global Id: T0600900079
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0600900079
Action Type: RESPONSE
Date: 01/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0600900079
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 12/06/2011
Action: Site Visit / Inspection / Sampling

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 07/20/2001
Action: Staff Letter

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 01/20/2011
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 02/12/2013
Action: Staff Letter

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 06/06/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900079
Action Type: RESPONSE
Date: 03/31/2013
Action: Soil Vapor Intrusion Investigation Workplan

Global Id: T0600900079
Action Type: REMEDIATION
Date: 01/01/1950
Action: Monitored Natural Attenuation

Global Id: T0600900079
Action Type: RESPONSE
Date: 04/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0600900079
Action Type: RESPONSE

ALTVILLE FOREST FIRE STATION (Continued) **S103479850**

Date: 10/19/2007
Action: Soil and Water Investigation Workplan

Global Id: T0600900079
Action Type: RESPONSE
Date: 09/06/2004
Action: Other Report / Document

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 10/04/2007
Action: Staff Letter

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 07/09/2009
Action: Staff Letter

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 06/14/2010
Action: Staff Letter

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 07/10/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 04/29/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900079
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 04/10/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 08/08/2001
Action: Staff Letter

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 01/11/2002
Action: Staff Letter

Global Id: T0600900079
Action Type: ENFORCEMENT
Date: 06/08/2001
Action: * Historical Enforcement

ALTVILLE FOREST FIRE STATION (Continued) **S103479850**

Global Id:	T0600900079
Action Type:	ENFORCEMENT
Date:	08/30/2007
Action:	Staff Letter
Global Id:	T0600900079
Action Type:	ENFORCEMENT
Date:	03/24/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600900079
Action Type:	ENFORCEMENT
Date:	06/27/2011
Action:	Staff Letter

LUST REG 5:

Region:	5
Status:	Pollution Characterization
Case Number:	050085
Case Type:	Drinking Water Aquifer affected
Substance:	GASOLINE
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

5
NNW
< 1/8
0.090 mi.
476 ft.

ALTAVILLE MOBILE
273 MAIN ST N
ANGELS CAMP, CA 95222

HIST CORTESE **S102423900**
LUST **N/A**
CUPA Listings

Relative:
Lower

Actual:
1529 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	5
Reg By:	LTNKA
Reg Id:	050024

LUST:

Region:	STATE
Global Id:	T0600900022
Latitude:	38.0849447
Longitude:	-120.5628579
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/10/1991
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	CALAVERAS COUNTY
RB Case Number:	050024
LOC Case Number:	058-019-016
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

ALTAVILLE MOBILE (Continued) **S102423900**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0600900022
Contact Type:	Local Agency Caseworker
Contact Name:	TONY MARIS
Organization Name:	CALAVERAS COUNTY
Address:	ENV. HEALTH, 891 MOUNTAIN RANCH RD.
City:	SAN ANDREAS
Email:	tmaris@co.calaveras.ca.us
Phone Number:	Not reported

Global Id:	T0600900022
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0600900022
Status:	Completed - Case Closed
Status Date:	04/10/1991

Global Id:	T0600900022
Status:	Open - Case Begin Date
Status Date:	02/04/1991

Global Id:	T0600900022
Status:	Open - Remediation
Status Date:	02/04/1991

Regulatory Activities:

Global Id:	T0600900022
Action Type:	ENFORCEMENT
Date:	04/05/1991
Action:	Closure/No Further Action Letter

Global Id:	T0600900022
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0600900022
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

LUST REG 5:

Region:	5
Status:	Case Closed
Case Number:	050024

ALTAVILLE MOBILE (Continued) **S102423900**

Case Type: Soil only
Substance: GASOLINE
Staff Initials: GTM
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

CUPA CALVERAS:
Facility Id: FA0000570
PE: 5311
Description: HAZ WASTE GENERATOR / WASTE OIL & ANTIFREEZE

Facility Id: FA0000570
PE: 5213
Description: HAZ MAT RELEASE RESPONSE PLAN 1-5 CHEMICALS

B6 **EDR US Hist Auto Stat** **1015400265**
NW **300 N MAIN** **N/A**
1/8-1/4 **ANGELS CAMP, CA 95222**
0.177 mi.
935 ft. **Site 1 of 3 in cluster B**

Relative:
Lower

Actual:
1510 ft.

EDR Historical Auto Stations:
Name: SIERRA AUTOMOTIVE
Year: 1999
Address: 300 N MAIN

Name: SIERRA AUTOMOTIVE
Year: 2000
Address: 300 N MAIN

C7 **B.H. SCHOOL DIST. BUS GARAGE** **LUST** **S103479834**
ESE **218 PERI ST** **N/A**
1/8-1/4 **ALTAVILLE, CA 95221**
0.197 mi.
1039 ft. **Site 1 of 5 in cluster C**

Relative:
Higher

Actual:
1548 ft.

LUST REG 5:
Region: 5
Status: Case Closed
Case Number: 050045
Case Type: Undefined
Substance: GASOLINE
Staff Initials: GTM
Lead Agency: Regional
Program: LUST
MTBE Code: 2

B8
NW
1/8-1/4
0.199 mi.
1051 ft.

320 N MAIN
ANGELS CAMP, CA 95222

Site 2 of 3 in cluster B

EDR US Hist Auto Stat **1015421763**
N/A

Relative:
Lower

Actual:
1512 ft.

EDR Historical Auto Stations:

Name:	VALDEZ JOHN THE PAINT & BODY SHOP
Year:	1999
Address:	320 N MAIN
Name:	VALDEZ JOHN THE PAINT & BODY SHOP
Year:	2000
Address:	320 N MAIN

B9
NW
1/8-1/4
0.199 mi.
1051 ft.

320 N MAIN ST
ANGELS CAMP, CA 95222

Site 3 of 3 in cluster B

EDR US Hist Auto Stat **1015421750**
N/A

Relative:
Lower

Actual:
1512 ft.

EDR Historical Auto Stations:

Name:	PAINT & BODY SHOP JR VALDEZ THE
Year:	2012
Address:	320 N MAIN ST

C10
ESE
1/8-1/4
0.203 mi.
1074 ft.

ALTAVILLE MAINTENANCE STN
154 MONTE VERDE RD
ALTAVILLE, CA 95221

Site 2 of 5 in cluster C

HIST CORTESE **S101306848**
LUST **N/A**
CUPA Listings

Relative:
Higher

Actual:
1550 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	05
Reg By:	LTNKA
Reg Id:	050009

LUST:

Region:	STATE
Global Id:	T0600900007
Latitude:	38.080955688
Longitude:	-120.557668
Case Type:	LUST Cleanup Site
Status:	Open - Remediation
Status Date:	01/12/2010
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	PGM
Local Agency:	CALAVERAS COUNTY
RB Case Number:	050009
LOC Case Number:	058-015-006
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	The case was opened following an unauthorized release from an underground storage tank system at the subject site. Corrective action is underway as directed by the CVRWQCB. Corrective action may consist of preliminary site investigation, planning and

ALTAVILLE MAINTENANCE STN (Continued) **S101306848**

implementation of remedial action, verification monitoring, or a combination thereof. A summary of the site history is available by clicking on either the "Cleanup Status History", "Regulatory Activities" or the "Site Maps/Documents" tab. For a complete site history the case file at the CVRWQCB should be consulted.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0600900007
Contact Type:	Local Agency Caseworker
Contact Name:	TONY MARIS
Organization Name:	CALAVERAS COUNTY
Address:	ENV. HEALTH, 891 MOUNTAIN RANCH RD.
City:	SAN ANDREAS
Email:	tmaris@co.calaveras.ca.us
Phone Number:	Not reported

Global Id:	T0600900007
Contact Type:	Regional Board Caseworker
Contact Name:	PETER MINKEL
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	pminkel@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0600900007
Status:	Open - Case Begin Date
Status Date:	08/01/1988

Global Id:	T0600900007
Status:	Open - Remediation
Status Date:	01/12/2010

Global Id:	T0600900007
Status:	Open - Site Assessment
Status Date:	08/01/1988

Global Id:	T0600900007
Status:	Open - Verification Monitoring
Status Date:	08/05/2003

Regulatory Activities:

Global Id:	T0600900007
Action Type:	ENFORCEMENT
Date:	01/25/2000
Action:	Staff Letter

Global Id:	T0600900007
Action Type:	ENFORCEMENT
Date:	04/08/2003
Action:	File review

Global Id:	T0600900007
Action Type:	ENFORCEMENT

ALTAVILLE MAINTENANCE STN (Continued) **S101306848**

Date: 11/01/2008
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 01/06/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 03/28/2011
Action: Site Visit / Inspection / Sampling

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 07/28/2009
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900007
Action Type: RESPONSE
Date: 10/30/2010
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 04/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0600900007
Action Type: RESPONSE
Date: 11/30/2011
Action: Well Installation Workplan

Global Id: T0600900007
Action Type: RESPONSE
Date: 01/30/2010
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 06/18/2003
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 04/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 08/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 01/15/2004
Action: Monitoring Report - Quarterly

ALTAVILLE MAINTENANCE STN (Continued) **S101306848**

Global Id: T0600900007
Action Type: RESPONSE
Date: 04/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 10/30/2007
Action: Other Report / Document

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 01/11/2007
Action: Meeting

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 09/05/2006
Action: Notice to Comply

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 06/24/2002
Action: Staff Letter

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 09/02/2011
Action: Staff Letter

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 05/11/2009
Action: Staff Letter

Global Id: T0600900007
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0600900007
Action Type: RESPONSE
Date: 01/23/2003
Action: Sensitive Receptor Survey Report

Global Id: T0600900007
Action Type: RESPONSE
Date: 10/15/2002
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 01/30/2008
Action: Other Report / Document

Global Id: T0600900007
Action Type: RESPONSE

ALTAVILLE MAINTENANCE STN (Continued) **S101306848**

Date: 08/28/2003
Action: Other Report / Document

Global Id: T0600900007
Action Type: RESPONSE
Date: 07/27/2005
Action: Tank Removal Report / UST Sampling Report

Global Id: T0600900007
Action Type: RESPONSE
Date: 10/30/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0600900007
Action Type: RESPONSE
Date: 04/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 07/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 07/31/2009
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 01/27/2003
Action: Soil and Water Investigation Report

Global Id: T0600900007
Action Type: RESPONSE
Date: 02/01/2003
Action: Other Report / Document

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 12/19/2011
Action: Staff Letter

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 01/03/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 01/03/2012
Action: Verbal Enforcement

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 04/20/2009
Action: Technical Correspondence / Assistance / Other

ALTAVILLE MAINTENANCE STN (Continued) **S101306848**

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 07/09/2013
Action: Staff Letter

Global Id: T0600900007
Action Type: RESPONSE
Date: 04/30/2007
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 10/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 08/17/2007
Action: Technical Correspondence / Assistance / Other

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 04/09/2012
Action: Staff Letter

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 07/22/2009
Action: Staff Letter

Global Id: T0600900007
Action Type: RESPONSE
Date: 04/30/2013
Action: Monitoring Report - Semi-Annually

Global Id: T0600900007
Action Type: RESPONSE
Date: 04/30/2013
Action: Other Report / Document

Global Id: T0600900007
Action Type: RESPONSE
Date: 09/30/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0600900007
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0600900007
Action Type: RESPONSE
Date: 08/02/2002
Action: Other Workplan

Global Id: T0600900007
Action Type: RESPONSE

ALTAVILLE MAINTENANCE STN (Continued) **S101306848**

Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 12/30/2011
Action: Well Installation Workplan - Regulator Responded

Global Id: T0600900007
Action Type: RESPONSE
Date: 12/30/2011
Action: Other Workplan - Regulator Responded

Global Id: T0600900007
Action Type: RESPONSE
Date: 04/30/2012
Action: Monitoring Report - Semi-Annually - Regulator Responded

Global Id: T0600900007
Action Type: RESPONSE
Date: 02/28/2012
Action: Well Installation Report - Regulator Responded

Global Id: T0600900007
Action Type: RESPONSE
Date: 03/30/2012
Action: Monitoring Report - Other - Regulator Responded

Global Id: T0600900007
Action Type: RESPONSE
Date: 08/30/2012
Action: Risk Assessment Report

Global Id: T0600900007
Action Type: RESPONSE
Date: 01/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: RESPONSE
Date: 02/28/2009
Action: Corrective Action Plan / Remedial Action Plan - Regulator Responded

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 06/13/2007
Action: Staff Letter

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 10/21/2005
Action: Staff Letter

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 10/26/2006
Action: Staff Letter

ALTAVILLE MAINTENANCE STN (Continued) **S101306848**

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 12/18/2006
Action: Meeting

Global Id: T0600900007
Action Type: ENFORCEMENT
Date: 04/21/2011
Action: Meeting

Global Id: T0600900007
Action Type: RESPONSE
Date: 07/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0600900007
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0600900007
Action Type: RESPONSE
Date: 07/30/2007
Action: Monitoring Report - Quarterly

LUST REG 5:
Region: 5
Status: Preliminary site assessment underway
Case Number: 050009
Case Type: Other ground water affected
Substance: DIESEL
Staff Initials: PGM
Lead Agency: Regional
Program: LUST
MTBE Code: 1

CUPA CALVERAS:
Facility Id: FA0000111
PE: 5311
Description: HAZ WASTE GENERATOR / WASTE OIL & ANTIFREEZE

Facility Id: FA0000111
PE: 5214
Description: HAZ MAT RELEASE RESPONSE PLAN 6-10 CHEMICALS

C11 **ALTAVILLE** **HIST UST** **U001615035**
SE **154 MONTE VERDE ST** **N/A**
1/8-1/4 **ALTAVILLE, CA 95814**
0.239 mi.
1264 ft. **Site 3 of 5 in cluster C**

Relative:
Higher

Actual:
1548 ft.

HIST UST:
Region: STATE
Facility ID: 00000068149
Facility Type: Not reported
Other Type: Not reported

ALTAVILLE (Continued) **U001615035**

Total Tanks:	0003
Contact Name:	Not reported
Telephone:	2097362589
Owner Name:	CALIF DEPT OF TRANSPORTATION
Owner Address:	1120 N STREET
Owner City,St,Zip:	SACRAMENTO, CA 95814

Tank Num:	001
Container Num:	0000000001
Year Installed:	1953
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	Not reported

Tank Num:	002
Container Num:	0000000002
Year Installed:	1953
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Not reported

Tank Num:	003
Container Num:	0000000003
Year Installed:	1953
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Not reported

C12 **CAL TRANS** **RCRA-SQG** **1000134706**
SE **163 MONTE VERDE** **FINDS** **CAD982488322**
1/8-1/4 **ANGELS CAMP, CA**
0.241 mi.
1275 ft. **Site 4 of 5 in cluster C**

Relative:
Higher

Actual:
1548 ft.

RCRA-SQG:

Date form received by agency:	04/05/1990
Facility name:	CAL TRANS
Facility address:	163 MONTE VERDE ANGELS CAMP, CA 95221
EPA ID:	CAD982488322
Mailing address:	1976 EAST CHARTER WAY STOCKTON, CA 95201
Contact:	ENVIRONMENTAL MANAGER
Contact address:	163 MONTE VERDE ANGELS CAMP, CA 95221
Contact country:	US
Contact telephone:	(209) 948-7427
Contact email:	Not reported
EPA Region:	09
Land type:	Other land type
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous

CAL TRANS (Continued) **1000134706**

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	CALIFORNIA STATE OF
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date:	10/25/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	State

FINDS:

Registry ID: 110002828600

CAL TRANS (Continued) **1000134706**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

C13
ESE
1/8-1/4
0.244 mi.
1287 ft.

BRET HARTE TRANSPORTATION DEPT.
219 PERI STREET
ANGELS CAMP, CA 95222

AST **A100339740**
N/A

Site 5 of 5 in cluster C

Relative:
Higher

Actual:
1549 ft.

AST:

Owner:	Bret Harte Union High School
Total Gallons:	1,700
Certified Unified Program Agencies:	Calaveras

D14
SE
1/8-1/4
0.245 mi.
1294 ft.

CITY OF ANGELS PUBLIC SAFETY COMPLEX
200 MONTE VERDE ST
ANGELS CAMP, CA 95222

LUST **S108147312**
CUPA Listings **N/A**

Site 1 of 3 in cluster D

Relative:
Higher

Actual:
1548 ft.

LUST:

Region:	STATE
Global Id:	T0600905162
Latitude:	38.0806452
Longitude:	-120.5576855
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/03/2006
Lead Agency:	CALAVERAS COUNTY
Case Worker:	JB
Local Agency:	CALAVERAS COUNTY
RB Case Number:	Not reported
LOC Case Number:	05-000-000506
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0600905162
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not reported

Global Id: T0600905162

CITY OF ANGELS PUBLIC SAFETY COMPLEX (Continued) **S108147312**

Contact Type: Local Agency Caseworker
Contact Name: JASON BOETZER
Organization Name: CALAVERAS COUNTY
Address: 891 MOUNTAIN RANCH ROAD
City: SAN ANDREAS
Email: jboetzer@co.calaveras.ca.us
Phone Number: Not reported

Status History:
Global Id: T0600905162
Status: Completed - Case Closed
Status Date: 08/03/2006

Global Id: T0600905162
Status: Open - Case Begin Date
Status Date: 07/28/2006

Global Id: T0600905162
Status: Open - Site Assessment
Status Date: 08/02/2006

Regulatory Activities:
Global Id: T0600905162
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0600905162
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0600905162
Action Type: REMEDIATION
Date: 01/01/1950
Action: Not reported

LUST REG 5:
Region: 5
Status: Case Closed
Case Number: Not reported
Case Type: Soil only
Substance: DIESEL
Staff Initials: GTM
Lead Agency: Local
Program: LUST
MTBE Code: N/A

CUPA CALVERAS:
Facility Id: FA0000114
PE: 5212
Description: HMRRP UST FACILITY NO ADD'L CHEMICALS

D15 SE 1/8-1/4 0.245 mi. 1294 ft. | **HYDROX INC**
200 MONTEVERDA ST
ALTAVILLE, CA 95221 | **SWEEPS UST** | **S106927455**
N/A

Site 2 of 3 in cluster D

Relative: Higher

Actual: 1548 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	502
Number:	Not reported
Board Of Equalization:	44-002035
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	05-000-000502-000506
Actv Date:	Not reported
Capacity:	6000
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	2

Status:	Not reported
Comp Number:	502
Number:	Not reported
Board Of Equalization:	44-002035
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported
Swrcb Tank Id:	05-000-000502-000507
Actv Date:	Not reported
Capacity:	6000
Tank Use:	M.V. FUEL
Stg:	PRODUCT
Content:	DIESEL
Number Of Tanks:	Not reported

D16 SE 1/8-1/4 0.245 mi. 1294 ft. | **HYDROX INC**
200 MONTE VERDA ST
ANGELS CAMP, CA 95222 | **CA FID UST** | **S101580686**
N/A

Site 3 of 3 in cluster D

Relative: Higher

Actual: 1548 ft.

CA FID UST:

Facility ID:	05000086
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2097362536
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	ANGELS CAMP 95222
Contact:	Not reported
Contact Phone:	Not reported

HYDROX INC (Continued) **S101580686**

DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

17
NW
1/4-1/2
0.295 mi.
1557 ft.

REPLANET LLC **SWRCY** **S107137996**
396 N MAIN ST **N/A**
ANGELS CAMP, CA 95222

Relative:
Lower

Actual:
1521 ft.

SWRCY:

Reg Id:	164030
Cert Id:	RC164030.001
Mailing Address:	9910 E 6th St
Mailing City:	Rancho Cucamonga
Mailing State:	CA
Mailing Zip Code:	91730
Website:	http://www.replanetusa.com
Phone Number:	(951) 520-1700
Grand Father:	N
Rural:	Y
Operation Begin Date:	07/01/2012
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Agency:	N/A
Monday Hours Of Operation:	CLOSED
Tuesday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Wednesday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Thursday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Friday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Saturday Hours Of Operation:	10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm
Sunday Hours Of Operation:	CLOSED
Cert Status:	Operational
Organization ID:	151891
Organization Name:	rePLANET LLC
Agency Reg ID:	N/A
Operation End Date:	Not reported

18
SE
1/4-1/2
0.315 mi.
1663 ft.

BRET HARTE HIGH TRANSPORTATION DEPT **HIST CORTESE** **S102436579**
218 PERI **LUST** **N/A**
ALTAVILLE, CA **CUPA Listings**
SWEEPS UST

Relative:
Lower

Actual:
1541 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	05
Reg By:	LTNKA
Reg Id:	050045

LUST:

Region:	STATE

BRET HARTE HIGH TRANSPORTATION DEPT (Continued) **S102436579**

Global Id:	T0600900040
Latitude:	38.079880387
Longitude:	-120.556718
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/07/2000
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	CALAVERAS COUNTY
RB Case Number:	050045
LOC Case Number:	058-016-018
File Location:	Not reported
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0600900040
Contact Type:	Local Agency Caseworker
Contact Name:	KEITH A. TALLIA
Organization Name:	CALAVERAS COUNTY
Address:	750 INDUSTRIAL WAY
City:	SAN ANDREAS
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0600900040
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0600900040
Status:	Completed - Case Closed
Status Date:	06/07/2000

Global Id:	T0600900040
Status:	Open - Case Begin Date
Status Date:	05/07/1993

Global Id:	T0600900040
Status:	Open - Remediation
Status Date:	06/10/1993

Global Id:	T0600900040
Status:	Open - Site Assessment
Status Date:	05/07/1993

Global Id:	T0600900040
Status:	Open - Site Assessment
Status Date:	06/29/1998

BRET HARTE HIGH TRANSPORTATION DEPT (Continued) **S102436579**

Regulatory Activities:

Global Id:	T0600900040
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery
Global Id:	T0600900040
Action Type:	ENFORCEMENT
Date:	01/11/2000
Action:	Staff Letter
Global Id:	T0600900040
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0600900040
Action Type:	ENFORCEMENT
Date:	04/03/2000
Action:	Staff Letter

CUPA CALVERAS:

Facility Id:	FA0000397
PE:	5311
Description:	HAZ WASTE GENERATOR / WASTE OIL & ANTIFREEZE
Facility Id:	FA0000397
PE:	5213
Description:	HAZ MAT RELEASE RESPONSE PLAN 1-5 CHEMICALS

SWEEPS UST:

Status:	Active
Comp Number:	514
Number:	4
Board Of Equalization:	44-002077
Referral Date:	06-21-93
Action Date:	12-21-93
Created Date:	03-22-90
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	05-000-000514-000001
Actv Date:	06-21-93
Capacity:	1000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	2
Status:	Active
Comp Number:	514
Number:	4
Board Of Equalization:	44-002077
Referral Date:	06-21-93
Action Date:	12-21-93
Created Date:	03-22-90

BRET HARTE HIGH TRANSPORTATION DEPT (Continued) **S102436579**

Tank Status:	A
Owner Tank Id:	2
Swrcb Tank Id:	05-000-000514-000002
Actv Date:	06-21-93
Capacity:	4000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

E19
ESE
1/4-1/2
0.365 mi.
1928 ft.

C & L CYCLE **LUST** **S105109512**
238 ST CHARLES ST **ENF** **N/A**
SAN ANDREAS, CA 95222

Site 1 of 2 in cluster E

Relative:
Higher

Actual:
1545 ft.

LUST REG 5:

Region:	5
Status:	Preliminary site assessment workplan submitted
Case Number:	050091
Case Type:	Soil only
Substance:	GASOLINE
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

ENF:

Region:	5S
Facility Id:	225011
Agency Name:	Wilmshurst, Richard & Louise
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	38.197329
Place Longitude:	-120.684894
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported

C & L CYCLE (Continued) **S105109512**

Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	UST
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	5B05UT00001
Reg Measure Id:	170957
Reg Measure Type:	Unregulated
Region:	5S
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	01/29/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	243351
Region:	5S
Order / Resolution Number:	R5-2000-0518
Enforcement Action Type:	Admin Civil Liability
Effective Date:	08/01/2000
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Withdrawn
Title:	ACLC R5-2000-0518 for Wilmshurst, Richard & Louise
Description:	Failure to submit workplan for investigation. 3 undergrnd storage tanks removed 2/3/99 revealed many perforations in tank walls. Soil samples collected beneath tanks contained up to 1200 mg/kg of tl petro hydrocarbons as gasoline & 14 ub/kg benzene
Program:	UST
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0

C & L CYCLE (Continued) **S105109512**

Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0
Region:	5S
Facility Id:	225011
Agency Name:	Wilmshurst, Richard & Louise
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	38.197329
Place Longitude:	-120.684894
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	UST
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	5B05UT00001
Reg Measure Id:	170957
Reg Measure Type:	Unregulated
Region:	5S
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	01/29/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported

C & L CYCLE (Continued) **S105109512**

Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	244112
Region:	5S
Order / Resolution Number:	R5-2001-0503
Enforcement Action Type:	Admin Civil Liability
Effective Date:	01/19/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Withdrawn
Title:	ACLC R5-2001-0503 for Wilmshurst, Richard & Louise
Description:	Failure to submit a Site Contaimination Work Plan by 11/27/00 and the results of the site investigation work in a Preliminary Investigation & Evaluation Report by 1/15/01 both of which were requested in 13267 Order issued on 10/30/00.
Program:	UST
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	5S
Facility Id:	225011
Agency Name:	Wilmshurst, Richard & Louise
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	38.197329
Place Longitude:	-120.684894
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported

C & L CYCLE (Continued) **S105109512**

NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	UST
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	5B05UT00001
Reg Measure Id:	170957
Reg Measure Type:	Unregulated
Region:	5S
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	01/29/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	244113
Region:	5S
Order / Resolution Number:	R5-2001-0126
Enforcement Action Type:	Admin Civil Liability
Effective Date:	01/19/2001
Adoption/Issuance Date:	05/11/2001
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	01/19/2001
EPL Issuance Date:	Not reported
Status:	Active
Title:	ACLO R5-2001-0126 for Wilmshurst, Richard & Louise

C & L CYCLE (Continued) **S105109512**

Description:	Failure to submit a Site Contaimination Work Plan by 11/27/00 and the results of the site investigation work in a Preliminary Investigation & Evaluation Report by 1/15/01 both of which were requested in 13267 Order issued on 10/30/00.
Program:	UST
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	25000
Initial Assessed Amount:	0
Liability $ Amount:	25000
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

E20
SE
1/4-1/2
0.380 mi.
2004 ft.

SAVE MART SUPERMARKET #46 **SLIC** **S106230267**
260 MAIN ST S **N/A**
ANGELS CAMP, CA

Site 2 of 2 in cluster E

Relative:
Higher

Actual:
1543 ft.

SLIC REG 5:

Region:	5
Facility Status:	Preliminary Assessment
Unit:	Facility is a Spill or site
Pollutant:	Metals, TPH
Lead Agency:	DTSC/DLL
Date Filed:	06/11/02
Report Date:	11/12/01
Date Added:	Not reported
Date Closed:	Not reported

21
ESE
1/2-1
0.541 mi.
2858 ft.

SAVE MART #46 **SLIC** **S105557546**
260 MAIN **CUPA Listings** **N/A**
ANGELS CAMP, CA **DEED**
VCP
ENVIROSTOR

Relative:
Higher

Actual:
1545 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	05/21/2009
Global Id:	SL0600981388
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Lead Agency Case Number:	Not reported
Latitude:	38.078637
Longitude:	-120.552881
Case Type:	Cleanup Program Site
Case Worker:	ZZZ
Local Agency:	Not reported
RB Case Number:	SLT5S766
File Location:	Regional Board
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Lead, Other Solvent or Non-Petroleum Hydrocarbon
Site History:	Land use covenant in place for site - no further action required by

SAVE MART #46 (Continued) **S105557546**

DTSC (lead agency). See Angels Camp Towne Center case on Envirostor for more information.

Click here to access the California GeoTracker records for this facility:

CUPA CALVERAS:

Facility Id:	FA0000270
PE:	5213
Description:	HAZ MAT RELEASE RESPONSE PLAN 1-5 CHEMICALS

DEED:

Area:	PROJECT WIDE
Sub Area:	Not reported
Site Type:	VOLUNTARY CLEANUP
Status:	ACTIVE
Deed Date(s):	06/23/2005
EDR Link ID:	5540001

VCP:

Facility ID:	05540001
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	ASP, LUC, EX, NOWN, NSUB, RES
Acres:	0.1
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Timothy Miles
Supervisor:	Steven Becker
Division Branch:	Cleanup San Joaquin
Site Code:	101434
Assembly:	05
Senate:	08
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	01/12/2012
Restricted Use:	YES
Funding:	Responsible Party
Lat/Long:	38.07855 / -120.5557
APN:	058-026-019
Past Use:	FOUNDRY
Potential COC:	30013
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	ANGELS CAMP TOWNE CENTER SITE
Alias Type:	Alternate Name
Alias Name:	058-026-019
Alias Type:	APN
Alias Name:	110033616059
Alias Type:	EPA (FRS #)
Alias Name:	101434
Alias Type:	Project Code (Site Code)
Alias Name:	05540001
Alias Type:	Envirostor ID Number

SAVE MART #46 (Continued) **S105557546**

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/11/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/19/2002
Comments: RA - Approximately 350 cubic yards of soil and 80 cubic yards of concrete debris contaminated with low levels of heavy metals and petroleum hydrocarbons were removed from the site as part of an expansion of the existing supermarket on the site. A deed restriction will be required for the rest of the site until it has been investigated and/or remediated. A removal action was completed for a portion of the site on 1/14/03. Approximately 350 cubic yards of soil and 80 cubic yards of concrete were removed. A deed restriction is required for the rest of the site until it is investigated/remediated.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 06/19/2002
Comments: CEQA - NOE -- A Notice of Exemption for undertaking a removal action to remove approximately 345 tons of metals contaminated foundry sands from the site was approved. RAW -- The removal action work plan was approved to remove approximately 345 tons of metals contaminated foundry seeds.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/06/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 11/12/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 10/14/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 06/23/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE

SAVE MART #46 (Continued) **S105557546**

Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 07/27/2001
Comments: ORDER- Signed a VCP with Pan Pacific Retail Porperties to complete a removal action workplan and a deed restriction at the Angel's Camp Towne Center Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 10/30/2011
Comments: Owner submitted inspection report.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: 5 Year Review Reports
Schedule Due Date: 10/31/2013
Schedule Revised Date: Not reported

ENVIROSTOR:
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 0.1
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Timothy Miles
Supervisor: Steven Becker
Division Branch: Cleanup San Joaquin
Facility ID: 05540001
Site Code: 101434
Assembly: 05
Senate: 08
Special Program: Voluntary Cleanup Program
Status: Active
Status Date: 01/12/2012
Restricted Use: YES
Site Mgmt. Req.: ASP, LUC, EX, NOWN, NSUB, RES
Funding: Responsible Party
Latitude: 38.07855
Longitude: -120.5557
APN: 058-026-019
Past Use: FOUNDRY
Potential COC: Lead
Confirmed COC: Lead, NONE SPECIFIED
Potential Description: SOIL
Alias Name: ANGELS CAMP TOWNE CENTER SITE
Alias Type: Alternate Name
Alias Name: 058-026-019
Alias Type: APN
Alias Name: 110033616059
Alias Type: EPA (FRS #)
Alias Name: 101434

SAVE MART #46 (Continued) **S105557546**

Alias Type: Project Code (Site Code)
Alias Name: 05540001
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/11/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/19/2002
Comments: RA - Approximately 350 cubic yards of soil and 80 cubic yards of concrete debris contaminated with low levels of heavy metals and petroleum hydrocarbons were removed from the site as part of an expansion of the existing supermarket on the site. A deed restriction will be required for the rest of the site until it has been investigated and/or remediated. A removal action was completed for a portion of the site on 1/14/03. Approximately 350 cubic yards of soil and 80 cubic yards of concrete were removed. A deed restriction is required for the rest of the site until it is investigated/remediated.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 06/19/2002
Comments: CEQA - NOE -- A Notice of Exemption for undertaking a removal action to remove approximately 345 tons of metals contaminated foundry sands from the site was approved. RAW -- The removal action work plan was approved to remove approximately 345 tons of metals contaminated foundry seeds.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/06/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 11/12/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 10/14/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 06/23/2005

SAVE MART #46 (Continued) **S105557546**

Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	07/27/2001
Comments:	ORDER- Signed a VCP with Pan Pacific Retail Porperties to complete a removal action workplan and a deed restriction at the Angel's Camp Towne Center Site.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction Monitoring Report
Completed Date:	10/30/2011
Comments:	Owner submitted inspection report.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	5 Year Review Reports
Schedule Due Date:	10/31/2013
Schedule Revised Date:	Not reported

Count: 22 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ALTAVILLE	S106922586	ALTAVILLE CAL TRANS MAINT YARD	89 MAIN ST	95222	SWEEPS UST
ANGELS CAMP	S112437531	AMERICAN TOWER CORP-FOWLER PEAK	HWY 4 AND STALLION		CUPA Listings
ANGELS CAMP	S113719688	TEICHERT CONSTRUCTION	HWY 4, ROLLERI BYPASS		CUPA Listings
ANGELS CAMP	S113719692	BAYLOR'S	2122C HWY 49		CUPA Listings
ANGELS CAMP	S112437554	SUBURBAN PROPANE - ANGELS	1321 HIGHWAY 49		CUPA Listings
ANGELS CAMP	S112437564	OARS	2687 HWY 49		CUPA Listings
ANGELS CAMP	S112437521	PG & E / FROG TOWN	HWY 49		CUPA Listings
ANGELS CAMP	U001603966	O.A.R.S., INCORPORATED	HWY 49-1.7 MILES SOUTH OF ANGE	95222	HIST UST
ANGELS CAMP	1003878758	RED HILL LDFL	ANGELS CAMP	95222	CERC-NFRAP
ANGELS CAMP	U001603957	CALAVERAS COUNTY FAIRGROUNDS	S. HIGHWAY 49	95222	HIST UST
ANGELS CAMP	S112437517	O'REILLY AUTO PARTS #3509	740 MAIN		CUPA Listings
ANGELS CAMP	S112437587	CALAVERAS LUMBER - AST	494 MAIN		CUPA Listings
ANGELS CAMP	S112437506	CVS #9539	41 MAIN		CUPA Listings
ANGELS CAMP	S112437563	THE PAINT & BODY SHOP	314 MAIN		CUPA Listings
ANGELS CAMP	S112437503	FROGGY'S AUTO WASH & LUBE	572 S MAIN		CUPA Listings
ANGELS CAMP	S112437546	CALAVERAS LUMBER	155 MAIN		CUPA Listings
ANGELS CAMP	S113719687	FORTY NINER BODY AND FRAME	1104 MAIN		CUPA Listings
ANGELS CAMP	S112437525	AMERIGAS	575 MAIN		CUPA Listings
ANGELS CAMP	S112437573	WAYNE & SON AUTOMOTIVE, INC.	329 MAIN		CUPA Listings
ANGELS CAMP	S113016751	CALTRANS D10 MAINTENANCE ALTAVILLE	154 MONTE VISTA ST	95222	HAZNET
ANGELS CAMP	S112437542	CAL FIRE - VALLECITO	3225 SIX MILE		CUPA Listings
WESTPOINT	S106923748	CABBAGE PATCH MAINTENANCE STA	HWY 26 PO BOX 599	95222	SWEEPS UST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
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: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

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: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
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: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
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: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
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: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
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: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

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: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 09/02/2013
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: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 09/05/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
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: 09/05/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 50

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 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 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

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

SLIC: Statewide SLIC Cases
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: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

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: 09/28/2012
Date Data Arrived at EDR: 11/01/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 162

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
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: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
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: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
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: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

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: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

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: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

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: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
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: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

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: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
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: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

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: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 09/05/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

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: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

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: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/19/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 28

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 04/26/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 20

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 12/02/2013
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: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

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: 08/06/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 22

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Quarterly

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: 09/05/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

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: 06/30/2013
Date Data Arrived at EDR: 09/03/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

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

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
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

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

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/14/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/11/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 03/12/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 55

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/30/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
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

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: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

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: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

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: 12/18/2012
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 30

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

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: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

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: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/30/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

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: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Every 4 Years

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: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
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

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
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: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 01/27/2014
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: 11/01/2012
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 114

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

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: 03/14/2013
Date Data Arrived at EDR: 03/20/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 112

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

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: 04/09/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 29

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/20/2014
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: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

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

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: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
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: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Biennially

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

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 50

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

UIC: UIC Listing

A listing of underground control injection wells.

Date of Government Version: 08/21/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 30

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Varies

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: 07/05/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 52

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
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

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: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: No Update Planned

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: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 35

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Annually

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
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: 08/09/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
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.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 41

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 58

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Varies

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: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

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: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
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: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/19/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 28

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
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: 08/29/2013
Date Data Arrived at EDR: 09/13/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 31

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
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: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/28/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/27/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/12/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 49

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 19

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/25/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/20/2014
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

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: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: N/A

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

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: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

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: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

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: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

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 US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

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: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

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: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 14

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 25

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 06/20/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 61

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 20

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 16

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/20/2013
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 39

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 46

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 09/20/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 46

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 8

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/09/2013
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 13

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/09/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 07/26/2013
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 13

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 42

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/28/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 35

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/22/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 03/25/2013
Number of Days to Update: 32

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 26

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 09/20/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 24

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 11/26/2012
Date Data Arrived at EDR: 11/28/2012
Date Made Active in Reports: 01/21/2013
Number of Days to Update: 54

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/23/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 42

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 09/04/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 39

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/11/2013
Date Data Arrived at EDR: 09/12/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 32

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/29/2013
Date Data Arrived at EDR: 05/30/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 46

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 49

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/20/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/18/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 6

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/18/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/03/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 16

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/03/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 08/23/2013
Number of Days to Update: 46

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/03/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 37

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2012
Date Data Arrived at EDR: 11/06/2012
Date Made Active in Reports: 11/30/2012
Number of Days to Update: 24

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 09/25/2013
Date Data Arrived at EDR: 09/27/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 21

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 08/26/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/23/2013
Number of Days to Update: 49

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/04/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 36

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/06/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 38

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/14/2013
Date Data Arrived at EDR: 08/16/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 53

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 09/09/2013
Date Data Arrived at EDR: 09/10/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 34

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/18/2013
Date Data Arrived at EDR: 09/20/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 27

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/18/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 24

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 07/05/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 47

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 38

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/14/2013
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 42

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 06/24/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 49

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/29/2013
Date Data Arrived at EDR: 09/18/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 28

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/26/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 55

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/05/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 17

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
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: 08/01/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/10/2013
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

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, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ALTAVILLE FOREST FIRE STATION
125 NORTH MAIN STREET
ANGELS CAMP, CA 95222

TARGET PROPERTY COORDINATES

Latitude (North):	38.0828 - 38˚ 4' 58.08''
Longitude (West):	120.5619 - 120˚ 33' 42.84''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	713838.7
UTM Y (Meters):	4217603.5
Elevation:	1543 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	38120-A5 ANGELS CAMP, CA
Most Recent Revision:	1973

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

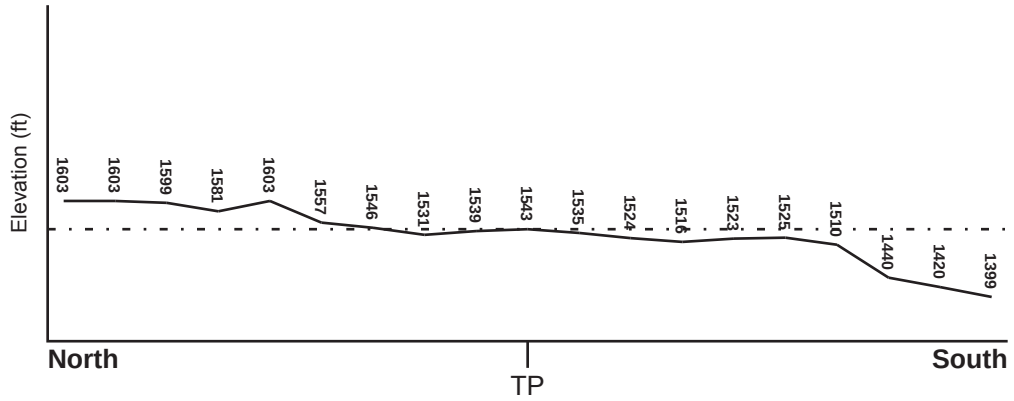
TOPOGRAPHIC INFORMATION

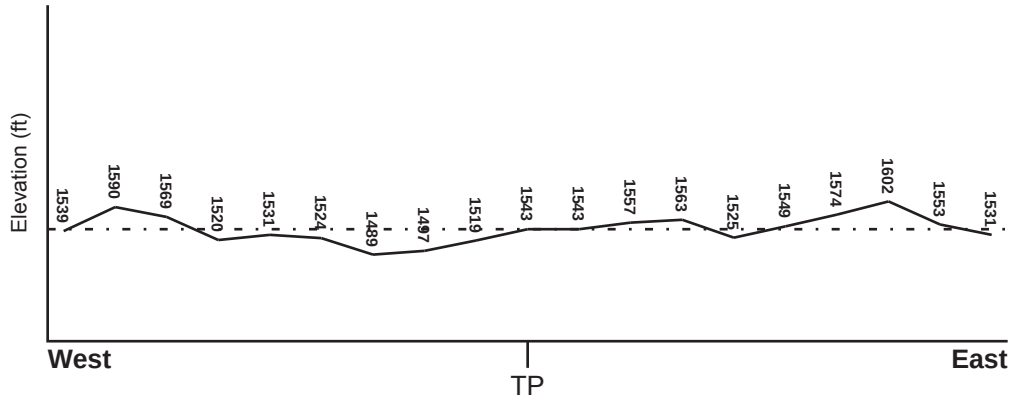
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 1543 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
CALAVERAS, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06009C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
ANGELS CAMP	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Pennsylvanian
Series:	Upper Paleozoic
Code:	uPze *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposits

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).

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. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	GUENOC
Soil Surface Texture:	clay loam
Hydrologic Group:	Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
Soil Drainage Class:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	MODERATE
Depth to Bedrock Min:	> 20 inches
Depth to Bedrock Max:	> 40 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	11 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.60
2	11 inches	36 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
3	36 inches	40 inches	unweathered bedrock	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: stony - loam
unweathered bedrock
silt loam
loam

Surficial Soil Types: stony - loam
unweathered bedrock
silt loam
loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: No Other Soil Types

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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

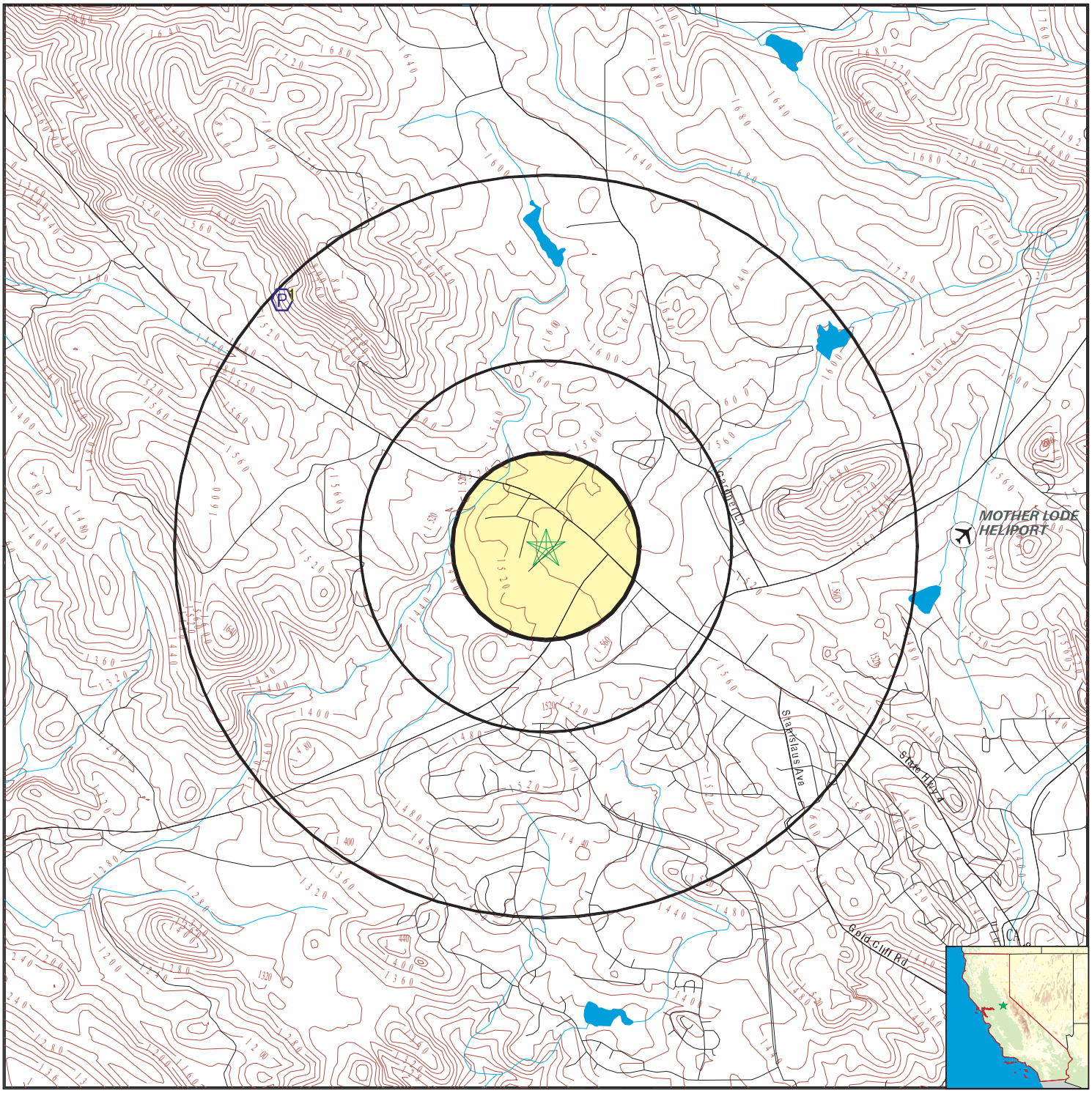
MAP ID	WELL ID	LOCATION FROM TP
1	CA0500015	1/2 - 1 Mile NW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 3771577.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
Oil, gas or related wells

SITE NAME: Altaville Forest Fire Station	CLIENT: Ninyo & Moore
ADDRESS: 125 North Main Street Angels Camp CA 95222	CONTACT: Peter Sims INQUIRY #: 3771577.2s
LAT/LONG: 38.0828 / 120.5619	DATE: October 30, 2013 3:17 pm

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Map ID Direction Distance Elevation	Database	EDR ID Number
1 **NW** **1/2 - 1 Mile** **Higher**	**FRDS PWS**	**CA0500015**

PWS ID:	CA0500015		
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	CAL TRANS CABBAGE PATCH CAL TRANS CABBAGE PATCH BOX 60 ALTAVILLE, CA 95221		
Addressee / Facility:	System Owner/Responsible Party CAL TRANS CABBAGE PATCH BOX 6 ALTAVILLE, CA 95221		
Facility Latitude:	38 05 33	Facility Longitude:	120 34 26
City Served:	Not Reported		
Treatment Class:	Untreated	Population:	00000025

Violations information not reported.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95222	62	7

Federal EPA Radon Zone for CALAVERAS County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95222

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.500 pCi/L	100%	0%	0%

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.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

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 Services
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 Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, 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 Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D

HISTORICAL RESEARCH DOCUMENTATION

Altaville Forest Fire Station
125 North Main Street
Angels Camp, CA 95222

Inquiry Number: 3771577.3
October 29, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/29/13

Site Name:
Altaville Forest Fire Station
125 North Main Street
Angels Camp, CA 95222

EDR Inquiry # 3771577.3

Client Name:
Ninyo & Moore
1956 Webster Street
Oakland, CA 94612

Contact: Peter Sims

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Ninyo & Moore were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Altaville Forest Fire Station
Address: 125 North Main Street
City, State, Zip: Angels Camp, CA 95222
Cross Street:
P.O. # 402242001
Project: Altaville Forest Fire Station
Certification # C0DA-4A6E-9518

Sanborn® Library search results
Certification # C0DA-4A6E-9518

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.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, 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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Altaville Forest Fire Station
125 North Main Street
Angels Camp, CA 95222

Inquiry Number: 3771577.5
November 01, 2013

The EDR Aerial Photo Decade Package

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Milford, CT 06461
800.352.0050
www.edrnet.com

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Date EDR Searched Historical Sources:

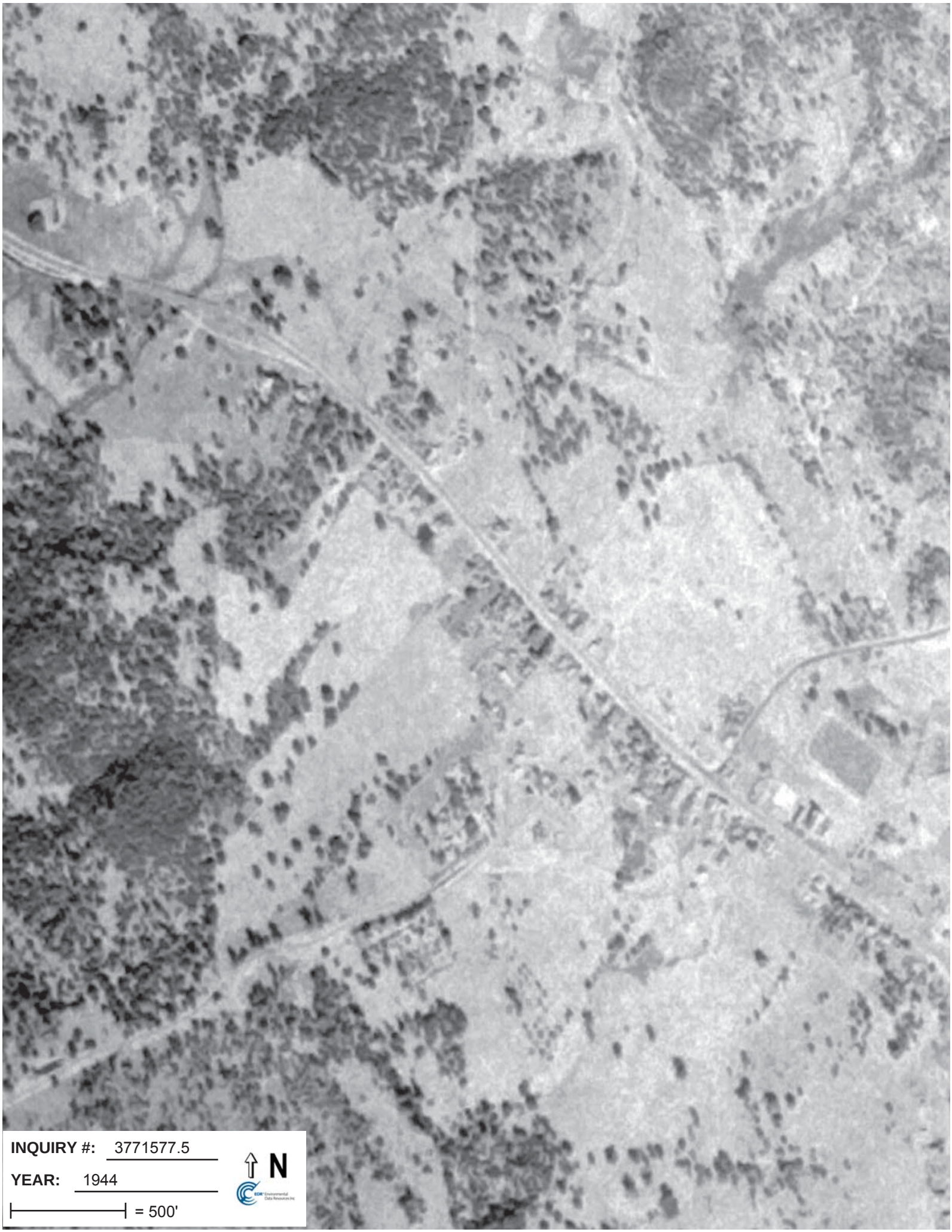
Aerial Photography November 01, 2013

Target Property:

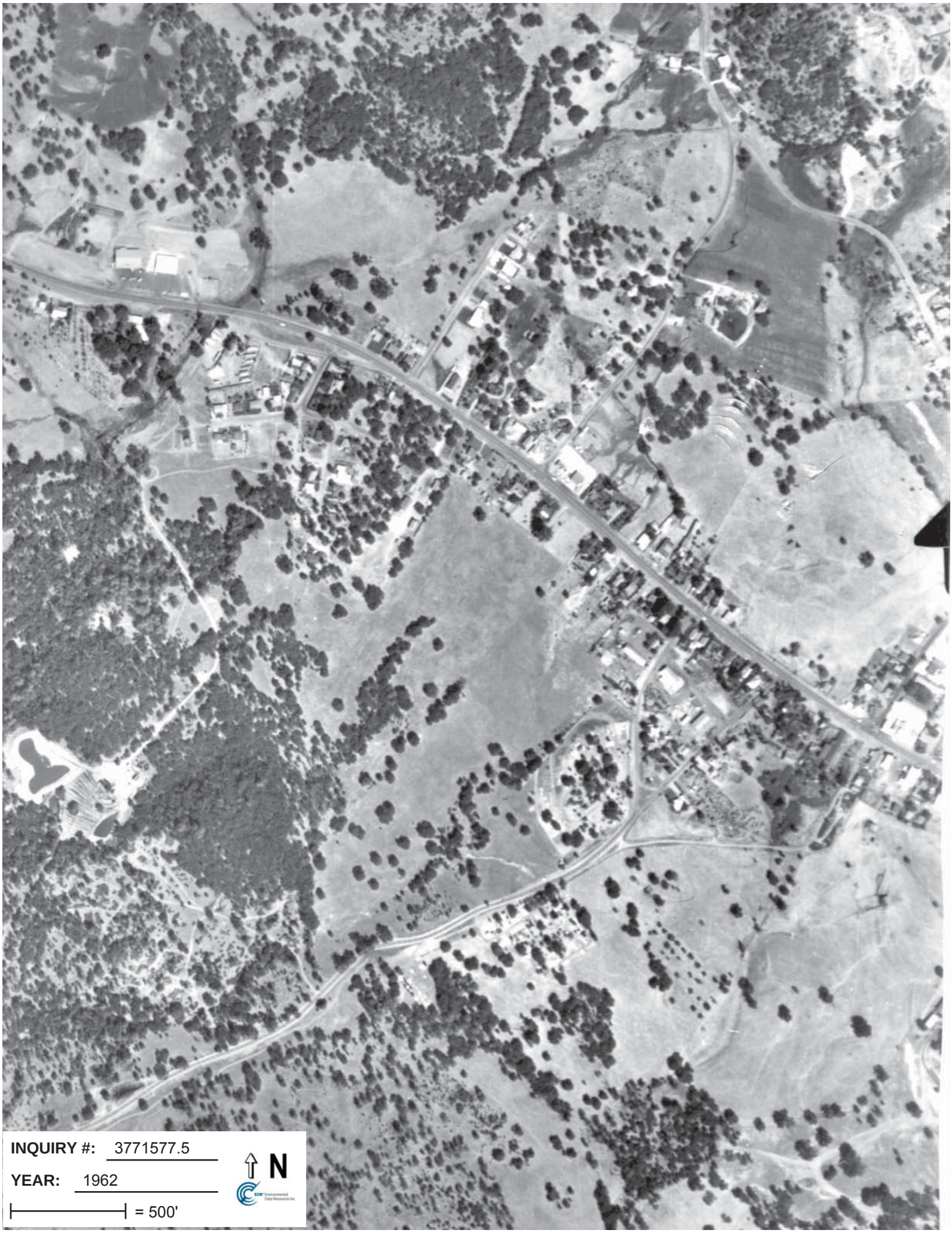
125 North Main Street

Angels Camp, CA 95222

Year	***Scale***	***Details***	***Source***
1944	Aerial Photograph. Scale: 1"=500'	Flight Year: 1944	USGS
1957	Aerial Photograph. Scale: 1"=500'	Flight Year: 1957	Cartwright
1962	Aerial Photograph. Scale: 1"=500'	Flight Year: 1962	Cartwright
1984	Aerial Photograph. Scale: 1"=500'	Flight Year: 1984	USGS
1987	Aerial Photograph. Scale: 1"=500'	Flight Year: 1987	USGS
1998	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1998	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Flight Year: 2006	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR


INQUIRY #: 3771577.5
YEAR: 1944
= 500'
N

INQUIRY #: 3771577.5
YEAR: 1957
= 500'
N


INQUIRY #: 3771577.5
YEAR: 1962
= 500'
N

INQUIRY #: 3771577.5
YEAR: 1984
= 500'
N

INQUIRY #: 3771577.5
YEAR: 1987
= 500'
N

INQUIRY #: 3771577.5
YEAR: 1998
= 500'
N

INQUIRY #: 3771577.5
YEAR: 2005
= 500'
N

INQUIRY #: 3771577.5
YEAR: 2006
= 500'
N

Altaville Forest Fire Station
125 North Main Street
Angels Camp, CA 95222

Inquiry Number: 3771577.4
October 30, 2013

EDR Historical Topographic Map Report

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Historical Topographic Map

N	TARGET QUAD NAME: JACKSON MAP YEAR: 1902 SERIES: 30 SCALE: 1:125000	SITE NAME: Altaville Forest Fire Station ADDRESS: 125 North Main Street Angels Camp, CA 95222 LAT/LONG: 38.0828 / -120.5619	CLIENT: Ninyo & Moore CONTACT: Peter Sims INQUIRY#: 3771577.4 RESEARCH DATE: 10/30/2013

Historical Topographic Map

N	TARGET QUAD NAME: SAN ANDREAS MAP YEAR: 1947 SERIES: 15 SCALE: 1:62500	SITE NAME: Altaville Forest Fire Station ADDRESS: 125 North Main Street Angels Camp, CA 95222 LAT/LONG: 38.0828 / -120.5619	CLIENT: Ninyo & Moore CONTACT: Peter Sims INQUIRY#: 3771577.4 RESEARCH DATE: 10/30/2013

Historical Topographic Map

N	TARGET QUAD NAME: SAN ANDREAS MAP YEAR: 1948 SERIES: 15 SCALE: 1:50000	SITE NAME: Altaville Forest Fire Station ADDRESS: 125 North Main Street Angels Camp, CA 95222 LAT/LONG: 38.0828 / -120.5619	CLIENT: Ninyo & Moore CONTACT: Peter Sims INQUIRY#: 3771577.4 RESEARCH DATE: 10/30/2013

Historical Topographic Map

N	TARGET QUAD NAME: ANGELS CAMP MAP YEAR: 1962 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Altaville Forest Fire Station ADDRESS: 125 North Main Street Angels Camp, CA 95222 LAT/LONG: 38.0828 / -120.5619	CLIENT: Ninyo & Moore CONTACT: Peter Sims INQUIRY#: 3771577.4 RESEARCH DATE: 10/30/2013

Historical Topographic Map

N	TARGET QUAD NAME: SAN ANDREAS MAP YEAR: 1962 SERIES: 15 SCALE: 1:62500	SITE NAME: Altaville Forest Fire Station ADDRESS: 125 North Main Street Angels Camp, CA 95222 LAT/LONG: 38.0828 / -120.5619	CLIENT: Ninyo & Moore CONTACT: Peter Sims INQUIRY#: 3771577.4 RESEARCH DATE: 10/30/2013

Historical Topographic Map

N	TARGET QUAD NAME: ANGELS CAMP MAP YEAR: 1973 PHOTOINSPECTED FROM : 1962 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Altaville Forest Fire Station ADDRESS: 125 North Main Street Angels Camp, CA 95222 LAT/LONG: 38.0828 / -120.5619	CLIENT: Ninyo & Moore CONTACT: Peter Sims INQUIRY#: 3771577.4 RESEARCH DATE: 10/30/2013

APPENDIX E

VAPOR ENCROACHMENT SCREENING MATRIX

Phase I ESA Vapor Encroachment Conditions (VEC) matrix includes a (1) Search Radius Test, (2) Chemicals of Concern Test (COC), and (3) a Critical Distance Test [1].

(1) Search Radius Test: Are there any known or suspect contaminated properties in the primary area of concern within the corresponding search radii?

☒ Yes ☐ No — If ***No***, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If ***Yes***, then:

(2) Chemicals of Concern Test: Are COC likely to be present within the area of concern for those known or suspect contaminated sites identified based on the Search Distance Test?

☒ Yes ☐ No — If ***No***, then screening for a VEC is complete and no VEC *currently* exists, go to #4. If ***Yes***, then:

(3) Critical Distance Test: A plume test to determine whether or not COC in the contaminated plume(s) may be within the critical distance.

☒ Yes ☐ No — (3a) Is information related to the contaminated(s) plume available (i.e. isoconcentration maps, site drawings, etc.)?
(3b) If ***No***, then a VEC cannot be ruled out; check ***Yes*** in #4 below indicating it is likely a VEC exists. If ***Yes***, then:

☐ Yes ☒ No — (3c) Is the site less than 100 feet to the nearest edge of a contaminated [non-petroleum hydrocarbon] plume(s)? If ***Yes***, then check ***Yes*** in #4 below indicating it is likely a VEC exists.

☒ Yes ☐ No — (3d) Is the site less than 30 feet to the nearest edge of a dissolved petroleum hydrocarbon plume(s)? If ***Yes***, then check ***Yes*** in #4 below indicating it is likely a VEC exists.

If the distance from the nearest edge of a contaminated plume to the nearest existing or planned structure on the site is less than 100 feet for non-petroleum hydrocarbon COC, or less than 30 feet for dissolved petroleum hydrocarbons, then it is presumed that a VEC *currently* exists beneath the site. If the distance from the nearest edge of the contaminated plume is greater than or equal to 100 feet for non-petroleum hydrocarbons, or 30 feet for dissolved petroleum hydrocarbon chemicals of concern, then it is presumed unlikely that a VEC *currently* exists beneath the site.

(4) Is it likely that a VEC *currently* exists beneath the site?

☒ Yes ☐ No — If ***No***, then the VEC screening is complete and no further investigation is recommended at this time. If ***Yes***, Ninyo & Moore recommends performing additional assessment, such as a Tier 2 VEC assessment according to ASTM E 2600-10.

[1] Based on guidance presented in the ASTM E 2600-10 Standard.

APPENDIX F

GEOPHYSICAL INVESTIGATION REPORT

ADVANCED GEOLOGICAL SERVICES

1605 School Street, #4
Moraga CA 94556
925 (808-8965)

November 25, 2013

Peter D. Sims, LEED AP
Project Environmental Geologist
Ninyo & Moore Geotechnical & Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612

Subject: Geophysical Investigation Report
CDF Fire Station
125 N. Main Street, Altaville, California

Mr. Sims-

1.0 INTRODUCTION

This report presents the results of Advanced Geological Services, Inc. (AGS) geophysical investigation at the California Department of Forestry (CDF) fire station in Altaville, California (Figure 1). The primary investigation objective was to locate buried metallic debris associated with wrecked vehicles, reportedly including one or more small airplanes. The secondary objective was to locate suspected backfilled trenches associated with buried utilities. The field work was performed on November 7, 2013 by AGS geophysicist Roark Smith, who used a Geonics EM61 high-sensitivity recording metal-detector, a Geonics EM31 terrain conductivity meter, and a GSSI SIR-3000 ground penetrating radar (GPR) system.

Figure 1 –Site Location Map, Altaville, California

Briefly, the EM61 was used to look for areas of buried metal, the EM31 was used to look for changes in soil conductivity indicative of trenches and/or pockets of non-metallic refuse; EM31 was also use to obtain a deeper investigation depth than the EM61. GPR was used to obtain graphical profiles of the subsurface to look for backfilled trenches and help identify buried objects detected by the EM61 and EM31 surveys. In general, EM31 and EM61 surveying can be an important part of a subsurface investigation because those techniques usually provide a deeper investigation depth than GPR, which can be as shallow as two feet at some sites. Depending on their size, the EM61can detect objects as deep as 10 feet while the EM31 can detect objects as deep as 15 feet.

2.0 RESULTS SUMMARY

- AGS has identified eight geophysical anomalies indicative of buried metal (Figure 2). Designated as A-1 through A-8, seven of the anomalies are characterized by elevated EM61

measurements indicative of shallowly buried (e.g., 5 feet or less) metal. The eighth anomaly (A-8) is a large area characterized by elevated EM31 terrain conductivity, which may be caused by natural geologic variations but also may be indicative of more deeply buried metal.

- Of the seven EM61 anomalies, A-1 and A-2 are the most significant. They are large, oval-shaped areas of anomalous EM61 response indicative of pockets of shallowly-buried small metal debris, although the areas may also contain larger objects at depth. Anomalies A-3 and A-4 are indicative of a single, larger buried metal objects or substructures such as a utility vault or underground storage tank. A-5 probably represents a buried pipe. A-6 and A-7 are more diffuse features that probably represent areas of scattered scrap metal at or near the surface.

3.0 INVESTIGATION AREA DESCRIPTION

The site is adjacent to the CDF fire station building and comprises a roughly rectangular-shaped, topographically flat lot measuring approximately 180 feet by 450 feet (1.9 acres). The lot was mostly unpaved and appeared to be a raised fill terrace serving as a laydown yard and outdoor and storage area for the fire station. Accordingly, the site contained several features, including buildings, storage containers, reinforced concrete structures, storage racks and metallic debris that produced geophysical noise and obstructed the survey in places (Figure 2).

4.0 GEOPHYSICAL METHODS AND EQUIPMENT

The geophysical investigation was performed using the following geophysical methods:

- Time-domain electromagnetic metal detection, using a Geonics EM61
- Frequency-domain electromagnetic terrain conductivity, using a Geonics EM31
- Ground Penetrating Radar (GPR) using a GSSI SIR-2 connected to a 400-MHz antenna

4.1 Time-Domain Electromagnetics (TDEM) using a Geonics EM61

The EM61 is a high-sensitivity, high-resolution recording metal detector commonly used to search for buried metal objects, particularly at developed sites cluttered with surface obstructions such as buildings, parked cars, chain-link fences, and buried utilities. Typical targets for EM61 surveys include underground storage tanks (USTs), reinforced concrete foundation remnants, buried refuse (which nearly always includes metallic debris), and individual metallic items such as ordnance and associated ordnance-related metal debris. The EM61 operates by transmitting a pulsed magnetic field, which causes (induces) small electrical currents (eddy currents) to flow through metallic objects near (below) the instrument. The strength of these eddy currents is measured by the EM61 receiver coil at a relatively long time after the magnetic field pulse subsides. This delayed measurement technique produces a reading (in millivolts) that responds strongly to metal but very weakly to the electrical properties of the surrounding soil, thus making the EM61 a high-sensitivity metal detector. The EM61 employs a one-meter-wide square coil, and its sensitivity can be enhanced by the deployment of a second receiver coil above the first; the second coil response can be used to reduce interference caused by nearby power lines and cultural objects such as vehicles and metal fences.

4.2 Frequency-Domain Terrain Conductivity (FDEM) using a Geonics EM31

The EM method measures electrical conductivity of the soil by inducing small electrical currents to flow

in the subsurface; the strength of the induced current is proportional to electrical conductivity. The EM31 instrument consists of a transmitter and receiver coils on a fixed PVC boom. Briefly, alternating electrical current flowing within the transmitter coil produces a magnetic field that penetrates into the subsurface, causing small electrical currents to flow in the subsurface. These subsurface currents have their own magnetic fields, which are detected and measured by the receiver coils. The current strength is proportional to conductivity, which allows the EM31 to be calibrated to measure conductivity directly. For subsurface investigations, variations in EM conductivity ("terrain conductivity") can indicate changes in the material properties of soil, rock, and fill material, the presence of buried refuse, and buried utilities and other types of metallic substructures. Although the EM31 is not as sensitive to buried metal objects as the EM61, EM31 surveys are useful because they have the potential to detect pockets of non-metallic refuse as well as linear conductors (i.e., metal pipes and cables) and larger metallic objects.

4.3 Ground Penetrating Radar (GPR)

GPR uses radar technology to produce a graphical profile of the subsurface that shows soil layering and images of buried objects. GPR systems typically use a single transceiving antenna (one that both transmits and receives the radar signal) that is dragged along the ground surface. The antenna emits a radar pulse into the ground; some of the radar energy reflects off of interfaces between materials with different electrical properties (e.g., soil and a UST) and returns to the surface where it is detected by the antenna and sent via the cable to a separate control unit where it is amplified and displayed on a computer screen as a vertical "wiggle trace," which is a plot of the strength (amplitude) of the received GPR signal (i.e., the reflection) over time. Although the vertical scale of a GPR profile is usually considered as depth, it actually measures the travel time of the radar pulse from the surface to a reflecting interface and back to the surface.

A subsurface profile is built as the antenna is pulled along the survey line and successive wiggle traces are recorded. GPR data are usually displayed as an array of closely-spaced traces; this procedure produces an image of the subsurface as the reflections (wiggles) on adjacent traces merge into coherent patterns. Soil layer boundaries appear as laterally continuous horizontal bands across a GPR profile. Buried objects appear as localized, high-amplitude (dark) reflection patterns. Buried pipes and USTs often exhibit a characteristic "upside down U" hyperbolic pattern, which allows them to be readily identified on a GPR record. Buried refuse often appears as zones of chaotic reflection patterns that disrupt the horizontal layering on a GPR profile. Although GPR can be subject to significant investigation depth limitations, it is used for utility locating because it has the potential to detect non-metallic utilities, whereas RF and EM locating methods will detect only metallic utilities. Burial depths are determined by using calibrating GPR profiles with images objects buried at known depths. Culverts and storm drain pipelines observed in drop inlets are often used for this purpose.

5.0 FIELD PROCEDURES

Before the field work began, AGS met onsite with Ninyo & Moore representative Peter Sims, who provided AGS with a map showing the area to be surveyed. AGS first performed the EM61 survey by wheeling the EM61 instrument back-and-forth across the site along east-west survey lines spaced approximately six feet apart. Approximately 10,600 line-feet EM61 data were obtained. The EM61 was programmed to obtain 4 readings per second, which approximately corresponds to one reading every two feet along each survey line. Horizontal positioning data were obtained using a Trimble Pro-XR Global

Positioning System (GPS) with the GPS antenna mounted over the center of the EM61 sensor coils using non-metallic straps and struts to minimize EM noise.

AGS then performed the EM31 survey by hand-carrying the EM31 instrument back-and-forth across the site along east-west survey lines spaced approximately 10 feet apart. The EM31 was programmed to obtain 2 readings per second, which approximately corresponds to one reading every four feet along each survey line. Horizontal positioning data were obtained using a backpack-mounted GPS. Approximately 9,000 line-feet of EM31 data were obtained.

After the EM data were obtained, AGS used its GPS to map prominent site features that likely affected the geophysical measurements, such as the buildings, storage containers, concrete pads, and debris areas. The map helps reference the geophysical data to the site and serves as a basemap upon which the EM data and investigation findings are presented (Figures 3 and 4); the map also documents the locations of surface metal objects so that the associated high-amplitude EM responses would not be mistaken for indications of buried metal, which is the investigation target.

AGS then performed GPR scanning by hand-pushing the cart-mounted GPR system along a grid of north-south and east-west survey lines spaced approximately 50 feet apart. It is worth noting that AGS performed the GPR survey in reconnaissance fashion along widely-spaced lines and monitored the data in field to assess the effectiveness of using GPR at the Altaville site. AGS determined that GPR had limited effectiveness, achieving an investigation depth of less than 3 feet below grade, and did not image any subsurface features of note. Overall, AGS obtained more than 1,900 line-feet of GPR data.

6.0 DATA PROCESSING AND ANALYSIS

EM61 and EM31 data processing and analysis was done using the GEOSOFT Oasis montaj earth science software system. A GEOSOFT kriging algorithm was used to prepare geo-referenced color-filled contour maps showing EM61 and EM31 response variations across the site (Figures 3 and 4, respectively). To facilitate correlation of EM response to site features, the contour maps were placed onto a basemap showing the locations of current site features as mapped by AGS.

For the EM analysis, AGS looked for high-amplitude responses not readily attributable to known metal objects such as the reinforced concrete pads, metal storage containers, and debris areas. Such responses are considered “anomalies” and are attributed to subsurface source bodies, which may include USTs, buried utilities, reinforced concrete foundations, and miscellaneous metallic debris. On the color contour maps, EM61 anomalies appear as “hot” (red and pink) colors representing areas with elevated readings indicative of metallic objects. EM31 anomalies can appear as both “hot” and “cool” (blue) colors representing terrain conductivity measurements above and below background readings, respectively. As a further aid to the analysis, data profiles for each survey transect were prepared and inspected. The profiles are especially useful for determining anomaly amplitudes and, in particular, assessing whether an EM31 anomaly is caused by buried object(s) or by a natural variation in geologic conditions. Profiles are also useful for identifying bad data caused by, say, a low-battery condition or a loose connection or other type of equipment malfunction within an EM system.

Because the EM61 was designed to produce a positive signal peak at the center of the metallic source

body, it tends to produce anomalies with a shape and extent that approximates the footprint of the metal source object, although it is worth noting that anomaly footprints are usually larger than that of the anomaly source body, and the footprint may also be distorted by nearby metal objects, underground utilities, and UST appurtenances. For reference, EM61 anomaly amplitudes associated with underground storage tanks (USTs) and similarly-sized metallic substructures depend on burial depth, but they are typically 200 millivolts (mV) or greater.

EM31 anomalies indicating buried refuse often appear as areas of elevated terrain conductivity readings, which are caused by electrically conductive leachate from decaying domestic waste, and/or by the accumulation and infiltration of stormwater runoff in the topographic depression caused by settling of the fill material. Above-ground metallic objects, such as buildings and chain-link fences, can produce a similar elevated response. Conversely, shallowly-buried metal objects can produce lower conductivity readings and in some instances even "negative" conductivity values, which are caused by an over-saturation and distortion of the EM31 system and are not a true conductivity measurement. In addition, EM31 responses in buried refuse areas often exhibit abrupt, high-amplitude positive and negative "kicks" associated with metallic refuse items.

AGS analyzed the GPR data in the field by examining subsurface images on the instrument's view screen, looking especially for chaotic, high-amplitude reflection patterns indicative of buried metallic debris. AGS also looked for lateral discontinuities in horizontal banding associated with natural soil layering, which would indicate a backfilled trench.

7.0 RESULTS

The investigation results and supporting geophysical data are presented on Figures 2 through 5 (Figure 1, displayed at the beginning of this Report, shows the site location). The results are also summarized on Table 1, below. Figure 2 is a site map showing the locations of geophysical anomalies indicative of substantial amounts of buried metallic debris. Figure 3 is a color-filled contour map of the EM61 data showing metal object locations. It is worth noting that, because of the abundance of high-amplitude responses (in excess of 3,000 mV) associated with surface metal objects, the EM61 color-contour display has been "clipped" to a maximum of 300 millivolts (mV) to better show lower-amplitude responses indicative of buried metal. Figure 4 is an EM31 contour map showing terrain conductivity variations across the site; Figure 4 also shows some of the EM31 data in profile format as an aid to the interpretation process. For completeness, Figure 5 shows the geophysical survey line locations.

Overall, the most pronounced features on the EM61 and EM31 results maps (Figures 3 and 4) are the high-amplitude responses (red areas on Figure 3 and red and blue areas on Figure 4) associated with the site's larger metallic structures, such as the reinforced concrete pads. Discounting those features, AGS has identified eight geophysical anomalies indicative of buried metal (Figure 2). Designated as A-1 through A-8, seven of the anomalies are characterized by elevated EM61 measurements indicative of shallowly buried (e.g., 5 feet or less) metal. The eighth anomaly (A-8) is a large area characterized by elevated terrain conductivity, which may be caused by natural geologic variations but also may be indicative of more deeply buried metal.

Table 1 – Results Summary- Altaville Fire Station Geophysical Investigation

Anomaly	Dimensions (ft)	Characteristics	Interpretation
A-1	60 x 60	Diffuse, oval-shaped low- and medium-amplitude (10 to 80 mV) EM61 response area that also contains isolated high-amplitude (>1,000 mV) "hits"	Cluster of smaller metallic debris items with a few larger, near-surface items
A-2	30 x 40	Diffuse, oval-shaped low- and medium-amplitude (10 to 80 mV) EM61 response area that also contains isolated high-amplitude (>1,000 mV) "hits"	Cluster of smaller metallic debris items with a few larger, near-surface items
A-3	15 x 25	Localized high-amplitude (~300 mV) EM61 response area.	Shallowly-buried metallic substructure (e.g., vault, UST)
A-4	10 x 13	Localized high-amplitude (~250 mV) EM61 response area.	Shallowly-buried smaller metallic object (e.g., valve, scrap metal)
A-5	7 x 70	Linear high-amplitude (~200 mV) EM61 response area.	Shallowly-buried metal pipe
A-6	15 x 30	Oval-shaped medium-amplitude (~125 mV) EM61 response area adjacent to AST and against site boundary fence	Scrap metal at or near the surface; possibly tools or fittings/fasteners associated with nearby AST
A-7	25 x 60	Elongated medium-amplitude (~100 mV) EM61 response area against site boundary fence	Scrap metal at or near the surface.
A-8	60 x 150	Large, elongated area of elevated EM31 terrain conductivity; "lumpy" data profiles.	Anomaly may be due to natural geologic variations, but "lumpy" EM31 data profiles and absence of associated EM61 response suggest more deeply-buried (~10 feet bgs) metal.

Of the seven EM61 anomalies (A-1 through A-7), A-1 and A-2 are the most significant. They are large (60 x 60 feet and 30 x 40 feet, respectively), oval-shaped areas of diffused, low- to medium-amplitude EM61 responses (in the 10 to 80 mV range) indicative of pockets of shallowly-buried small metal debris; A-1 and A-2 also contain isolated high-amplitude responses (>1,000 mV) indicative of larger metal objects at or near the surface. Anomalies A-3 and A-4 are more compact, high-amplitude response areas indicative of a single, larger buried metal object or substructure such as a utility vault or underground storage tank. A-5 is a linear feature that probably represents a buried pipe. A-6 and A-7 are more diffuse features located against the site boundary fence that probably represent areas of scattered scrap metal at or near the surface.

The eighth anomaly, A-8, is a broad, elongated yet well-defined area measuring approximately 60 feet by 150 feet; it exhibits an elevated EM31 terrain conductivity response that is not associated with any observed surface objects. As previously noted, A-8 may be caused by natural geologic variations but also may be indicative of more deeply buried metal. A natural geologic feature that could produce such an elongated area of elevated terrain conductivity is a silt deposit in a buried stream channel; however, the high conductivity area at A-8 is confined to the site and appears to be truncated at both ends— at the slope break along the western edge of the site and at the storage racks near the center of the site (Figure 4) —which supports an interpretation of a confined burial area. In addition, the EM31 data profiles exhibit a "lumpy" nature that suggests the conductivity variations are caused by buried objects and not by natural geologic variations. For illustration, AGS has included EM31 data profiles across anomaly A-8.

Overall, GPR performed poorly at the Altaville site; GPR signal penetration was limited to a depth of approximately 3.0 feet. No buried objects of note were imaged, nor were any indications of backfilled trenches observed.

8.0 LIMITATIONS of GEOPHYSICAL LOCATING METHODS

In general, a geophysical method's limitations for detecting a particular target are related to the target's size, burial depth, the amount of contrast in material properties between the target and surrounding material, and finally, the amount of interference from surrounding site features. For a target to be detected the ground surface above it must allow for survey access, the target itself must have sufficient size to reflect or otherwise disturb some the incoming energy used for detection. The target also must have enough contrast with the surrounding material to reflect or otherwise disturb enough of the incoming energy so as to be detected. And, finally, it can't be buried so deeply that the reflected/disturbed energy is so dissipated that it is too weak to be detected when it returns to the surface. Weak energy returns during geophysical investigations are further exacerbated by ambient noise like that produced by natural and cultural features, such as utilities, fences, parked vehicles, vegetative cover, and debris.

The overall flat, open terrain at the Altaville site was generally favorable for detecting buried metallic features with the EM survey instruments, except for those areas in close proximity to the buildings, fences, and reinforced concrete pads. In those areas, the high-amplitude EM noise would likely mask the weaker response from any subsurface targets present. Non-metallic targets such as stone, concrete, and brick foundations are difficult to detect directly because their electrical properties are so similar to soil that they lack enough contrast to be detected by EM methods. However, these types of targets can often be found indirectly because of their associated metallic components, such as pipes, conduit, grade beams, and reinforcing metal can be detected. GPR has the potential to detect such non-metallic targets; however, the associated reflections can be lost in the background clutter because they are often similar to those from natural features such as tree roots and boulders. Moreover, GPR had limited usefulness at the Altaville site due to its shallow investigation depth, which was limited to approximately 3 feet below ground surface (bgs).

9.0 CLOSING

All geophysical data and field notes collected for this investigation will be archived at the AGS office. The data collection and interpretation methods used in this investigation are consistent with standard practices applied to similar geophysical investigations. The correlation of geophysical responses with probable subsurface features is based on the past results of similar surveys although it is possible that some variation could exist at this site. Due to the nature of geophysical data, no guarantees can be made or implied regarding the targets identified or the presence or absence of additional objects or targets.

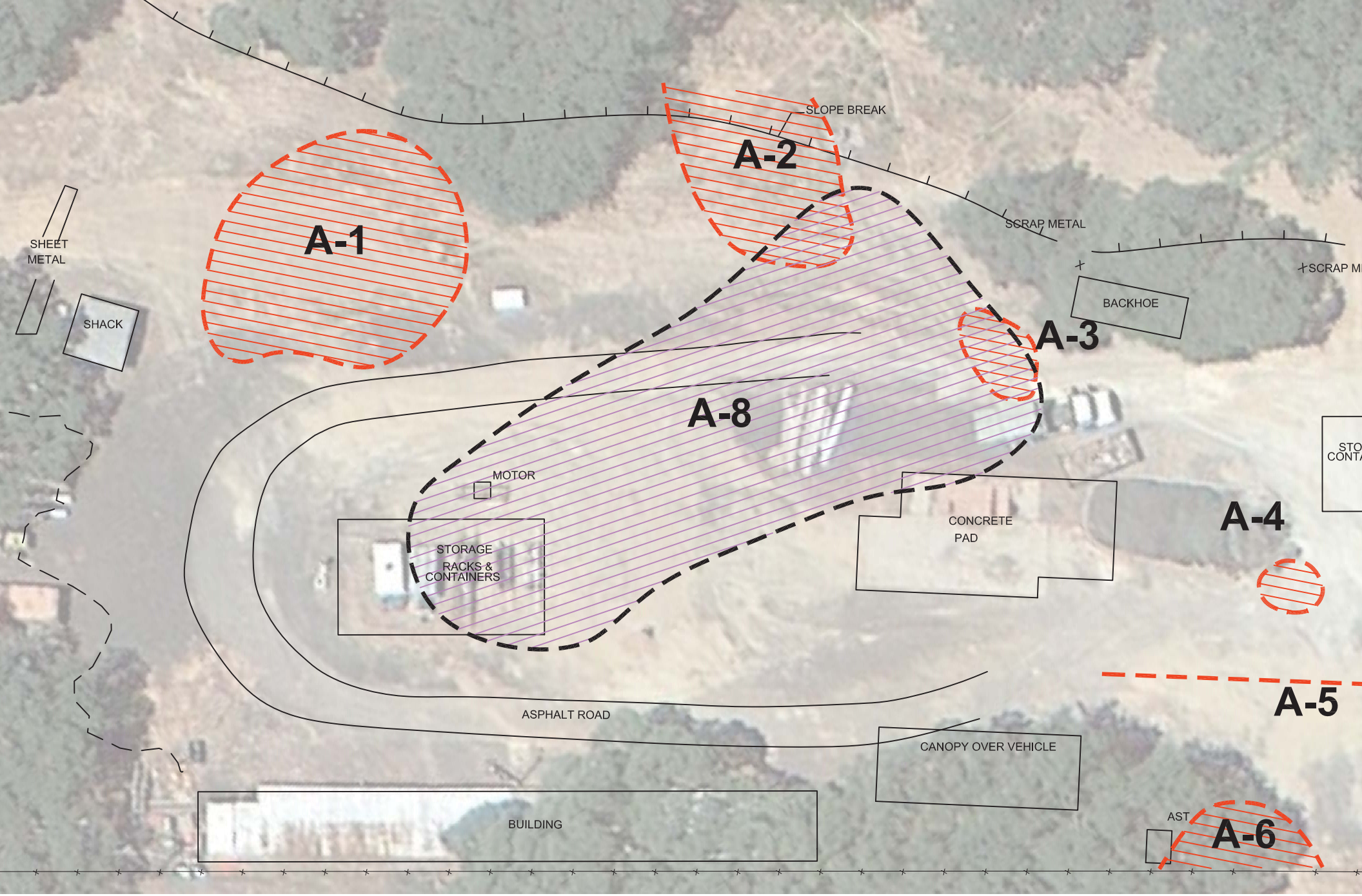
We appreciated working for you on this project and hope to work with you again. If you have any questions, I can be reached at (925) 808-8965 or Rsmith@Advancedgeo.com.

Respectfully,

Roark W. Smith, GP 987
Senior Geophysicist
Advanced Geological Services

Figures:

Figure 1	Site Location Map (imbedded in Report text)
Figure 2	Geophysical Investigation Results
Figure 3	EM61 Survey Results
Figure 4	EM31 Survey Results
Figure 5	Geophysical Survey Line Locations



EXPLANATION

EM61 ANOMALY INDICATIVE OF BURIED METAL AREA

EM31 ANOMALY INDICATIVE OF POSSIBLE BURIED METAL AREA

N

ADVANCED GEOLOGICAL SERVICES

SLOPE BREAK

SCRAP METAL

SCRAP ME

SHEET METAL

SHACK

BACKHOE

MOTOR

STORAGE RACKS & CONTAINERS

CONCRETE PAD

STO CONTA

ASPHALT ROAD

CANOPY OVER VEHICLE

BUILDING

AST

mV

3.9 4.6 5.4 6.3 7.5 9.1 11.2 13.9 18.1 24.5 37.2 60.1 101.8 305.0

N

ADVANCED GEOLOGICAL SERVICES

EM31 TERRAIN CONDUCTIVITY
DATA PROFILE

SLOPE BREAK
SCRAP METAL
SCRAP M
SHEET METAL
SHACK
BACKHOE
MOTOR
STORAGE RACKS & CONTAINERS
CONCRETE PAD
ASPHALT ROAD
CANOPY OVER VEHICLE
BUILDING
AST

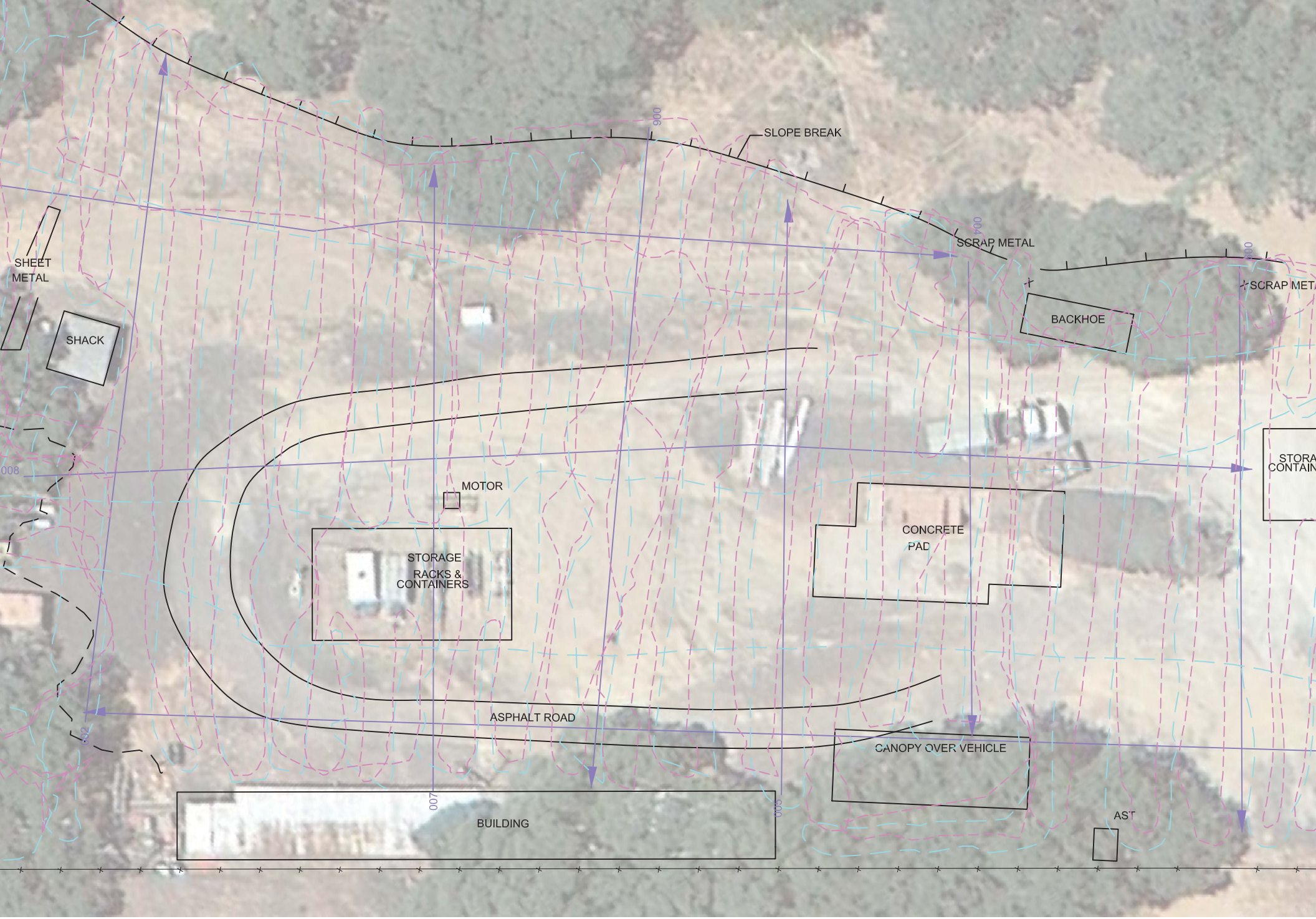
mS/m

4.9 5.3 5.7 6.2 6.9 7.5 8.4 9.5 11.1 13.1 15.7 19.0 24.5 32.9 59.4

N

ADVANCED GEOLOGICAL SERVICES

EM



EXPLANATION

EM61 SURVEY LINE

EM61 SURVEY LINE

ADVANCED GEOLOGICAL SERVICES

APPENDIX G

ENVIRONMENTAL PROFESSIONAL QUALIFICATIONS

KRISTOPHER M. LARSON, PG
PRINCIPAL GEOLOGIST

EDUCATION

B.S., Geology, 1996, San Francisco State University

REGISTRATIONS AND CERTIFICATIONS

PG 8059 (California)

EXPERIENCE HIGHLIGHTS

City of Oakland On-Call Environmental Services Contract

City of Alameda As-Need Environmental Services Contract

Alameda County Public Works Agency On-Call Environmental Services Contract

Contra Costa County Public Works Department As-Needed Environmental Services Contract

Oakland Unified School District As-Needed Environmental Services Contract

Rodeo Waterfront Predevelopment Assessment

ACCMA Highway 101 Aerial Deposited Lead Survey

Phase I and II Environmental Site Assessments

Port of Oakland Risk Management Plan

Coliseum Intercity Rail Station, Soil Management Plan (SMP)

Bessie Carmichael School Underground Storage Tank Removal

Oakland Municipal Center Quarterly Groundwater Monitoring

As Principal Geologist, Mr. Larson is the Operations Manager for environmental services in Ninyo & Moore's Oakland office. In this capacity, he has served numerous important clients on a variety of environmental projects. His areas of expertise include transactional environmental due diligence, subsurface site characterization, storm water management, site remediation and construction/demolition planning and supervision. Prior to joining Ninyo & Moore Mr. Larson worked as an environmental specialist at the San Francisco Bay Regional Water Quality Control Board. He has worked closely with all local, State and Federal environmental agencies, including the DTSC, EPA, RWQCBs, Army Corps of Engineers, and numerous local oversight programs.

REPRESENTATIVE PROJECT EXPERIENCE

Ravenswood Family Health Center, Site Assessment, East Palo Alto, California: Performed Phase I and Phase II ESAs for the site property considered for redevelopment as a health center., subsurface investigation of the former auto wrecking yard including soil, groundwater and soil gas sampling and analysis, preparation of a Remedial Action Plan. This project was Brownfield Grant funded.

Phase I and II Preliminary Site Assessment and Soil Investigation, 104-Acre Parcel, San Juan Highway, San Juan Bautista, California: Responsible for the Phase I and Phase II investigation for this project. Phase I responsibilities included contacting state and local regulatory agencies regarding information on possible sources of contamination on site. Phase II project work included collecting and analyzing site soil samples and preparing reports regarding project activities, results and recommendations.

The Car Spa Phase I and Phase II Environmental Site Assessment, Sunnyvale, California: Performed a Phase I Site Assessment of a car wash service facility. Responsibilities include site inspection and reconnaissance, regulatory file review, investigation of a regional volatile organic compound (VOC) groundwater plume and report preparation.

City of Alameda, Webster Street Renaissance Project, Phase I Environmental Site Assessment, Alameda, California: Project Manager for the Phase I Environmental Site Assessment for the Webster Street Reconnaissance Project in Alameda. Mr. Larson's responsibilities included project management, regulatory correspondence and file review, site reconnaissance and report preparation for a six-block section of Webster Street.

Alameda County Public Works Agency On-Call Environmental Services Contract, Alameda County, California: Project Manager for the ACPWA On-Call Environmental Services contract. This current contract extends for four years, and includes a wide range of Environmental and Geotechnical Services, including preparation of Phase I and Phase II Environmental Site Assessments (ESAs), Remedial Action Plans (RAPs), oversight of remediation activities, Hazardous Building Material Surveys (HBMS) and oversight of hazardous material abatement activities.

City of Oakland Public Works Agency On-Call Environmental Services Contract, Oakland, California: Project Manager for the City of Oakland PWA On-Call Environmental Services contract. The scope of services for the contract include includes preparation of Phase I and Phase II Environmental Site Assessments (ESAs), Remedial Action Plans (RAPs), and Soil Management Plans (SMPs). His project responsibilities include meetings with City of Oakland PWA Project Managers, assigning staff to PWA projects, oversight of project activities, and budget and report review.

APPENDIX H

Hazardous Building Materials Survey

HAZARDOUS BUILDING MATERIALS SURVEY
PERMANENT STORAGE SHED AND FIRE PUMP TESTING PIT
ALTAVILLE FOREST FIRE STATION
125 NORTH MAIN STREET
ALTAVILLE, CALIFORNIA

PREPARED FOR:
Mr. Anthony Brown
Project Director II
RESD/Project Management Branch
Department of General Services
707 3rd Street, 3rd Floor, MS 502
West Sacramento, California 95605

PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612

December 10, 2013
Project No. 402242001

December 10, 2013
Project No. 402242001

Mr. Anthony Brown
Project Director II
RESD/Project Management Branch
Department of General Services
707 3rd Street, 3rd Floor, MS 502
West Sacramento, California 95605

Subject: Hazardous Building Materials Survey
Altaville Forest Fire Station
Permanent Storage Shed & Fire Pump Testing Pit
125 North Main Street
Altaville, California

Dear Mr. Brown:

In accordance with your authorization to proceed, Ninyo & Moore has performed a Hazardous Building Materials Survey at the above mentioned property where two structures are scheduled to undergo demolition. The structures are located on the Altaville Forest Fire Station property at 125 North Main Street in Altaville, California. The attached report presents our methodology, findings, conclusions, and recommendations regarding our survey and assessment. We appreciate the opportunity to be of service to you on this important project. Should you have any questions regarding this report, please contact the undersigned at your convenience.

Sincerely,
NINYO & MOORE

D. Blair Bridges, Project Geologist
DOSH Certified Site Surveillance Technician (No. 10-4604)
DPH Lead-Related Construction Services Inspector/Assessor (No. 24052)

William P. Larkin, Senior Environmental Scientist, DOSH Certified Asbestos Consultant (No. 99-2688)
DPH Lead-Related Construction Services Inspector/Assessor and Project Monitor (No. 5543)

DBB/WPL/caa

Distribution: (1) Addressee

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Appendix B – Asbestos Analytical Results and Chain-of-Custody Records
Appendix C – Lead-Containing Material Analytical Results and Chain-of-Custody Records
Appendix D – Soluble Threshold Limit Concentration Analytical Results and Chain-of-Custody Records
Appendix E – California Department of Public Health – Lead Hazard Evaluation Report

1. INTRODUCTION

Ninyo & Moore conducted this Hazardous Building Material Survey (HBMS) at the Altaville Forest Fire Station (AFFS) permanent storage shed and fire pump testing pit structures located at 125 North Main Street in Altaville, California (Figure 1). Ninyo & Moore performed the approved scope of work in general accordance with our signed contract with the Department of General Services (DGS).

1.1. Site Description

The structures in this HBMS include a permanent storage shed (with an office) and a fire pump testing pit. The storage shed is one continuous structure primarily used as storage space for AFFS equipment and also contains an office. This structure encompasses approximately 2,000 square feet. The fire pump testing pit lies mostly beneath grade and contains water. The surficial area of the pit encompasses approximately 200 square feet.

In general, building finishes within the storage shed include painted gypsum wallboard, ceramic floor tiles, painted wooden walls, and painted corrugated-iron walls and roof. The fire pump testing pit is constructed of concrete and steel.

1.2. Involved Parties

Mr. Blair Bridges conducted the HBMS sampling activities for Ninyo & Moore on November 7, 2013. Mr. Bridges is a California Department of Occupational Safety and Health (DOSH) Certified Site Surveillance Technician (No. 10-4604) and a California Department of Public Health (CDPH) Lead-Related Construction Services Inspector/Assessor (No. 24052). Mr. William Larkin provided project oversight and quality review for Ninyo & Moore. Mr. Larkin is a CDPH Lead-Related Construction Services Inspector/Assessor and Project Monitor (No. 5543) and a DOSH Certified Asbestos Consultant (No. 99-2688).

1.3. User Reliance

This report may be relied upon and is intended exclusively for use by DGS. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than DGS is undertaken at said parties' sole risk.

2. PURPOSE

This HBMS was conducted to evaluate areas scheduled for demolition to ascertain if potential hazards associated with the affected building materials, paint, or other miscellaneous hazardous building materials (potential mercury-containing thermostats, polychlorinated biphenyls [PCB]-containing items, fluorescent light tubes, exit signs (sometimes associated with low-level radio-active sources), and Freon™-containing refrigeration systems) may exist within the two structures. Destructive sampling techniques (i.e. opening up wall cavities and ripping up carpeting) were not implemented during this HBMS.

3. HAZARDOUS BUILDING MATERIALS SURVEY

Samples were collected to evaluate if potential asbestos-containing materials (ACMs), lead containing materials (LCMs), and/or other miscellaneous hazardous building materials are present at the two structures.

3.1. Scope of Work

Ninyo & Moore personnel performed the services listed below.

- Visual assessment of accessible areas within the two DGS structures to evaluate the possible presence of ACMs and potential LCMs [lead-based paint (LBP), lead-containing paint (LCP), ceramic tiles, etc.].
- Collection of eight building material samples and submittal of these samples to an independent certified laboratory for analysis of asbestos content.
- Collection of nine potential LCMs and submittal of these samples to an independent certified laboratory for the analysis of lead content including the analysis of three of these samples for soluble threshold limit concentration (STLC) for lead using the waste extraction test (WET) for waste characterization purposes.

- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, air conditioning units, and Freon™-containing refrigeration systems.

- Preparation of this HBMS report, which presents our data and summarizes the assessed materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3.2. Physical Limitations

The permanent storage shed (including the office) was accessed during the HBMS activities. The exterior of the fire pump testing pit was accessed. The interior of the fire pump testing pit was observed from the pit opening to be half full of water and thus not accessed.

Due to the non-destructive sampling techniques employed during this HBMS, there is a possibility that additional suspect materials (ACMs, LBP, etc.) or other miscellaneous hazardous building materials may be discovered during demolition activities of the two site structures. Additionally, this assessment also did not include subsurface assessment of hazardous materials. As such, there may be Transite or tar-covered pipes beneath the project area.

3.3. Survey Activities and Sample Collection

The surveys performed during this HBMS followed United States Environmental Protection Agency (USEPA) guidelines, within the limitations of the scope of this assessment. The asbestos survey was performed by a California Certified Site Surveillance Technician and consisted of collecting suspect ACMs from all accessible areas of the two structures. The LCM survey was conducted by a California Certified Lead Paint Inspector/Assessor and consisted of collecting paint chip and ceramic tile samples from the interior and exterior of the two structures. In addition, Ninyo & Moore performed a visual assessment and quantified miscellaneous items that may potentially present a hazard during building renovation/demolition activities. The locations from which the suspect ACM and LCM sam-

ples were collected are shown on Figure 2. Professional certifications are presented in Appendix A.

Building materials that were sampled and analyzed for the presence of asbestos and lead and a summary of miscellaneous hazardous building materials are presented in Tables 1 through 3. Laboratory test results for asbestos analysis are presented in Appendix B, and laboratory test results for lead analysis are presented in Appendices C and D.

3.4. Asbestos Survey

A preliminary visual assessment and bulk-sampling survey of suspect ACMs was performed at the site structures. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are uniform in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area. Samples were collected using USEPA-recommended sampling procedures.

A total of eight bulk asbestos samples were collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

3.5. Lead-Containing Materials Survey

Potential lead-containing materials (paint chips, ceramic tiles, etc.) were sampled to assess their lead concentration for both waste characterization and future contractor/worker safety. The survey was conducted in general accordance with accepted environmental science and engineering practices. A total of nine samples were analyzed. Potential lead-containing materials that were sampled and analyzed for the presence of lead are presented in Table 2.

3.6. Miscellaneous HBMS

A visual assessment and quantification was performed of potential miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing

items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, air conditioning units, and Freon™-containing refrigeration systems). Miscellaneous hazardous building materials observed at the two structures are presented in Table 3. In accordance with the scope of work, positive identification of these materials (via analytical testing) was not performed.

4. LABORATORY ANALYSES

The following sections describe the laboratory analyses performed regarding potentially hazardous materials and equipment surveyed.

4.1. Asbestos

After collection, the ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with USEPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Materials in which no asbestos was detected are defined in the laboratory report as “ND” in the “Asbestos Detected” column. The analytical results are summarized in Table 1. Copies of the laboratory analytical report and chain-of-custody record are presented in Appendix B.

4.2. Lead-Containing Materials

After collection, the suspect LCM samples were transferred to EMSL for analysis of total lead content, in accordance with USEPA Test Method SW 846 3050/7000B (Flame AAS). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the USEPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials determine whether a material is considered to be LBP. The USEPA stipulates that materials containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm^2), or more than half of one percent

(0.5%) by weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a LBP. Coatings with reported lead concentrations less than 1.0 mg/cm^2 or 5,000 mg/kg would be considered LCP.

The U.S. Department of Housing and Urban Development (HUD)/USEPA guidelines for designating a painted surface as lead-containing is consistent with the Department of Health Services (DHS). Paint that is chipping or peeling, or that may be removed from surfaces, and has a lead content equal to or greater than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the two structures are summarized in Table 2. Copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

Three samples (LBP-01, LBP-05, and LBP-08) were selected for waste characterization purposes and were analyzed for STLC for lead using the WET in accordance with California Title 22 and Resource Conservation and Recovery Act (RCRA) guidelines. These samples were selected on the basis of the age and quantity of the paint present on the structures. Copies of the laboratory analytical report and chain-of-custody record are presented in Appendix D.

4.3. Miscellaneous Hazardous Building Materials

As indicated above, confirmation of miscellaneous hazardous building materials, via analytical testing, was not performed for this survey. Potentially hazardous miscellaneous building materials observed and quantified at the two structures are presented in Table 3.

5. FINDINGS

A HBMS was performed at the two structures to evaluate if potential hazards associated with the building materials, paint, or other miscellaneous hazardous building materials (potential mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon™-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this limited survey, LBP/LCP and/or miscellaneous hazardous building materials are located at the two site structures.

5.1. Asbestos

Based upon the analytical results associated with this sampling survey, no building materials sampled within the planned areas of demolition were reported to be asbestos-containing.

5.2. Lead-Containing Material

Eight paint chip samples and one ceramic tile sample were collected and analyzed for this study. One of these paint chip samples (LBP-09, light-gray paint on a wall in the northern portion of the permanent storage shed) contained lead at a reported concentration of greater than 0.5% by weight (or 5,000 mg/kg). This paint sample is considered LBP. The lead concentrations associated with three of the paint chip samples (LBP-02, LBP-03, and LBP-07) were reported by the analytical laboratory (EMSL) to be less than the associated reporting limit (<100 mg/kg or <0.01% by weight) and sample LBP-04 was less than the associated reporting limit of 170 mg/kg (0.017% by weight). The lead concentrations for the remaining four paint chip samples (LBP-01, LBP-05, LBP-06, and LBP-08) ranged from 100 mg/kg (or 0.01% by weight) to 1,200 mg/kg (or 0.12% by weight). These paint samples are considered LCP. Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

Samples LBP-02, LBP-03, and LBP-07 were re-analyzed for lead by EPA Method 6010C because the reporting limit of 100 mg/kg was greater than the screening level for additional waste characterization of 50 mg/kg. The three samples (LBP-02, LBP-03, and LBP-07) had reported concentrations of total lead below 50 mg/kg. These paint samples are considered LCP; however, they are not considered hazardous waste.

Two of the three samples (LBP-01 and LBP-08) selected for additional waste characterization purposes did not exceed the STLC for lead of 5 milligrams per liter (mg/L); therefore

these samples were characterized as non-hazardous waste. The remaining sample (LBP-05) was reported with a lead concentration of 7.2 mg/L. In order to fully evaluate the hazardous waste classification of this sample it would need to be further analyzed for soluble lead using the Toxicity Characteristic Leaching Procedure (TCLP). At the clients request this procedure was not employed.

One ceramic tile sample (LBP-07) was also collected. This sample was reported by EMSL to be less than the associated reporting limits.

5.3. Miscellaneous HBMS

Miscellaneous hazardous building materials observed at the two buildings included potential PCB-containing light ballasts; an air-conditioning unit; and fluorescent light tubes. No attempt was made to disassemble or sample any of the observed miscellaneous hazardous building materials.

6. CONCLUSIONS

LCMs and miscellaneous hazardous building materials are present at the two structures. This does not mean that the health of AFFS staff or maintenance workers is endangered. Most of the materials are in good, undisturbed condition; therefore, exposure to structure occupants is expected to be negligible. If these materials deteriorate over time, are damaged, or are disturbed, such as during renovation or demolition operations, then lead dust may be released, creating a potential health hazard for structure occupants, maintenance personnel, and contractors.

The miscellaneous hazardous building materials observed at the two structures were observed to be in good condition. No exposure issues related to structure occupants are expected.

7. RECOMMENDATIONS

Since LCMs and miscellaneous hazardous building materials have been reported at the two structures, the following recommendations and precautions are provided:

- The reported LCMs at the two structures should be incorporated into a building-specific Operations and Maintenance (O&M) Plan. This O&M Plan should emphasize that these LCMs should not be disturbed. Any identified LCM in damaged or non-intact condition should be promptly repaired or abated. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed LCM abatement/stabilization removal contractor should remove the LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. The removal work scope and requirements should be included in a work plan/specification developed by a California Department of Public Health Certified (CDPH) lead professional (i.e. Project Designer or Project Monitor). It is also recommended that all abatement activities should be conducted under the supervision of a DPH-certified Project Monitor. **While Ninyo & Moore provided an estimate of the quantity of LCMs present at the two structures, it is the abatement contractor's responsibility to confirm LCM quantities present.**

- Prior to demolition or renovation activities, potential mercury-containing thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and Freon™-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to all applicable federal, state, and local laws/regulations. All light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for "No PCBs" or "PCB free" stickers). **While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present at the two structures, it is the abatement contractor's responsibility to confirm the quantities of items present.**

- There is a possibility that additional suspect ACMs, LCMs, or other miscellaneous hazardous building materials may be discovered during structure renovations or demolition. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8. LIMITATIONS

Ninyo & Moore's findings, conclusions, and recommendations regarding environmental conditions, as presented in this report, are based on limited sampling and chemical analysis, with the exception of the inventory for miscellaneous hazardous building materials. Further assessment of potential adverse environmental impacts may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the areas evaluated. However, if additional suspect ACMs, miscellaneous

hazardous building materials, or LCMs are encountered during renovation or demolition activities, these materials should be sampled by qualified personnel, and analyzed for content prior to further disturbance. In addition, please note that quantities of ACMs, miscellaneous hazardous building materials, and LCMs are approximate. It is the contractor's responsibility to confirm ACM, LCM, and miscellaneous hazardous building material quantities present.

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of subsurface environmental, geotechnical conditions, or potential geologic hazards.

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

The environmental findings, conclusions, and recommendations contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our findings, conclusions, and recommendations are based on an analysis of the observed site conditions. It should be understood that the conditions of a site can change with time as a result of natural processes or the activities of man at the site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government ac-

tion or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

Table 1 - Asbestos Survey Results

Sample I.D.	Building	Material Location	Sample Description	Approximate Quantity	Friable Y/N	Condition	Asbestos Content
ASB-01	Storage Shed	Office Wall	Wallboard/Joint Compound with Texture	NA	NA	NA	Wallboard - ND Joint Compound - ND Texture - ND
ASB-02	Storage Shed	Office Wall	Wallboard/Joint Compound with Texture	NA	NA	NA	Wallboard - ND Joint Compound - ND Texture - ND
ASB-03	Storage Shed	Office Wall	Wallboard/Joint Compound with Texture	NA	NA	NA	Wallboard - ND Joint Compound - ND Texture - ND
ASB-04	Storage Shed	Office Floor	3-foot by 3-foot Ceramic Tile	NA	NA	NA	ND
ASB-05	Storage Shed	Exterior - North, behind West Wall	Vapor Barrier	NA	NA	NA	ND
ASB-06	Storage Shed	Exterior - on Air Conditionoing Unit	White Sealant	NA	NA	NA	ND
ASB-07	Storage Shed	Exterior - Wall	Silver Paint	NA	NA	NA	ND
ASB-08	Testing Pit	Testing Pit Pipe	Insulation and Jacket	NA	NA	NA	Insulation - ND Jacket - ND

NOTES:

Analysis by Polarized Light Microscopy using EPA 600/R-93/116 Method

ND = None detected

N/A = Not applicable

Non-destructive sampling techniques were utilized during this sampling survey.

Table 2 - Lead-Based Paint Survey Results

Sample I.D.	Building	Sample Location	Lead-Containing Surface (LCS) (e.g., door, wall, frame)	Sample Description (Color / # of Layers / Substrate)	Condition	Estimate of Surface Area	Total Lead[1]		Total Lead[2]	W.E.T (STLC) (mg/L)
							Weight Percent	Parts per Million (or mg/kg)	Parts per Million (or mg/kg)	
LBP-01	Storage Shed	Exterior - Office Wall	Wall	Light-Green/2/Wood	Intact	500 SF	0.010	100*	NA	<0.40
LBP-02	Storage Shed	Interior - Office Wall	Wall	Light-Blue/2/Wallboard	Intact	900 SF	<0.010	<100	10*	NA
LBP-03	Storage Shed	Exterior - Door Frame	Door Frame	Green/2/Wood	Intact	400 SF	<0.010	<100	2.3*	NA
LBP-04	Storage Shed	Exterior - Door Frame	Door Frame	White/2/Wood	Intact	50 SF	<0.017	<170	NA	NA
LBP-05	Storage Shed	Exterior - on Corrugated Iron	Wall	Silver/2/Metal	Intact	2,000 SF	0.078	780*	NA	7.2
LBP-06	Storage Shed	South Area	I-Beam	Gray/2/Metal	Non-Intact	800 SF	0.12	1,200*	NA	NA
LBP-07	Storage Shed	Office Floor	Floor	3-foot by 3-foot Ceramic Tile	Intact	400 SF	<0.010	<100	44*	NA
LBP-08	Testing Pit	Test Pit Cover	Pit Cover	Brownish-Red/2/Metal	Non-Intact	300 SF	0.015	150*	NA	1.2
LBP-09	Storage Shed	North Area Wall	Wall	Light-Gray/2/Wood	Intact	700 SF	1.5	**15,000**	NA	NA

NOTES:

Total lead analyzed in accordance with EPA Test Method SW 846 3050B/7000B.

Total lead analyzed in accordance with EPA Test Method 6010C.

mg/kg = Milligrams per kilogram

W.E.T = Waste Exctraction Test

STLC analyzed by WET/EPA Method 6010B/7470

mg/L = Milligrams per Liter

SF = Square feet

* indicates lead-containing paint

NA = Not Aplicable

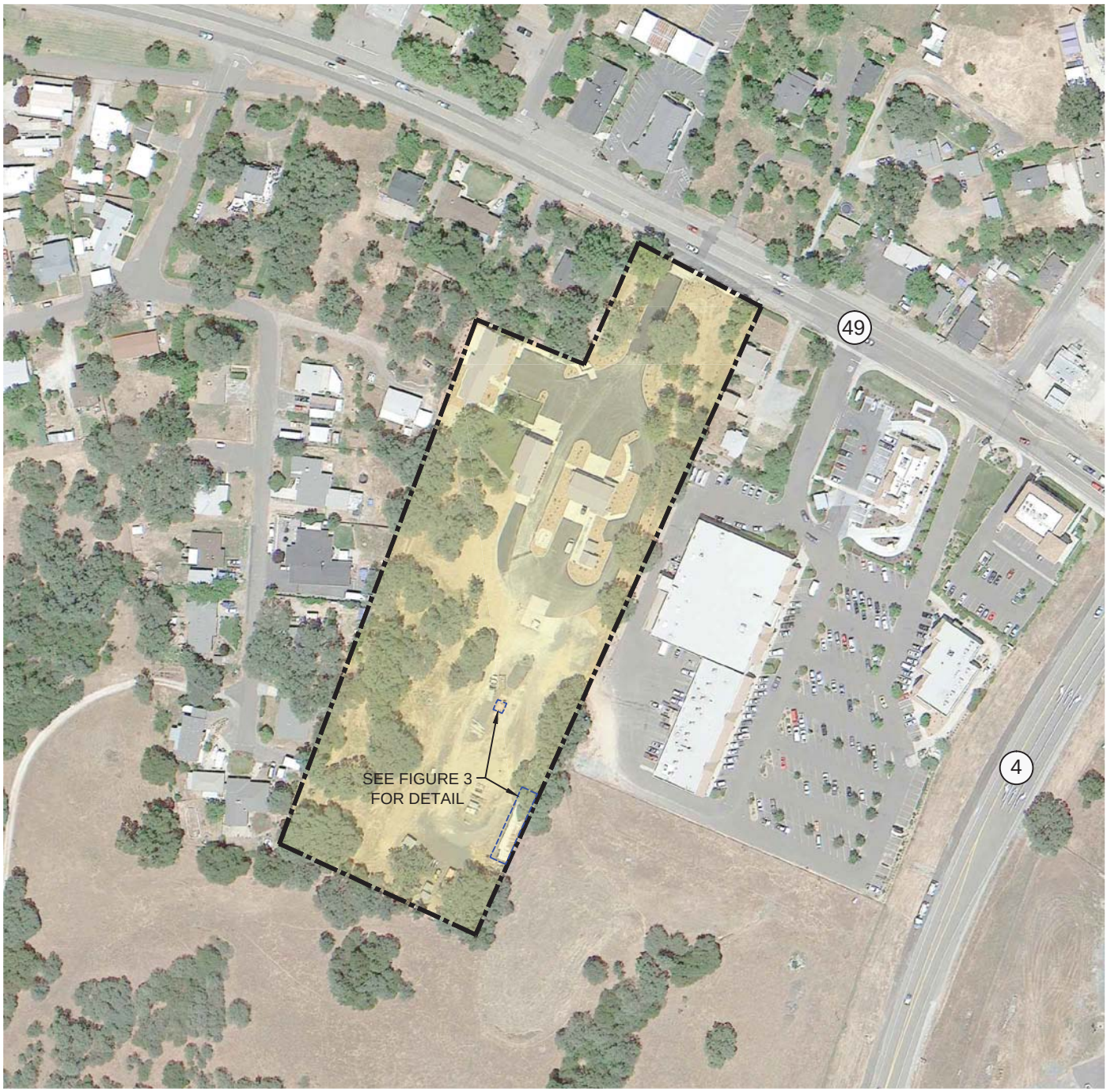
Bold indicates Lead-Based Paint (>5,000 mg/kg)

Estimated quantities are not intended for use in bidding calculations.

Table 3 - Miscellaneous Hazardous Building Materials Survey Results

Building	Light Ballasts	Flourescent Light Tubes	Air-Conditioning Units
Storage Shed	2	4	1

SITE
JACKSON
SAN ANDREAS
ANGELS CAMP
SONORA
CALAVERAS COUNTY
CALIFORNIA
JOAQUIN COUNTY
TUOLUMNE COUNTY
Altaville
Dogtown
Murphys
Vallecito
Copperopolis
Telegraph City
Knights Ferry
Valley Springs
Calaveritas
Mokelumne Hill
Sheep Ranch
Mountain Ranch
Camanche Reservoir
Tulloch Reservoir
Chinese Camp
Jamestown
Stent
Farmington
Valley Home
Milton
Felix
Burson
Wallace
Campo Seco
Jenny Lind
Sunnybrook
Big Bar
Electra
Paloma
Tuttletown
Frogtown
Douglas Flat
Stanislaus
Hathaway Pines
Arnold
Moccasin Flat
Cedar Ridge
Columbia
Sulphur Springs
Standard
Eugene
Knights Ferry
Hogan Lake
Pardee Reservoir
Woodward Reservoir
Farmington Control Flood Basin
Calaveras County Airport
Columbia Airport
Frogtown Airport
Angels Hotel
Calaveras County Museum
Mercer Caverns
Calaveras Big Trees State Park
Mitchell Mill
Independence
Glencoe
Bonnelly
Jackson Gate
Martell
Camp Connell
Dorrington
Mountain Ranch
Sheep Ranch
Avery
Murphys Historic Hotel & Lodge
Old Timers Museum
Vallecito Bell Monument
Hunting Cavern
Gold Springs
Garson Hill
Copperopolis
New Melones Lake
Rushing Mountain
Chinese Camp
Moccasin
Jacksonville
Sonora
Tuolumne
Wards
Ferry
Gold
Country
Tuttletown
Jamestown
Stent
Sulphur Springs
Standard
Columbia
Cedar Ridge
Douglas Flat
Murphys
Vallecito
Gold Springs
Frogtown
Garson Hill
Copperopolis
Telegraph City
Milton
Felix
Valley Springs
Burson
Wallace
Campo Seco
Jenny Lind
Sunnybrook
Big Bar
Electra
Paloma
Mokelumne Hill
Mountain Ranch
Sheep Ranch
Calaveritas
Dogtown
Altaville
Knights Ferry
Valley Home
Farmington
Eugene
Stanislaus
Hathaway Pines
Arnold
Moccasin Flat
Cedar Ridge
Camp Connell
Dorrington
Mitchell Mill
Independence
Glencoe
Bonnelly
Jackson Gate
Martell
Camanche Reservoir
Tulloch Reservoir
Chinese Camp
Jamestown
Stent
Sonora
Tuolumne
Wards
Ferry
Gold
Country
Tuttletown
Frogtown
Douglas Flat
Murphys
Vallecito



REFERENCE: GOOGLE EARTH IMAGERY, 2013.

N

SCALE IN FEET

0 200 400

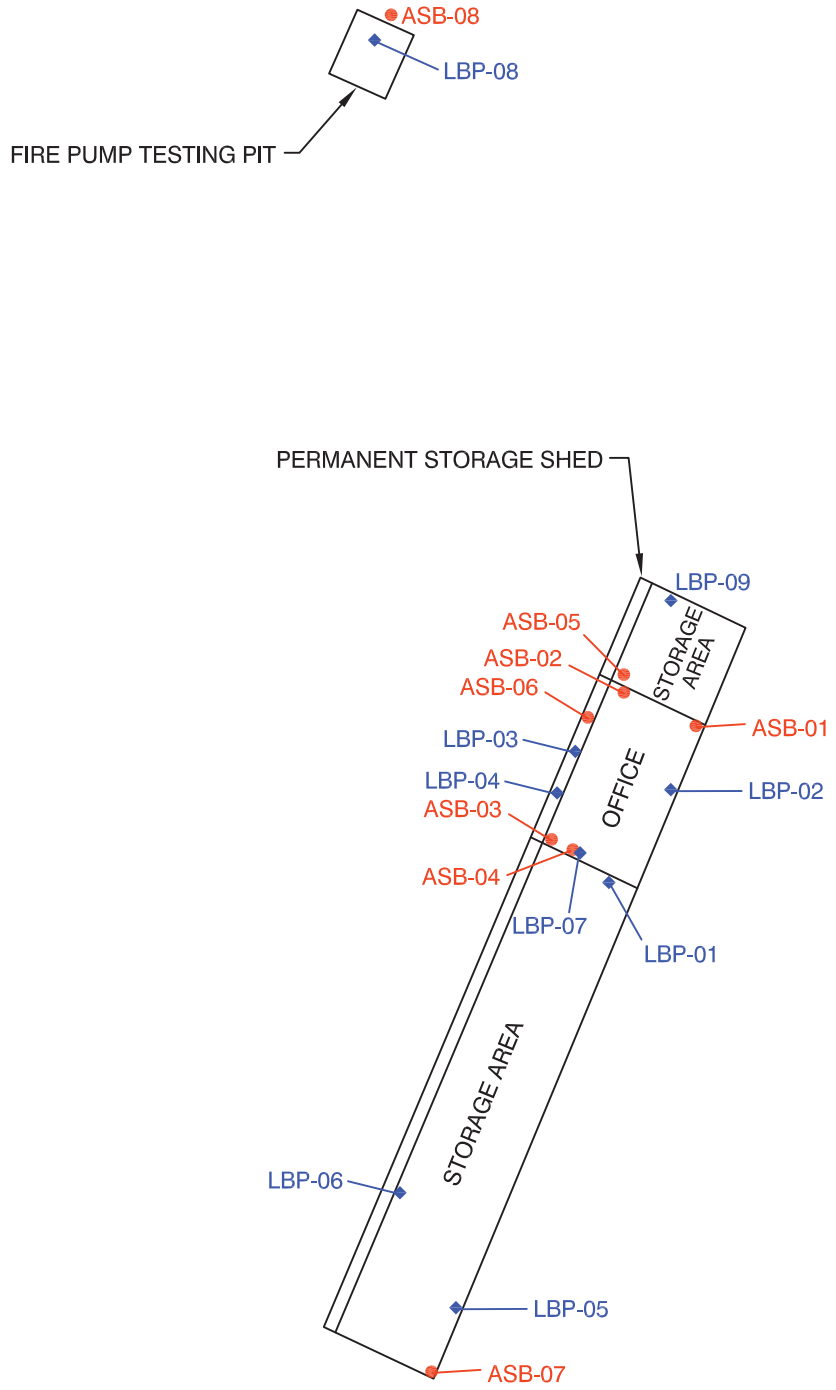
NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND

SITE BOUNDARY

Ninyo & Moore		SITE VICINITY	FIGURE
PROJECT NO.	DATE	125 NORTH MAIN STREET ALTAVILLE, CALIFORNIA	2
402242001	12/13		

402242001-SV-2.dwg, Dec 05, 2013, 2:19pm, SN



N

SCALE IN FEET

0 30 60

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND	
ASB-08 ●	SUSPECT ASBESTOS SAMPLE
LBP-09 ◆	SUSPECT LEAD PAINT CHIP SAMPLE

Ninyo & Moore	SAMPLE LOCATIONS	FIGURE
PROJECT NO. / DATE	125 NORTH MAIN STREET ALTAVILLE, CALIFORNIA	3
402242001 / 12/13		

402242001-SPL-3.dwg, Dec 05, 2013, 2:21pm, SN

APPENDIX A
CERTIFICATIONS

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101048-3

EMSL Analytical, Inc.

San Leandro, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

AIRBORNE ASBESTOS FIBER ANALYSIS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2013-07-01 through 2014-06-30

Effective dates

DEPARTMENT OF COMMERCE ★ UNITED STATES OF AMERICA ★

For the National Institute of Standards and Technology

National Voluntary
Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.
2235 Polvorosa Avenue, Suite 230
San Leandro, CA 94577
Baojia Ke, Ph.D.
Phone: 510-895-3675 Fax: 510-895-3680
E-Mail: ssiegel@emsl.com
URL: http://www.emsl.com

AIRBORNE ASBESTOS FIBER ANALYSIS (TEM) **NVLAP LAB CODE 101048-3**

NVLAP Code	*Designation / Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

2013-07-01 through 2014-06-30

Effective dates

For the National Institute of Standards and Technology

NVLAP-01S (REV. 2005-05-19)

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101048-3

EMSL Analytical, Inc.

San Leandro, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2013-07-01 through 2014-06-30

Effective dates

For the National Institute of Standards and Technology

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.
2235 Polvorosa Avenue, Suite 230
San Leandro, CA 94577
Baojia Ke, Ph.D.
Phone: 510-895-3675 Fax: 510-895-3680
E-Mail: ssiegel@emsl.com
URL: http://www.emsl.com

BULK ASBESTOS FIBER ANALYSIS (PLM) **NVLAP LAB CODE 101048-3**

NVLAP Code	*Designation / Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

2013-07-01 through 2014-06-30

Effective dates

For the National Institute of Standards and Technology

NVLAP-01S (REV. 2005-05-19)

The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Laboratory

A2LA has accredited

EMSL ANALYTICAL, INC.

San Leandro, CA

for technical competence in the field of

Environmental Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General Requirements for the Competence of Testing and Calibration Laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).

Presented this 3rd day of February 2012.

President & CEO
For the Accreditation Council
Certificate Number 2845.09
Valid to January 31, 2014

AMERICAN ASSOCIATION FOR LABORATORY ACCREDITATION
CORPORATE SEAL 1978
DISTRICT OF COLUMBIA
A2LA

For the tests or types of tests to which this accreditation applies, please refer to the laboratory's Environmental Scope of Accreditation.

The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Environmental Lead Testing Laboratory

A2LA has accredited

EMSL ANALYTICAL, INC.

San Leandro, CA

under the

Environmental Lead (Pb) Testing Laboratory Accreditation Program

By virtue of the on-site assessment of this laboratory's environmental lead (Pb) testing capabilities and successful participation in the Environmental Lead Proficiency Analytical Testing Program (ELPAT), this laboratory has been found to meet the A2LA Environmental Lead (Pb) Program Requirements. As such, this laboratory is recognized under the EPA Office of Pollution and Toxics' (OPPT) National Lead Laboratory Accreditation Program (NLLAP). This accreditation covers the following matrices: Soil, Dust, and Paint Chips .

Presented this 3rd day of February 2012.

President & CEO
For the Accreditation Council
Certificate Number 2845.09
Valid to January 31, 2014

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL ANALYTICAL, INC.
2235 Polvorosa Ave., Ste. 230
San Leandro, CA 94577
Baojia Ke, Ph.D. Phone: (510) 895-3675

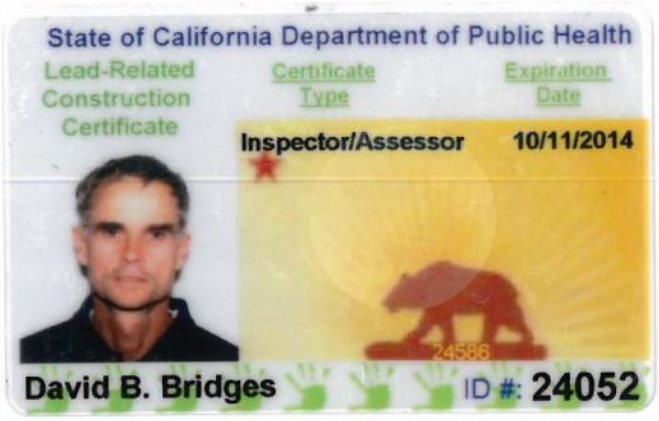
ENVIRONMENTAL

Valid To: January 31, 2014 Certificate Number: 2845.09

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform recognized EPA methods using the following testing technologies and in the analyte categories identified below; for the test methods applicable to the National Environmental Lead Laboratory Accreditation Program (NLLAP) and tests on children's products:

ENVIRONMENTAL LEAD	
Test	**Test Method(s)**
Total Lead (Pb) in Soil	Soil, EPA 7000B – (FLAA), 3050 Modified Hotblock Digestion
Total Lead (Pb) in Paint Chips	Chips, EPA7000B – (FLAA), 3050 Modified Hotblock Digestion
Total Lead (Pb) in Dust Wipes	Wipes, EPA 7000B – (FLAA), 3050 Modified Hotblock Digestion
Total Lead (Pb) in Air	Air Cassettes, NIOSH 7082

5301 Buckeystown Pike, Suite 350 | Frederick, Maryland 21704-8373 | Phone: 301 644 3248 | Fax: 301 662 2974 | www.A2LA.org


State of California Department of Public Health
Lead-Related Construction Certificate
Certificate Type
Expiration Date
Inspector/Assessor
10/11/2014
24586
David B. Bridges
ID #: 24052

State of California
Division of Occupational Safety and Health

Certified Site Surveillance Technician

David B Bridges
Name

Certification No. **10-4604**

Expires on **04/21/14**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California
Division of Occupational Safety and Health

Certified Asbestos Consultant

William P Larkin
Name

Certification No. **99-2688**

Expires on **12/08/14**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	07/03/2014
Project Monitor	07/03/2014

William P. Larkin ID #: **5543**

APPENDIX B
ASBESTOS ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY RECORDS

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091317937
CustomerID:	NOMO22
CustomerPO:	
ProjectID:	

Attn: **Blair Bridges**
Ninyo & Moore
1956 Webster
Suite 400
Oakland, CA 94612

Phone:	(510) 633-5640
Fax:	(510) 633-5646
Received:	11/07/13 4:30 PM
Analysis Date:	11/10/2013
Collected:	11/7/2013

Project: **DGS - ALTAVILLE**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
ASB-01-Wallboard *091317937-0001*	OFFICE WALL	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
ASB-01-Joint Compound *091317937-0001A*	OFFICE WALL	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
ASB-01-Texture *091317937-0001B*	OFFICE WALL	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
ASB-02-Wallboard *091317937-0002*	OFFICE WALL	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
ASB-02-Joint Compound *091317937-0002A*	OFFICE WALL	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
ASB-02-Texture *091317937-0002B*	OFFICE WALL	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
ASB-03-Wallboard *091317937-0003*	OFFICE WALL	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
ASB-03-Joint Compound *091317937-0003A*	OFFICE WALL	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)
Kenneth Dunbar (15)

Baojia Ke, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from 11/10/2013 13:45:34

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091317937
CustomerID:	NOMO22
CustomerPO:	
ProjectID:	

Attn: **Blair Bridges**
Ninyo & Moore
1956 Webster
Suite 400
Oakland, CA 94612

Phone:	(510) 633-5640
Fax:	(510) 633-5646
Received:	11/07/13 4:30 PM
Analysis Date:	11/10/2013
Collected:	11/7/2013

Project: **DGS - ALTAVILLE**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**% Type**
ASB-03-Texture *091317937-0003B*	OFFICE WALL	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
ASB-04-Ceramic Tile *091317937-0004*	OFFICE FLOOR	Brown Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
ASB-05-Vapor Barrier *091317937-0005*	EXTERIOR / NORTH BEHIND WOODEN WALL	White Fibrous Homogeneous	95%	Cellulose	5%	Non-fibrous (other)	**None Detected**
ASB-06-Sealant *091317937-0006*	EXTERIOR / ON HVAC UNIT	White Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
ASB-07-Paint *091317937-0007*	EXTERIOR / WALLS & ROOF	Silver Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
ASB-08-Insulation *091317937-0008*	PIT PIPE COVER	White Fibrous Homogeneous	99%	Glass	1%	Non-fibrous (other)	**None Detected**
ASB-08-Jacket *091317937-0008A*	PIT PIPE COVER	Black Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**

Analyst(s)
Kenneth Dunbar (15)

Baojia Ke, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from 11/10/2013 13:45:34

091317937

3day TAT

№ 091317937

page 1 of 1

ASBESTOS BULK SAMPLE DATA SHEET

Ninyo & Moore
1956 Webster Street, #400
Oakland, CA 94612
Tel: (510) 633-5640
Fax: (510) 633-5646

Project Name: DGS - Altaville
Project No.:
Project Manager: Bill Larkin & Blair Bridges
APN:
Site Address: Altaville

Sampled By: DBB
Sampled By:
Sampled By:
Date Sampled: 11/7/13

Laboratory: EMSL
Tel:
Fax:

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr.)	Received By: (sign/print)	Laboratory
B Bridges / Blair Bridges	Ninyo&Moore	11/7/13	1620	Boolon 11-7-13	4:30pm.

LabID	Sample ID	Building Number	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	ASB-01	Storage Building	office Wall	Wallboard/Joint Compound with Texture	900 SF	Y	Good
	ASB-02				See ASB-01		
	ASB-03						
	ASB-04		office Floor	3'x3' Brown Ceramic Tile	400 SF	N	
	ASB-05		Exterior - North wall behind wooden	Vapor Barrier		N	
	ASB-06		Exterior - on HVAC unit	white sealant	2 SF		
	ASB-07		" - walls & Roof	Silver Paint	2000 SF		Poor
	ASB-08	Pit	~~[illegible]~~ Pit pipe cover	Insulation & Jacket	5 SF	Y	Poor

Asbestos Consultant

APPENDIX C
LEAD-CONTAINING MATERIAL ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY RECORDS

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091317939
CustomerID:	NOMO22
CustomerPO:	
ProjectID:	

Attn: **Blair Bridges**
Ninyo & Moore
1956 Webster
Suite 400
Oakland, CA 94612

Phone:	(510) 633-5640
Fax:	(510) 633-5646
Received:	11/07/13 4:30 PM
Collected:	11/7/2013

Project: **DGS - Altaville**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	Analyzed	RDL	Lead Concentration	Notes
0001	11/8/2013	0.010 % wt	0.010 % wt	Site: Storage building/ office exterior wall Desc: Light green/2/wood
Client Sample LBP-01				Collected: 11/7/2013
0002	11/8/2013	0.010 % wt	<0.010 % wt	Site: Storage building/ office interior wall Desc: Very light blue/2/wallboard
Client Sample LBP-02				Collected: 11/7/2013
0003	11/8/2013	0.010 % wt	<0.010 % wt	Site: Storage building/ office exterior door frame Desc: Green/2/wood
Client Sample LBP-03				Collected: 11/7/2013
0004	11/8/2013	0.017 % wt	<0.017 % wt	Site: Storage building/ office exterior door frame Desc: White/2/wood
Client Sample LBP-04				Collected: 11/7/2013
0005	11/8/2013	0.010 % wt	0.078 % wt	Site: Storage building/ exterior on corrogated iron Desc: Silver/2/metal
Client Sample LBP-05				Collected: 11/7/2013
0006	11/8/2013	0.010 % wt	0.12 % wt	Site: Storage building/ storage area (South) i-beam Desc: Gray/2/metal
Client Sample LBP-06				Collected: 11/7/2013
0007	11/8/2013	0.010 % wt	<0.010 % wt	Site: Storage building/ office floor Desc: 3'x3' brown CT
Client Sample LBP-07				Collected: 11/7/2013
0008	11/8/2013	0.010 % wt	0.015 % wt	Site: Pit/ pit cover Desc: Brownish-red/2/metal
Client Sample LBP-08				Collected: 11/7/2013
0009	11/8/2013	0.10 % wt	1.5 % wt	Site: Storage building/ North storage space wall Desc: Light gray/2/wood
Client Sample LBP-09				Collected: 11/7/2013

Baojia Ke, Laboratory Manager
or other approved signatory

Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. The QC data associated with these results included in this report meet the method QC requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. * slight modifications to methods applied. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 11/08/2013 09:03:22

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091317939
CustomerID:	NOMO22
CustomerPO:	
ProjectID:	

Attn: **Blair Bridges**
Ninyo & Moore
1956 Webster
Suite 400
Oakland, CA 94612

Phone:	(510) 633-5640
Fax:	(510) 633-5646
Received:	11/07/13 4:30 PM
Collected:	11/7/2013

Project: **DGS - Altaville**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B*/7000B)

Lab ID:	***Analyzed***	***RDL***	*Lead* ***Concentration***	***Notes***

Baojia Ke, Laboratory Manager
or other approved signatory

Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. The QC data associated with these results included in this report meet the method QC requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. * slight modifications to methods applied. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 11/08/2013 09:03:22

(3 day TAT)

091317939

LEAD BASED PAINT BULK SAMPLE DATA SHEET

Sheet 1 of 1

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612
510-633-5640
510-633-5646 (fax)

Project Name: DGS - Altaville
Project No.:
Project Manager: ~~Pete~~ Bill Larkin + Blair Bridges
APN:
Site Address: Altaville

Sampled By: DBB
Sampled By:
Sampled By:
Date Sampled: 11/7/13

Laboratory: EMSL
Tel:
Fax:

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr.)	Received By: (sign/print)	Laboratory
B Bridges / Blair Bridges	Ninyo&Moore	11/7/13	1620	R. Colon	4:30pm 11-7-13

LabID	Sample ID	Building Number	Sample Location	Building Component	Sample Description (Color /# Layers /Substrate)	Estimated Surface Area	Condition
	LBP-01	Storage Building	Office Exterior Wall	Wall	~~Gre~~ Light Green/2/wood	500SF	Intact
	LBP-02		Office Interior Wall	Wall	very light Blue/2/wallboard	900 SF	Intact
	LBP-03		" Exterior Door Frame	Door Frame	Green/2/wood	400 SF	Intact
	LBP-04		" " " "	Door Frame	white/2/wood	50 SF	
	LBP-05		Exterior on Corrogated Iron	Wall	Silver/2/metal	2000SF	
	LBP-06		storage Area (South)	I-Beam	Gray/2/metal	800SF	non-intact
	LBP-07		Office Floor	Floor	3'x3' Brown CT	400 SF	Intact
	LBP-08	Pit	Pit Cover	Pit Cover	Brownish-Red/2/metal	300SF	non-intact
	LBP-09	Storage Building	North Storage Space	Wall	Light Gray/2/wood	700 SF	Intact

091317939

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone: (856) 303-2500 Fax: (856) 858-4571 Email: Env_Chemistry@emsl.com

Attn: **Blair Bridges**
Ninyo & Moore
1956 Webster
Suite 400
Oakland, CA 94612

Phone: (510) 633-5640
Fax: (510) 633-5646

11/19/2013

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 11/13/2013. The results are tabulated on the attached data pages for the following client designated project:

DGS - Altaville

The reference number for these samples is EMSL Order #011305696. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director

The test results contained within this report meet the requirements of NELAC and/or the specific certification program that is applicable, unless otherwise noted.
NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 858-4571
http://www.EMSL.com Env_Chemistry@emsl.com

EMSL Order: 011305696
CustomerID: NOMO22
CustomerPO:
ProjectID:

Attn: **Blair Bridges**
Ninyo & Moore
1956 Webster
Suite 400
Oakland, CA 94612

Phone: (510) 633-5640
Fax: (510) 633-5646
Received: 11/13/13 2:00 PM

Project: **DGS - Altaville**

Analytical Results

Client Sample Description LBP-02
Office Interior Wall
Collected: 11/7/2013 ***Lab ID:*** *0001*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
6010C	Lead	10	2.3	mg/Kg	11/15/2013	JS	11/15/2013	BE

Client Sample Description LBP-03
Office Exterior Door Frame
Collected: 11/7/2013 ***Lab ID:*** *0002*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
6010C	Lead	2.3	2.2	mg/Kg	11/15/2013	JS	11/15/2013	BE

Client Sample Description LBP-07
Office Floor
Collected: 11/7/2013 ***Lab ID:*** *0003*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date*	*Analyst*	*Analysis Date*	*Analyst*
6010C	Lead	44	2.4	mg/Kg	11/15/2013	JS	11/15/2013	BE

Definitions:
ND - indicates that the analyte was not detected at the reporting limit
RL - Reporting Limit

01305696 ~~3 day TAT~~ 1 week per Peter AKG 11/13 01317939-TA

LEAD BASED PAINT BULK SAMPLE DATA SHEET

Sheet 1 of 1

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612
510-633-5640
510-633-5646 (fax)

Project Name: DGS - Altaville
Project No.:
Project Manager: ~~Peter~~ Bill Larkin + Blair Bridges
APN:
Site Address: Altaville

Sampled By: DBB
Sampled By:
Sampled By:
Date Sampled: 11/7/13

Laboratory: EMSL
Tel:
Fax:

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (PM/AM)	Received By: (sign/print)	Laboratory
B Bridges / Blair Bridges	Ninyo&Moore	11/7/13	1620	R. Odon /	4:30pm 11-7-13
				Travis Albert / Travis Albert	11/13/13 2:00pm

LabID	Sample ID	Building Number	Sample Location	Building Component	Sample Description (Color / # Layers / Substrate)	Estimated Surface Area	Condition
	LBP-01	Storage Building	Office Exterior Wall	Wall	Light Green/2/wood	500SF	Intact
(1) *	LBP-02		Office Interior Wall	Wall	very light Blue/2/wallboard	900 SF	Intact
(2) *	LBP-03		" Exterior Door Frame	Door Frame	Green/2/wood	400 SF	Intact
	LBP-04		" " " "	Door Frame	white/2/wood	50 SF	
	LBP-05		Exterior on Corrugated Iron	Wall	Silver/2/metal	2000SF	
	LBP-06		Storage Area (South)	I-Beam	Gray/2/metal	800SF	non-intact
(3) *	LBP-07		Office Floor	Floor	3'x3' Brown CT	400SF	Intact
	LBP-08	Pit	Pit Cover	Pit cover	Brownish Red/2/metal	300SF	non-intact
	LBP-09	Storage Building	North Storage Space	Wall	Light Gray/2/wood	700SF	Intact
	* per Peter analyze ICP-lead one week TAT AKG 11/13						
	Conditional analysis on -02 for STLC if >50 mg/kg						

01317939

011305696

APPENDIX D
SOLUBLE THRESHOLD LIMIT CONCENTRATION ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY RECORDS

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 786-5974
http://www.EMSL.com cinnaminsonleadlab@emsl.com

EMSL Order:	201311871
CustomerID:	NOMO22
CustomerPO:	
ProjectID:	

Attn: **Blair Bridges**
Ninyo & Moore
1956 Webster
Suite 400
Oakland, CA 94612

Phone:	(510) 633-5640
Fax:	(510) 633-5646
Received:	11/13/13 1:44 PM
Collected:	11/7/2013

Project: **DGS-Altaville**

Test Report: Soluble Threshold Limit Concentration

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Lead* ***Concentration***
LBP-01	*0001*	11/7/2013	11/19/2013	<0.40 mg/L
	Site: Storage Building / Office Exterior Wall Desc: Wall / Light Green / 2 / Wood			
LBP-05	*0002*	11/7/2013	11/19/2013	7.2 mg/L
	Site: Storage Building / Exterior Corrogated Iron Desc: Wall / Silver / 2 / Metal			
LBP-08	*0003*	11/7/2013	11/19/2013	1.2 mg/L
	Site: Pit / Pit Cover Desc: Pit Cover / Brownish-Red / 2/ Metal			

The sample amount provided to the laboratory for STLC analysis was less than the recommended minimum amount of 50 grams.

Julie Smith - Laboratory Director
NJ-NELAP Accredited:03036
or other approved signatory

"<" (less than) result signifies that the analyte was not detected at or above the reporting limit.
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ

Initial report from 11/19/2013 16:56:32

3 day TAT

~~091317939~~ 201311871

LEAD BASED PAINT BULK SAMPLE DATA SHEET

11/13/13

Sheet 1 of 1

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612
510-633-5640
510-633-5646 (fax)

Project Name: DGS - Altaville
Project No.:
Project Manager: ~~Pete~~ Bill Larkin + Blair Bridges
APN:
Site Address: Altaville

Sampled By: DBB
Sampled By:
Sampled By:
Date Sampled: 11/7/13

Laboratory: EMSL
Tel:
Fax:

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr)	Received By: (sign/print)	Laboratory
B Bridges / Blair Bridges	Ninyo&Moore	11/7/13	1620	R. Colon	4:30pm 11-7-13

LabID	Sample ID	Building Number	Sample Location	Building Component	Sample Description (Color /# Layers /Substrate)	Estimated Surface Area	Condition
*	LBP-01	Storage Building	Office Exterior Wall	Wall	~~Gre~~ Light Green/2/wood	500SF	Intact
	LBP-02		Office Interior Wall	Wall	very light Blue/2/wallboard	900 SF	Intact
	LBP-03		" Exterior Door Frame	Door Frame	Green/2/wood	400 SF	Intact
	LBP-04		" " " "	Door Frame	white/2/wood	50 SF	
*	LBP-05		Exterior of Corrogated Iron	Wall	Silver/2/metal	2000SF	
	LBP-06		Storage Area (South)	I-Beam	Gray/2/metal	800SF	non-intact
	LBP-07		Office Floor	Floor	3'x3' Brown CT	400SF	Intact
*	LBP-08	Pit	Pit Cover	Pit Cover	Brownish-Red/2/metal	300SF	non-intact
	LBP-09	Storage Building	North Storage Space	Wall	Light Gray/2/wood	700SF	Intact

per client email analyze for STL lead via RAME on live MAT

11/13/13 1344

091317939

APPENDIX E
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH – LEAD-HAZARD EVALUATION REPORT

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation 11/7/2013

Section 2 — Type of Lead Hazard Evaluation (Check one box only)

☒ Lead Inspection ☐ Risk assessment ☐ Clearance Inspection ☐ Other (specify) _____

Section 3 — Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)]	City	County	Zip Code
125 North Main Street	Altaville	Calaveras	95221

Construction date (year) of structure	Type of structure		Children living in structure?
	☐ Multi-unit building	☐ School or daycare	☐ Yes ☒ No
	☐ Single family dwelling	☒ Other Storage Facility	☐ Don't Know

Section 4 — Owner of Structure (if business/agency, list contact person)

Name	Telephone number
Don Clark M.S., P.E. State of California, Department of Forestry and Fire Protection	916-324-1649

Address [number, street, apartment (if applicable)]	City	State	Zip Code
1416 Ninth Street, ~~Sacramento,~~	Sacramento	CA	94244-2460

Section 5 — Results of Lead Hazard Evaluation (check all that apply)

☐ No lead-based paint detected ☒ Intact lead-based paint detected ☐ Deteriorated lead-based paint detected

☐ No lead hazards detected ☐ Lead-contaminated dust found ☐ Lead-contaminated soil found ☐ Other _____

Section 6 — Individual Conducting Lead Hazard Evaluation

Name	Telephone number
D. Blair Bridges	510 343-3000 +5209

Address [number, street, apartment (if applicable)]	City	State	Zip Code
1956 Webster Street, #400	Oakland	CA	94612

CDPH certification number	Signature	Date
24052	B Bridges	

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Section 7 — Attachments

A. A foundation diagram or sketch of the structure indicating the specifc locations of each lead hazard or presence of lead-based paint;
B. Each testing method, device, and sampling procedure used;
C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:

California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

TRANSMISSION VERIFICATION REPORT

TIME : 12/09/2013 11:03
NAME : NINYO AND MOORE
FAX : 510-633-5646
TEL : 510-633-5640
SER.# : BROD5J252210

DATE,TIME	12/09 11:03
FAX NO./NAME	15106205656
DURATION	00:00:17
PAGE(S)	01
RESULT	OK
MODE	STANDARD ECM