### APPENDIX O

PHASE I ENVIRONMENTAL SITE ASSESSMENT (REVISED)



#### November 2008

Prepared for:

lone Band of Miwok Indians 14 West Main Street Ione, CA 95640

Prepared by:



### 228-ACRE PLYMOUTH PROPERTY

### PHASE I ENVIRONMENTAL SITE ASSESSMENT

#### November 2008

Prepared for:

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# SECTION 1.0 INTRODUCTION

#### **SECTION 1.0**

#### INTRODUCTION

#### 1.1 PURPOSE

Analytical Environmental Services (AES) has prepared this Environmental Site Assessment (ESA) in conformance with American Society for Testing and Materials (ASTM) Standard Practice E 1527-05, and Bureau of Indian Affairs (BIA) guidelines (620 DM Chapter 2) which specify requirements for the innocent landowner defense under the Comprehensive Environmental Response, Cleanup, and Liability Act (CERCLA) and procedures for proposed real property acquisition. The purpose of this assessment is to Recognized Environmental Conditions associated with the Subject Property. This Phase I ESA includes twelve parcels located in Amador County, California (Figures 1 and 2). The assessors Parcel Numbers (APNs) for the Subject Property parcels are listed below:

Parcel 1: 08-110-009 (137.78-acres)

Parcel 2: 08-110-022 (7.86-acres)

Parcel 3: 08-110-026 (60-acres)

Parcel 4: 010-200-003 (0.64-acres)

Parcel 5: 010-200-004 (2.68-acres)

Parcel 6: 010-200-006 (1.65-acres)

Parcel 7: 010-200-007 (1.19-acres)

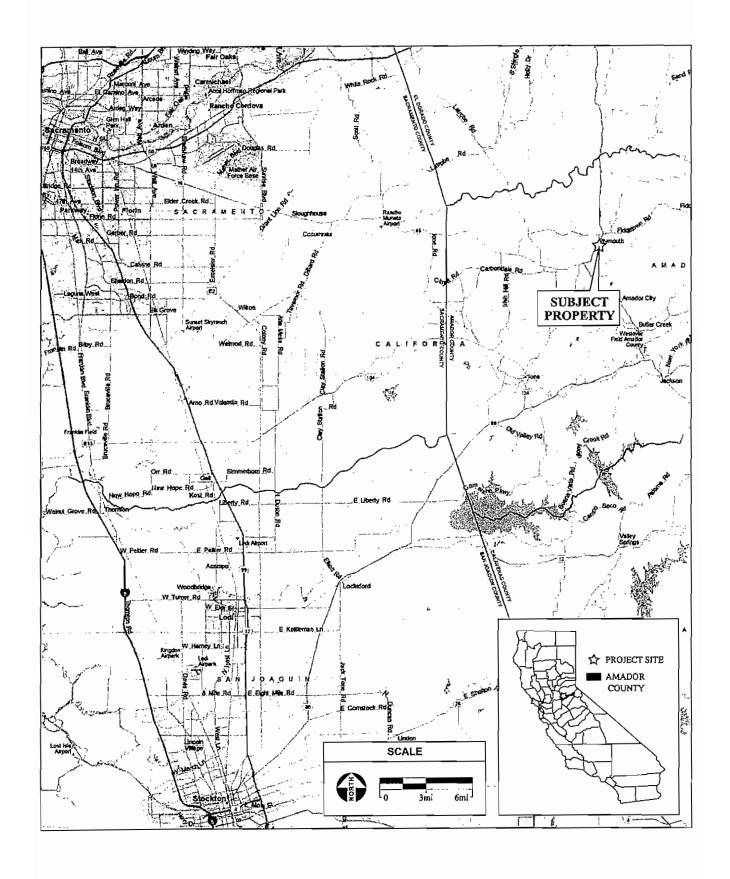
Parcel 8: 010-200-008 (0.53-acres)

**Parcel 9:** 010-200-009 (0.81-acres)

Parcel 10: 010-200-010 (1.56-acres)

Parcel 11: 010-200-011 (1.56-acres)

Parcel 12: 08-011-021 (12.12 acres)



This ESA covers the Subject Property, adjacent areas, and surrounding known sources of contamination, up to 2.0 miles from a point roughly equivalent to the Subject Property. Site reconnaissance inspections of the Subject Property and adjacent properties were performed and relevant database listings of hazardous sites, waste generators, and underground storage tanks were reviewed (EDR, 2008). AES also reviewed historical aerial photographs for the Subject Property. Years available for review were 1944, 1962, 1984, 1987, 1998, and 2005.

#### 1.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

The term Recognized Environmental Condition (REC) refers to 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 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 term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Additionally, the term historical REC refers to an environmental condition associated with the Subject Property, including a past release of any hazardous substance or petroleum product, which in the past would have been considered a REC, however such condition has since been remediated. Historical RECs will therefore be included in this Phase I ESA (ASTM 2005).

#### 1.3 LIMITATIONS AND EXCEPTIONS

No ESA can completely eliminate uncertainty regarding the potential for RECs in connection with a property. Conformance of this assessment with ASTM Standard Practice E 1527-05 will reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the Subject Property. While AES has made every effort to discover and interpret available historical and current information on the property within the time available, the possibility for undiscovered contamination to be present remains. AES's report is a best-effort collection and interpretation of available information consistent with industry standards for the completion of Phase I ESAs.

This ESA is based on a site reconnaissance of the Subject Property, searches of government hazardous materials databases, and interviews with the current property owners and/or their representatives. Physical testing of soil or groundwater was not within the scope of this assessment. Asbestos containing building materials (ACM) and lead-based paint surveys were not included.

#### 1.4 METHODOLOGY

A variety of data sources were consulted in completing this ESA. The following sub-sections describe the methods used and the data sources consulted to accomplish each task.

#### 1.4.1 HISTORICAL REVIEW

Previous land uses and history of the Subject Property was researched in an effort to identify RECs at or near the Subject Property. Historical aerial photographs (Appendix A) and topographic maps (Appendix B) from different decades were examined for the presence of aboveground storage tanks, industrial buildings, gas station canopies and/or pump islands, as well as other indications of bulk hazardous material storage. Other sources of historical information including Sanborn Fire Insurance Maps and City Directory Abstracts did not include coverage of the Subject Property due to the rural nature of the Subject Property.

#### 1.4.2 DATABASE SEARCHES

Database searches were made for records of known storage tank sites and known sites of hazardous materials generation, storage or contamination. Available information from federal, state, and local agency lists of: (a) known or potential hazardous waste sites and landfills; (b) sites currently under investigation for environmental violations; (c) sites which manufacture, generate, use, store, and/or dispose of hazardous materials or hazardous wastes; (d) sites which have underground storage tanks (USTs); and (e) sites with recorded violations of regulations concerning USTs and hazardous materials/hazardous wastes. The database search is intended to identify facilities that may have the potential to impact surface and subsurface conditions on the Subject Property. A full listing of sites within the vicinity of the Subject Property is provided in Appendix C.

#### 1.4.3 TITLE REPORT AND ENVIRONMENTAL LIEN SEARCH

A review of ownership records in the form of a title report was performed to review potential land uses that would signify potential RECs in connection with the Subject Property. The title report was supplied by the property owner and information within the title report appears reliable.

An EDR Environmental Lien Search (Appendix D) was reviewed for Parcel 1 to ensure no pending cleanup liens exist for Parcel 1 and the abandoned mine. No environmental clean-up liens were noted in the lien search.

#### 1.4.4 SITE RECONNAISSANCE

Pete Connelly performed a field inspection of the Subject Property on October 2, 2003, October 7, 2003, and April 2, 2004. A follow-up inspection occurred on October 22, 2008 for the

preparation of this updated Phase I ESA. The purpose of the site reconnaissance is to examine for obvious physical indications of improper hazardous substance or petrochemical disposal such as stained soil or asphalt, stressed vegetation, sumps, partially buried drums, bulk underground fuel storage tanks, and other obvious signs of hazardous materials involvement. In addition, adjacent properties were visually inspected to the extent possible without trespassing on private property to determine if obvious RECs are visible on adjacent properties. Section 3.0 describes the findings and includes photos of the field inspections.

#### 1.5 DEVIATIONS AND DATA GAPS

ASTM Standard E 1527-05 requires any significant data gaps, deviations and deletions from the ASTM Standard to be identified and commented on in the Phase I ESA. A significant data gap would be one that affected the ability to identify a REC on the Subject Property or adjacent properties.

Sanborn Fire Insurance Maps and EDR City Directory Abstracts were not available for the Subject Property. There were no problems identifying past uses of the Subject Property; therefore the lack of Sanborn Fire Insurance Maps and EDR City Directory Abstracts is not considered a significant data gap for this Phase I ESA. The historical aerial photos that provide coverage of the Subject Property are of varying scale and clarity. Individual structures that are identified on the Subject Property in the 1944, 1962, 1987, 1998, and 2005 are not identifiable on the 1984 aerial. Because the decade package (EDR, 2008) provides sufficient coverage for the prior years (1962) and individual structures are visible in these photos, the quality of the 1981 aerial photo is not considered a significant data gap for this Phase I ESA.

# SECTION 2.0 SITE DESCRIPTION

#### **SECTION 2.0**

#### SITE DESCRIPTION

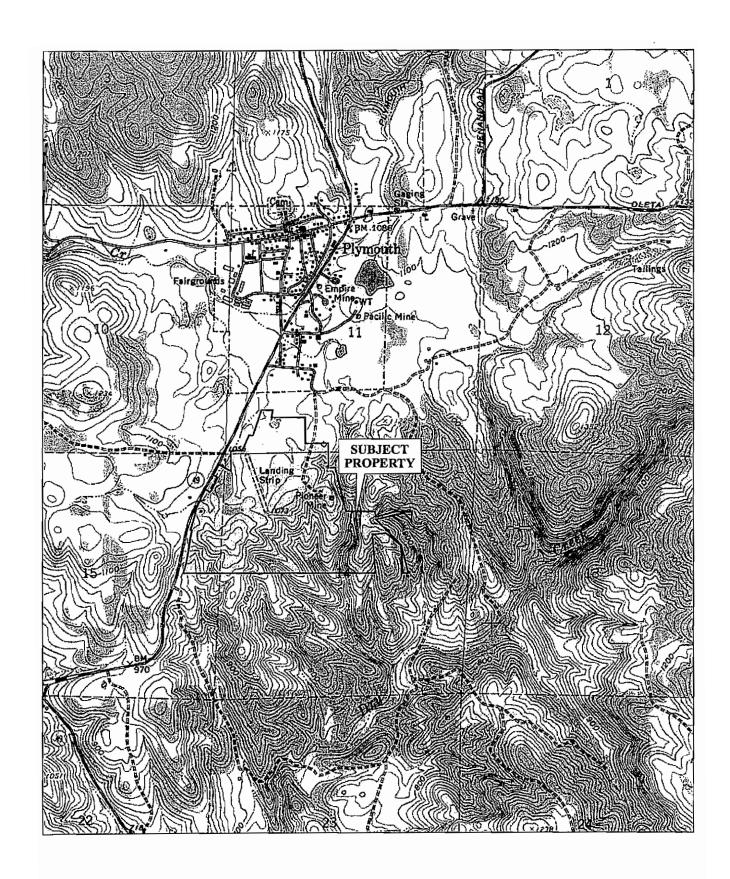
#### 2.1 LOCATION AND LEGAL DESCRIPTION

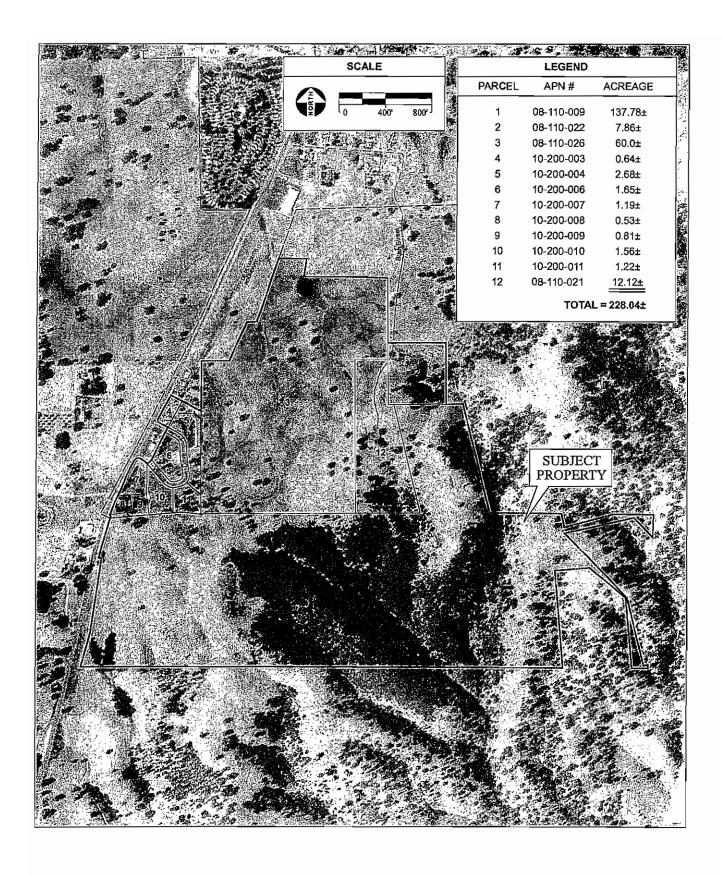
The Subject Property is located in Western Amador County, California, outside the City of Plymouth, and is bound by Highway 49 to the west, the City of Plymouth to the north, and rural residential and undeveloped vacant land to the south and east (Figure 2). The Subject Property is comprised of 12 separate parcels totaling approximately 228.04 acres (Figure 3). The Amador County Assessor Parcel Numbers (APNs) and acreage are listed in Table 2-1. Four (4) of the Subject Property parcels are located in unincorporated Amador County, these include Parcels 1, 2, 3, and 12. These unincorporated parcels are contiguous to the other eight Subject Property parcels which are located within the City of Plymouth. Six of the parcels located in the City of Plymouth are off Village Drive and Highway 49. These include Parcels 4, 5, 6, 7, 10, and 11. The remaining two Subject Property parcels are located off Highway 49 (Parcels 8 and 9) (Figure 3).

TABLE 2-1
Subject Property Parcels

Parcel	APN number	Acreage	<u>Location</u>
1	08-110-009	137.78	Unincorporated Amador County
2	08-110-022	7.86	Unincorporated Amador County
3	08-10-026	60	Unincorporated Amador County
4	10-200-003	0.64	City of Plymouth
5	10-200-004	2.68	City of Plymouth
6	10-200-006	1.65	City of Plymouth
7	10-200-007	1.19	City of Plymouth
8	10-200-008	0.53	City of Plymouth
9	10-200-009	0.81	City of Plymouth
10	10-200-010	1.56	City of Plymouth
11	10-200-110	1.22	City of Plymouth
12	08-110-021	12.12	Unincorporated Amador County

SOURCE: AES, 2008





#### 2.2 SITE AND VICINITY CHARACTERISTICS

Natural features of the project site include several prominent rock outcroppings, California annual grassland, and dense oak woodland and thick chaparral. The topography of the Subject Property has rolling hills with gradual to steep elevation changes. The elevations of the Subject Property range from approximately 880 feet above mean sea level (amsl) to approximately 1145 feet amsl. Several natural seasonal drainages are present on the Subject Property; which generally flow towards the south. The northern portions of the site, primarily the northern portion of Parcels 2, 3, and 12, are generally flat. Stormwater accumulates within several low lying areas of Parcel 3, this parcel has historically been used for cattle grazing and the water that accumulates along the northern portion of Parcel 3 is used to water cattle during the spring and early summer months. As stated above, Parcels 4, 5, 6, 7, 10, and 11 are located off Village Drive. Portions of these parcels have been graded for future development.

Some of the Subject Property parcels are comprised of vacant lands which have never been developed, while others are developed and include a commercial hotel and residential structures. Table 2-2 is a summary of the Subject Property improvements. Section 3.0 includes site photos and a summary of the site reconnaissance findings including site photos of environmental conditions.

Parcel 1: Parcel 1 has never been developed and is comprised of 137.78 acres used for cattle grazing. There are remains of a mine that appear to have been filled with debris. The debris is comprised of corrugated metal and large wood planks arranged in a pile, covering the mine shaft. Several piles of what appear to be mine tailing are located next to the mine. The tailings are described by the property owner as crushed slate that was discarded during prior hard rock mining activities. The piles are covered with native vegetation that does not appear stressed. Other obvious remnants of the mine include several concrete footings/foundations along a hillside; the footing/foundations are arranged in a staircase fashion, originating at the top of a hill along the northeast corner of Parcel 1. Several pits and ditches were noted along in the northern portions of Parcel 2. A previous geotechnical investigation (Geocon, 2005) noted several ditches and adits in areas south of the former mine. The vegetation in these areas are representative of the reminder of the site and do not appear stressed. There are no indicators of gross contamination such a stained soil, debris piles, chemical odors, or other potential signs of gross contamination on this portion of the Subject Property.

Parcel 2: The physical address of Parcel 2 is 9448 Bush Street. This parcel is developed and has a vacant, approximately 1,200 square foot (sq/ft), wood framed, concrete slab house with composition shingle roof. A septic system, two domestic wells, barn, pig pen, and pump house

TABLE 2-2
Subject Property Improvements

Subject Property Improvements						
Parcel	APN number	Address/location	<u>Improvements</u>			
1	08-110-009	NA	Vacant. One groundwater well contained in a concrete vault.			
2	08-110-022	9448 Bush Street	Approximately 1,200 sq/ft home, barn, pig pen, pump house, two domestic wells			
3	08-10-026	NA	Vacant never developed			
4	10-200-003	NA/Highway 49 frontage	Marquis Sign for Shenandoah Inn			
5	10-200-004	17674 Village Drive	Shenandoah Inn. Storm water drains maintained by City of Plymouth			
6	10-200-006	Off Village Drive	Graded for future development. Storm water drains maintained by City of Plymouth			
7	10-200-007	NA/Highway 49 frontage	Graded for future development.			
8	10-200-008	17594 Highway 49	Approximately 1,500 sq/ft residential structure			
9	10-200-009	17590 Highway 49	Approximately 1,200 sq/ft residential structure			
10	10-200-010	Off Village Drive	Graded for future development. Storm water drains maintained by City of Plymouth			
11	10-200-110	Off Village Drive	Graded for future development. Storm water drains maintained by City of Plymouth			
12	08-110-021	9458 Bush Street	1,200 sq/ft home, barn/garage, domestic well			

SOURCE: AES, 2008

were noted on this parcel. As noted above, the southern portion of Parcel 2 has what appear to be several mining ditches.

Parcel 3: This parcel comprises approximately 60 acres and is a vacant field used for cattle grazing. A seasonal pond located along on the northern border of Parcel 3 is fed from stormwater runoff that originates from an open field located on the neighboring parcel to the north. There are no indicators of gross contamination on this portion of the Subject Property.

Parcel 4: This parcel comprises approximately 0.64 acres and contains the marquis sign for the Shenandoah Inn. There is a vegetated roadside ditch along Highway 49 were surface stormwater accumulates. Several power poles are located next to the roadside ditch. There are no pole mounted transformers associated with these power lines.

Parcel 5: This parcel is developed and is the location of the Shenandoah Inn, which is a two story 49 room hotel located at 17674 Village Drive. Utilities for the hotel include water and

wastewater service provided by the City of Plymouth, propane gas provided through a private company, and electricity provided through Pacific Gas and Electric. The hotel was built in 1989 (Patel, 2008). Prior to 1989, Parcel 5 was undeveloped as shown on historic aerial photos and topographic maps.

Parcels 6, 7, 10, and 11: These parcels are all located off Village Drive. Portions of these Subject Property parcels appear to have been graded previously in anticipation of future development. Improvements along Village Drive include fire hydrants, storm drains, and curb and gutters.

Parcel 8: This parcel is developed and has an occupied residential structure approximately 1,500 sq/ft in size. The residential structure is comprised of concrete block walls, concrete slab foundation, and composition shingle roof. The physical address of Parcel 8 is 17594 Highway 49. A domestic well was noted along the eastern portion of this parcel.

Parcel 9: Parcel 9 is also developed and includes an unoccupied 1,200 sq/ft residential structure with concrete slab foundation and attached garage. The physical address of Parcel 9 is 17590 Highway 49.

Parcel 12: The physical address of Parcel 12 is 9458 Bush Street. An approximately I,200 square foot ranch-style home with a composition shingle roof, concrete slab foundation, detached garage/barn, private groundwater well, and a septic system.

#### ADJACENT PROPERTIES

AES performed a survey of adjacent properties to the extent possible without trespassing. The purpose is to identify adjacent businesses and determine if current land uses would affect the planned use of the Subject Property. There are three commercial business located along the western border of the Subject Property. At 17699 Highway 49, immediately west of Parcel 6 is the Village Market/Shell Gas Station. The Columa Del Oro Mexican restaurant and Gold Country Café are also located on Highway 49, west of Parcel 3. The property immediately north of Parcel 3 is undeveloped. The properties immediately east of the project site are generally rural residential and vacant land, with some cattle grazing. The property south of the project site consists of vacant land used for cattle grazing.

Several gas station sites were mapped in the EDR Radius Map Report under various locations and addresses (Appendix C). The EDR report is listed in the Sierra Trading Post and Exxon Station #506 as being located at within less than 0.25 miles of the Subject Property. The EDR report identifies these two gas station sites as being located at the intersection of Highway 49 and Main Street. This intersection is approximately 0.65 miles from the northern border of Parcel 3. The

Sierra Trading Post, Exxon Station #506, and E-Z Serve are the same business and located at the intersection of Highway 49 and Main Street in Plymouth. There are no other gas stations with the exception of the Shell Gas Station/Village Market located in the vicinity of the Subject Property on Highway 49.

Historic mines are delineated on the historical topographic maps as the Pacific Mine and Empire Mine (Appendix B). These hard rock mines are located approximately 0.50 and 0.65 miles from the Subject Property, respectively. Generally the risks associated with historic mines are safety related and consist of either collapse or the risk of falling into an unmarked mining pit. Surface water impacts also occur from heavy metals in the mine tailings reacting to oxygen and rain water. The result is acid mine drainage. A review of topographic maps indicates concentrated stormwater runoff from the Pacific Mine and Empire Mine does not appear to flow towards the Subject Property.

#### 2.3 HYDROLOGY

The eastern and southern portion of Parcel 1 is steeply sloped and consists of small watersheds that drain into Dry Creek. Surface water runoff from Parcel 1 drains into an unnamed seasonal tributary of Dry Creek. Stormwater runoff from the areas of the Subject Property along Village Drive generally drains into stormdrains located on these parcels. There parcels have sufficient vegetation that limits runoff onto Village Drive. Surface water runoff originating from the paved surface of Village Drive drains towards Highway 49; eventually entering roadside ditches and stormdrains located on Highway 49. Parcel 8 and 9 generally drain towards the south and west, towards Highway 49, eventually entering roadside ditches along Highway 49. Stormwater runoff originating on Parcel 2 generally drains towards in the east and southeast, following the natural topography of the site, eventually flowing into a steep ravine and season creek. Parcel 12 generally drains towards in the south, following the natural topography, flowing into a steep ravine located in Parcel 1. Parcel 3 is relatively flat and stormwater runoff from the adjacent property to the north drains onto Parcel 3. Stormwater generally accumulates in the northern portion of Parcel 3, into a seasonal pond used to water cattle. Some portions of Parcel 3 drain into low lying area along the border of Parcel 1 and Parcel 3.

Static water levels in wells located on the Subject Property range from 75 feet to 200 feet below ground surface (bgs) (AES, 2008).

#### 2.4 GEOLOGY AND SOIL

The geology of the Subject Property consists of greenstone and gray to black slate of the Mariposa Formation (Upper Jurassic age) and metasedimentary rocks, chiefly graphitic schist, metachert and amphibolite schist of the Calaveras Formation (Carboniferous to Permian). The trend of ridges and rock formations in the project area is generally northwest to southeast. The

Mariposa Formation consists of greenstone that has its origins as metamorphosed basic, igneous intrusive rock and slate that was once seafloor mud. The formation was metamorphosed and evenly folded and fractured during the Nevadan mountain building episode (late Jurassic). The Mariposa Formation crops out as marine sedimentary and metasedimentary rocks with greenstone along the western edge. The Calaveras Formation consists of ancient marine sediments of the Paleozoic era likely formed as a result of coral reef activities. Seismic activity in Jurassic times (250 million years ago) and again about 5 million years ago caused the ancient sediments including the coral reef to be uplifted and folded into its present state.

The dominant soil types on the Subject Property are Exchequer very rocky silt loam (EcE), Exchequer and Auburn loams (EhD), and Exchequer and Auburn very rocky loams (ExE). These soils are loams and silty loams, with low clay content. The soils are derived from the erosion of shallow bedrock of the Calaveras and Mariposa formations described above.

#### 2.5 CURRENT USES OF THE SUBJECT PROPERTY

Pete Connelly performed a field inspection of the Subject Property on October 2, 2003, October 7, 2003, and April 2, 2004. A follow-up inspection occurred on October 22, 2008 for the preparation of this updated Phase I ESA. Current uses of the Subject Property are rural residential and vacant land. Improvements on the Subject Property are summarized in Table 2-2. Parcels 1, 3, 6, 7, 10, and 11 are undeveloped. Parcel 1 is used for seasonal cattle grazing and is the location of the Historic Pioneer Mine. As stated in Section 2.2, four residential structures were noted on the Subject Property. Two of these structures are located off Highway 49 on Parcel 8 and 9. Parcel 8 is located at 17954 Highway 49 and contains an approximately 1,500 sq/ft concrete block house, attached garage and concrete slab foundation. The second house is located on Parcel 9 (17590 Highway 49) and contains an approximately 1,200 square foot wood framed house with concrete slab foundation and attached garage. The other two residential structures are located on Parcels 2 and 12 and are addressed as 9448 and 9458 Bush Street, respectively. The residential structure located on Parcel 2 is comprised of an approximately 1,200 sq/ft house constructed of wood frame, concrete foundation, detached garage, and composition shingle roof. The residential structure located on Parcel 12 is of similar construction as the structure on Parcel 2. This structure is an approximately 1,200 sq/ft house constructed of wood frame, concrete foundation, detached garage, and composition shingle roof. There is an approximately 300 sq/ft detached garage/barn structure located next to the house.

As noted in Section 2.2, Parcel 4 is the location of the Highway 49 frontage marquis sign for the Shenandoah Inn. Parcel 5 is the location of the Shenandoah Inn which is a 49 room hotel with swimming pool and conference rooms. There were no signs of improper hazardous materials storage during the site reconnaissance inspections.

No obvious indications of gross contamination were present on the Subject Property. Section 3.0 includes photographs of site conditions that were encountered during the October 22, 2008 site visit.

#### 2.6 HISTORICAL USES OF THE SUBJECT PROPERTY

Ownership records and a search of hazardous materials databases (Section 4.0) do not suggest any hazardous materials involvement on the Subject Property. Historical uses of the Subject Property are rural residential and vacant land (seasonal cattle grazing). Individual property owners were interviewed in 2003 during the preparation of a Phase I ESA. No RECs were identified by the Subject Property owners during the interviews.

Parcel 1 is the location of the Historic Pioneer Mine; an abandoned hard rock and quartz mine. Remnants of the mine include a demolished lift station and several concrete footings and foundations that are likely remnants of a stamp mill (rock crusher). The mining shaft was filled with debris to limit safety hazards. The previous property owner (Matulich, 2004) was interview several times during the site inspections and during several telephone conversations. Mr. Matulich states that his family has never stored or used hazardous materials on this portion of the Subject Property and is not aware of any gross contamination on the Subject Property. A telephone interview with Mr. Matulitch occurred on October 23, 2008 to ensure no changes occurred regarding hazardous materials involvement. The property owner questionnaires are included in Appendix F.

Historical ownership records describe Parcel 2 as the location of the New London Quartz mine. The southern portion of this parcel abuts to areas of Parcel 1 where several ditches and mounds were observed. The ditches and mounds are likely from historical mining activities. The ditches are heavily overgrown with native grasses and there are no physical indications of gross contamination in the areas adjacent to the mine. There are several ditches and mounts that were noted along the southern portions of Parcel 2.

The owner of the Shenandoah Inn (Parcels 4 and 5) (Patel, 2008) of was interviewed during the preparation of this updated Phase I ESA. According to Ms. Patel, there have been no hazardous materials incidences that would result in gross contamination on Parcels 4 and 5.

Historical ownership records describe Parcel 12 as the location of the Gov. Bradford lode mining claim. The southeast border of Parcel 12 abuts to areas of Parcel 1 were the Historic Pioneer Mine is located.

#### 2.7 AERIAL PHOTOGRAPHS

Historical aerial photographs (**Appendix B**) and topographic maps (**Appendix C**) were reviewed for the Subject Property. Years available for review were 1944 (1"=555"), 1962 (1"=555"), 1984 (1"=666"), 1998 (1"=666"), and 2005 (1" = 484"). Aerial photographs are of varying scale and clarity. Historical aerial images offer detailed review of previous land uses on the Subject Property and adjacent properties.

#### 1944

The Subject Property appears undeveloped with the exception of man-made structures that are visible on Parcels 8 and 9. The structures are possibly residences, however, due to the resolution of the photo, it is difficult to determine. The 1944 topographic map identifies a building as being present at this location. The Historic Pioneer Mine and lift structure are also visible on the 1944 photo. Several dirt roads are visible on Parcel 3, one of which appears to lead to the mine site. The 1944 topographic map shows a road leading from the town of Plymouth to the Pioneer Mine. One of the hilltops along the northern property boundary of Parcel 1 is void of vegetation and appears to have been cleared. Adjacent properties appear undeveloped, and void of man-made structures.

#### 1962

Land use has not changes on the Subject Property compared to the previous photo. Trees visible on Parcels 8 and 9 appear to obscure most of the structures visible on the 1944 aerial photo. Similar to the 1944 topographic map, the 1962 map identifies a building as being present at this location. The building is likely located on Parcel 8. Parcel 3 is undeveloped; however an airstrip is present on the parcel. There are no buildings associated with the airstrip on Parcel 3. The 1962 aerial photo shows a building present on Parcel 2 that appears to be a residence. That building was not visible in the 1944 aerial photo. Individual structures associated with the mine that were visible in the 1944 photo are not visible in this photo. An airstrip, stock pond, and the Pioneer Mine are all delineated on the 1962 topographic map. Adjacent parcels are undeveloped with the exception of parcels located on the west side of Highway 49. The parcels located west of Highway 49 appear to be rural residential in nature.

#### 1984 and 1987

The 1984 aerial photo has poor resolution and individual structures are only slightly visible. Areas were residential structures are currently present on Parcels 2 and 12 appear to have been cleared in preparation for construction of the residences. Both structures are visible in the 1987 aerial photo. The parcels located off Village Drive appear to be in the process of being developed in the 1987 photo, as those parcels appear to have been cleared of vegetation. Outlying areas are more developed compared to the previous photos.

#### 1998

The portions of the Subject Property located off Village Drive appear as they are today. The Shenandoah Inn is visible in the 1998 aerial photo. The adjacent property west of Parcel 6 has a building present as well as the gas station canopy as it appears today. Residences are visible on Parcels 2 and 12. The cattle watering pond located on Parcel 3 is visible in this photo. The restaurants located on Highway 49, as well as a large trailer park, northwest of Parcel 3 are visible in the 1998 photo. The airstrip that is visible in the 1962 photo is no longer visible in the 1998 photo. The town of Plymouth appears more developed compared to the previous photos.

#### 2005

These photos indicate land use has not changed between 1998 and 2005. The Subject Property parcels appear much as they do today. An unpaved road located off Highway 49 enters Parcel 1 and appears to have been widened and extended towards the east and southeast sometime between 1998 and 2005. Two watering ponds are visible on the Subject Property. One of the ponds is located on the southwest corner of Parcel 1, next to Highway 49. The second pond is in the same location on Parcel 3 as shown on the 1998 aerial photo and isdelineated in the 1962 topographic map.

#### 2.8 SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance Maps do not provide coverage of the Subject Property.

## SECTION 3.0

SITE RECONNAISSANCE AND INTERVIEWS

#### **SECTION 3.0**

#### SITE RECONNAISSANCE AND INTERVIEWS

#### 3.1 OBJECTIVE

The objective of the site reconnaissance is to identify current or historic hazardous materials involvement on the Subject Property or in the vicinity of the Subject Property. Hazardous materials involvement or signature environmental conditions include the presence or likely presence of any hazardous materials or petroleum products that indicate an existing release, past release, or a threat of release into any structure on the property, soil, or groundwater. Signs of possible hazardous materials involvement would include any indications of underground storage tanks existing on the Subject Property, stained soils and/or unusual odors originating from the Subject Property, indications of an excavation or removal of soils, including patched asphalt and large debris piles, and other obvious signs of hazardous materials involvement.

#### 3.2 SITE RECONNAISSANCE FINDINGS

Pete Connelly performed a field inspection of the Subject Property on October 2, 2003, October 7, 2003, and April 2, 2004. A follow-up inspection occurred on October 22, 2008 for the preparation of this updated Phase I ESA. The field inspection consisted of walk-through inspections of the Subject Property as well as limited visual observations of neighboring properties. Adjacent properties were observed to the extent possible without trespassing. Refer to the discussion in Section 2.2 and Section 2.5 which describes site and vicinity characteristics and current uses of the Subject Property, respectively. Photographs documenting conditions observed on the Subject Property during the October 22, 2008 site inspection are shown on Figures 4 through 7.

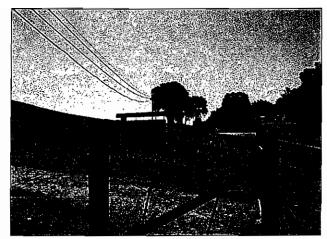
#### 3.3 INTERVIEWS AND QUESTIONNAIRES

Standard property owner and user questionnaires were completed by a representative of the Subject Property owners. These questionnaires are included as **Appendix E**. No RECs are identified in the questionnaires.

On October 23, 2008, a standard property owner questionnaire was completed by the owner of the Shenandoah Inn, Usha Patel. There are no hazardous materials stored on the hotel property.

Pool chemicals are stored in amounts that do not require regulatory oversight or permitting. Two 500 gallon liquid propane tanks are located next to the hotel. These tanks appear to be in good working order and are managed through a private contractor. Cleaner, degreasers, and floor stripping chemicals are stored in a designated area and used according to manufacturer's guidelines. As such, the presence of these materials does not constitute a Recognized Environmental Condition.

As stated in Section 2.6, individual property owners were interviewed in 2003 during the preparation of a Phase I ESA. No RECs were identified by the Subject Property owners during the interviews. There are no changes in land uses on any of the Subject Property parcels since 2003. The information provided by the property owner of Parcels 6, 7, 8, 9, 10, and 11 is deemed reliable for this updated Phase I ESA.



**PHOTO 1:** Driveway leading to Parcel 1 off Highway 49. Photo was taken facing south.

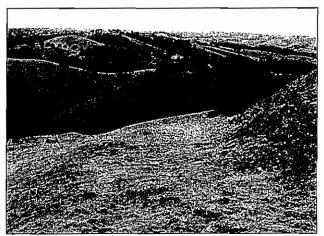


PHOTO 3: Northeastern portion of Parcel 1 facing southeast.

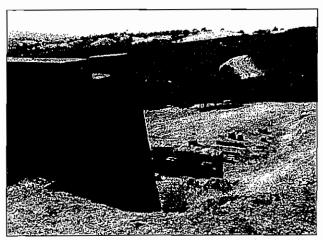


PHOTO 5: Concrete foundations associated with the mine on Parcel 1. Photo taken facing southwest.



PHOTO 2: Western portion of Parcel 1 next to Highway 49. Photo was taken facing south.

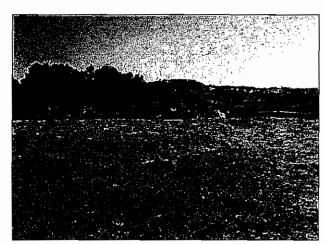


PHOTO 4: Mine shaft filled with debris on Parcel 1.



PHOTO 6: Northern border of Parcel 2 facing west.

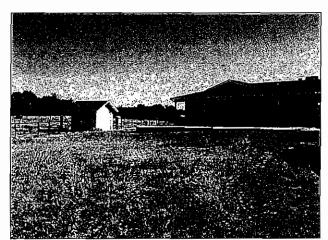


PHOTO 8: Ranch style house on Parcel 2.

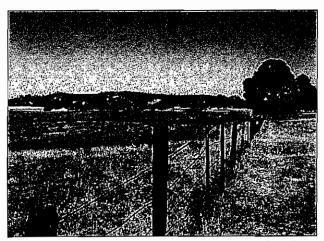


PHOTO 10: Parcel 3 facing north. Photo was taken along the eastern border of Parcel 2.



PHOTO 7: Steep wooded area along the southeast corner of the Subject Property (Parcel 2).

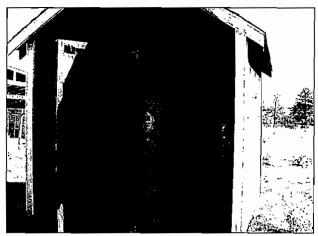


PHOTO 9: Domestic well located on Parcel 2.



PHOTO 11: Marquis sign along Highway 49.



PHOTO 13: Intersection of Village Drive and Highway 49 showing Parcel 7 and 10.



PHOTO 15: Fire hydrant on Village Drive.



PHOTO 12: Shenandoah Inn location on Parcel 5. Photo taken from Parcel 1 facing north.



PHOTO 14: Parcel 11 facing north. Photo taken from the northwest corner of Parcel 1.

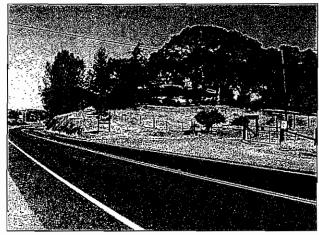


PHOTO 16: An approximate 1,500 square foot residential structure located on Parcel 8.



PHOTO 17: An approximately 1,200 square foot vacant residential structure located on Parcel 9.

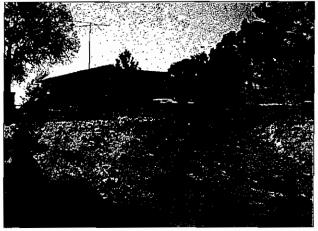


PHOTO 18: An approximately 1,200 square foot vacant residential structure located on Parcel 12.

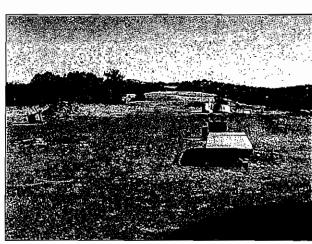


PHOTO 19: Items of household debris located on Parcel 12.

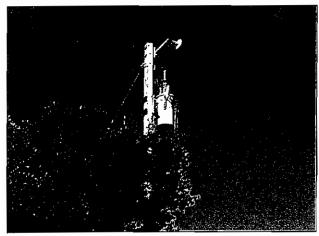


PHOTO 20: Pole mounted transformer located on Parcel 8.



PHOTO 21: Pole mounted transformer located on Parcel 12.

# SECTION 4.0 RECORDS REVIEW

#### **SECTION 4.0**

#### RECORDS REVIEW

#### 4.1 DATABASE REVIEW

Database searches were conducted for records of known storage tank sites and known sites of hazardous materials generation, storage, and/or contamination. Databases were searched for sites and listings up to one mile from a point roughly equivalent to the center of the Subject Property. The environmental database review was accomplished by using the services of a computerized search firm *Environmental Data Resources, Inc.* (EDR). EDR uses a geographical information system to plot locations of past or previous hazardous materials involvement. AES reviewed the EDR report to determine if the Subject Property and adjacent sites are listed on regulatory agency databases. The purpose of review of adjacent properties is to determine if adjacent sites will impact surface and/or subsurface conditions on the Subject Property. Included in the EDR database report is a list of "unmapped sites". AES reviewed the list of unmapped sites for the properties that may be located within the search radius specified for each governmental database. These sites do not appear to be located within the applicable search radius of the Subject Property. The complete list of reviewed databases is provided in the EDR report, included in Appendix D and is summarized in Table 4-1. Information on past and/or current hazardous materials involvement involving adjacent properties is summarized in Section 4.2.2.

#### 4.2 HAZARDOUS MATERIALS INVOLVEMENT

A regulatory agency database report was obtained and reviewed to identify locations of past and/or current hazardous materials involvement. Regulatory agency databases were searched for records of known storage tank sites and known sites of hazardous materials generation, storage, or contamination, or where violations pertaining to storage and/or use of hazardous materials have occurred. Databases were searched for sites and listings up to two miles from a point roughly equivalent to the southeast corner of Parcel 3. Although a site may be listed within the database report, this does not mean the site is currently contaminated or will impact the environmental quality of the Subject Property. It should be noted that the database search is only as accurate as the data entered into the government agency maintained databases and the date on which those databases were last updated. Installation of underground storage tanks or hazardous

TABLE 4-1 ENVIRONMENTAL DATA RESOURCES (EDR) SUMMARY OF AGENCY DATABASES

Agency Database	Survey Distance	Sites Identifie
Federal Superfund Liens (NPL! RECOVERY)	2.0 miles	0
CERCLA <sup>2</sup> Lien information (LIENS 2)	2.0 miles	
Hazardous Materials Information Reporting System (HMIRS)	2.0 miles	0
U.S. EPA Emergency Response Notification System (ERNS) List	I.O miles	0
U.S. EPA RCRA Registered Large and Small Generators of Hazardous Waste (RCRIS-LQG and RCRIS-SQG)	1.25 miles	0
U.S. EPA RCRA Transporters, Storage, and Disposal of Hazardous Waste Facilities (RCRIA - TSDF)	I.5 miles	0
RCRA Conditionally Exempt Small Quantity Generators (RCRA - CESQG)	1.25 miles	0
U.S. EPA RCRA Transporters, Storage, and Disposal of Hazardous Waste (RCRA - TSD)	I.5 miles	
U.S. Engineering Controls <sup>3</sup>	1.5 miles	0
U.S. Institutional Controls <sup>4</sup>	1.5 miles	0
Department of Defense Sites (DOD)	2.0 miles	
Comprehensive Environmental Response, Compensation, and Liability, Information System (CERCLIS - NFRAP)	1.5 miles	0
Mines Master Index File (MINES)	1.25 miles	0
Open Dump Inventory (ODI)	1.5 miles	0
Formerly Used Defense Sites (FUDS)	2.0 miles	0
Corrective Action Reports (CORRACTS)	2.0 miles	0
CORTESE	1.5 miles	2
State Hazardous Site List (HSL)	2.0 miles	0
State Coalition for Remediation of Drycleaners List (SCRD Drycleaners)	1.25 miles	0
State Solid Waste Tire Facility (SWTIRE)	1.5 miles	0
Facility and Hazardous Materials Manifest Data (HAZNET)	1.0 miles	0
Underground Storage Tank Database (UST)	1.25 miles	3
Hazardous Water Manifest Data (CA Manifest)	1.25 miles	0
State Solid Waste Facilities (SWF - LF)	I.5 miles	1
California Wastes Discharge System Database (WDS)	1.0 miles	1
Envirostor Database (EnviroStor Database)	2.0 miles	2
California Underground Storage Tank Database (CA FID UST)	1.25 miles	0
Leaking Underground Storage Tank (LUST) Sites	1.5 miles	2
State Spills, Leaks, Investigations, and Cleanups Listing (SLIC)	1.0 miles	0
State Hazardous Substance Storage Container Database (HIST UST)	1.25 miles	3
Statewide Environmental Evaluation and Planning System (SWEEPS UST)	1.25 miles	0
Voluntary Cleanup Program Properties (VCP)	1.5 miles	0

Source: Environmental Data Resources, Inc., 2008

<sup>&</sup>lt;sup>2</sup>Comprehensive Environmental Response Cleanup and Liability

<sup>&</sup>lt;sup>3</sup>Enginering controls include various forms of caps, building foundations, liners, and treatment methods to eliminate exposure pathways into

environmental media (soils, water) or affect human health.

<sup>4</sup> Institutional controls include administrative measures such as groundwater use restrictions; construction restrictions, property use restrictions, and post remediation care requirements.

material releases, if not reported to the appropriate agency, would not be listed on any of the databases searched.

#### 4.2.1 SUBJECT PROPERTY

The Subject Property was not listed on any of the regulatory agency databases that were searched by EDR.

#### 4.2.2 ADJACENT PROPERTIES

Several sites were identified in the database report. The list below identifies the sites as they appear in the EDR Radius Map Report (Appendix C).

- 1. The first site is listed on the Haznet database as being located at the intersection of Main Street and State Highway 49 in the town of Plymouth. The EDR report does not give an address for this site however several online mapping services identify the Sierra Trading Post as being at located 18725 State Highway 49, approximately 0.75 miles from the Subject Property. The Sierra Trading Post generates approximately 2.2184 tons of unspecified oil containing waste that is removed from the site and taken to a recycler.
- 2. The second site is listed as the Exxon Station #506 located at the intersection of Main Street and State Highway 49 in the town of Plymouth; this is the same location as the Sierra Trading Post. The Exxon Station # 506 is listed on the Hist UST database as the location of three underground storage tanks.
- 3. A third site is identified in the database report as the E-Z Serve located at 18725 State Highway 49. The E-Z Serve site is listed on the Leaking Underground Storage Tank (LUST) database. A pollution Characterization and Remedial Action were implemented in January and February 2008. The E-Z Serve site is located approximately 0.75 miles north of the Subject Property and is being clean up through Regional Water Quality Control Board oversight. It does not appear that at this time the E-Z serve site would affect the environmental quality of the Subject Property.
- 4. The fourth site listed in the EDR report is Foothill Garage and Wrecking located approximately 0.75 miles from the Subject Property at 9408 Pacific Street, Plymouth. The Foothill Garage and Wrecking Site is listed on the California Waste Discharge (WDR) database as the location of an active facility with a continuous or seasonal discharge regulated under California WDR requirements. This facility poses a minor threat to water quality in the event of a violation of WDR requirements. The EDR lists the Foothill Garage and Wrecking site as a Category C Facility which is a site with no waste treatment system, such as cooling water discharges or those sites who must comply through best management practices to ensure water quality is not compromised. The Foothill Garage and Wrecking site is also listed on the

Envirostor database as a site in which a site screening and preliminary assessment were completed in 1987.

The remaining listed sites are located beyond 0.50 miles from the Subject Property and are not considered an environmental threat to the Subject Property.

# SECTION 5.0 FINDINGS AND CONCLUSIONS

## **SECTION 5.0**

## FINDINGS AND CONCLUSIONS

AES performed this Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E1527-05 for the approximately 228-04 acres Subject Property located in Amador County California. Any exceptions to, or deletions from, this practice are described in Section 1.5 of this Phase I ESA. The Amador County assessors' parcel numbers (APNs) for the Subject Property are listed in Table 2-1 and a summary of improvements on the Subject Property are listed in Table 2-2. Based on information gathered while conducting this Phase I ESA, AES observed the following:

- Current land uses include vacant undeveloped land used for cattle gazing, a 49 room hotel, and rural residential.
- The Subject Property is not listed on any regulatory agency database for hazardous materials involvement. Property ownership records do not suggest any businesses being located on the Subject Property that would use, store, and/or generate hazardous materials.
- Several items of non-hazardous debris are located on Parcel 12 including a pile of roofing
  materials. These materials do not appear to be of an age were asbestos containing
  materials (ACMs) would be present, nevertheless, these materials should be removed and
  taken to a licensed disposal facility.
- Several piles of mine tailings were observed on Parcel 1. The mine is shown as the Pioneer Mine on the United States Geological Survey topographic map (Figure 2). The tailings are characteristic of unprocessed crushed hard rock in which gold ore has not been extracted. As noted in Section 2.2, vegetation in the areas adjacent to the abandoned mine appear healthy and there are no signs of erosion of the mine tailings. The mine site is located on a remote hill top with no public access. In March, 2005 water samples were collected from three seasonal streams and tested for pH. The range of pH was 6.45 to 7.04. In September, 2008 bulk soil samples were collected from the mine tailings and analyzed for CAM-17 heavy metals and for naturally occurring asbestos (NOA). All samples were non-detect for NOA as shown in the laboratory report attached to this ESA (Appendix G, Table 1). Several exceedances were noted for arsenic. The

exceedances for arsenic are common in the foothills of Northern California, were background levels within the Sierra Foothills often exceed 1,000 ppm (AEHS, 2008).

Based on available information, the mine tailings constitute a Recognized Environmental Condition on the Subject Property. There are currently no plans to develop in the vicinity of the former mine. The mine tailings may be capped with a vegetative cover thereby preventing erosion. Capping mine tailings is an accepted risk reduction approach utilized by federal agencies (UDSA, 2003). A vegetative cover with thick rooted plants would eliminate the risk of human exposure to soils that contain high levels of arsenic. In addition to a vegetative cover, the tailings area should be fenced off to prevent public access. As such, leaving the mine tailings in place does not pose an immediate risk to human health and the environment. Additional assessments including a risk evaluation would be necessary if land disturbing activities are planned for areas adjacent to the mine.

## SECTION 6.0

REPORT AUTHORS/ REFERENCES

## **SECTION 6.0**

## REPORT AUTHORS AND REFERENCES

The undersigned declare to the best of their professional opinion that they meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. Peter J. Connelly, Registered Environmental Assessor (REA), prepared this report, qualifies as an environmental professional (EP) as defined in the ASTM Standard E1527-05, and has the specific qualifications based on education, training, and experience to assess a property of the nature, and setting of the Subject Property. He prepared this report under the professional supervision of David Zweig, P.E. who also qualifies as an EP. Pete Connelly and David Zweig's signatures appear below, and their resumes are included as **Appendix F**.

Author:

Peter J. Connelly, REA Associate

Review:

David Zweig, P.E., President AES

No. 30018
Expires: 5/30/09



#### REFERENCES

- AEHS, 2008. Association of the Environmental Health of Soils. Study of State Soil Arsenic Regulations. California State background arsenic levels: see Table 2.
- AES, 2008. Analytical Environmental Services. Environmental Impact Statement Ione Band of Miwok Indians 228.04 Acre Land Transfer and Casino Project. Dated November 2008.
- American Society for Testing and Materials (ASTM) 2005. Practice E1527-05: "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process."
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- Hauter, Ron. 2004. Personal Interview. February 25, 2004. Property Owner Parcel 2.
- Jameson, 2008. Johnny "Gil" Jameson. Tribal Vice Chair Ione Band of Miwok Indians. Telephone interview occurred on November 4, 2008.
- LaFrank, Laura. 2004. Personal Interview. April 2, 2004. Property Owner Parcel 12.
- Matulich, Ron. 2003. Personal Interview. October 7, 2003 and October 24, 2008. Property Owner Parcel 1.
- Patel, Usha. 2008. Personal Interview: October 2, 2003 and October 22, 2008. (Owner: Shenandoah Inn) (Parcels 4 and 5). Phone number (209) 245-4491.
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- United States Department of Agriculture (USDA), 2007. Web Soil Survey 1.1, National Cooperative Soil Survey.
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District, Six Rivers National Forrest 1330 Bayshore Way, Eureka, CA. Available online at: http://www.fs.fed.us/r5/klamath/publications/pdfs/siskonmine/SiskonEECA12May03Final.pd f

Wheeler, Norman. 2003. Personal Interview October 28, 2003. Property Owner Parcels 6, 7, 8, 9, 10, and 11.

http://www.fs.fed.us/r5/klamath/publications/pdfs/siskonmine/SiskonEECA12May03Final.pdf

## **APPENDICES**

# APPENDIX A

HISTORIC AERIAL PHOTOGRAPHS

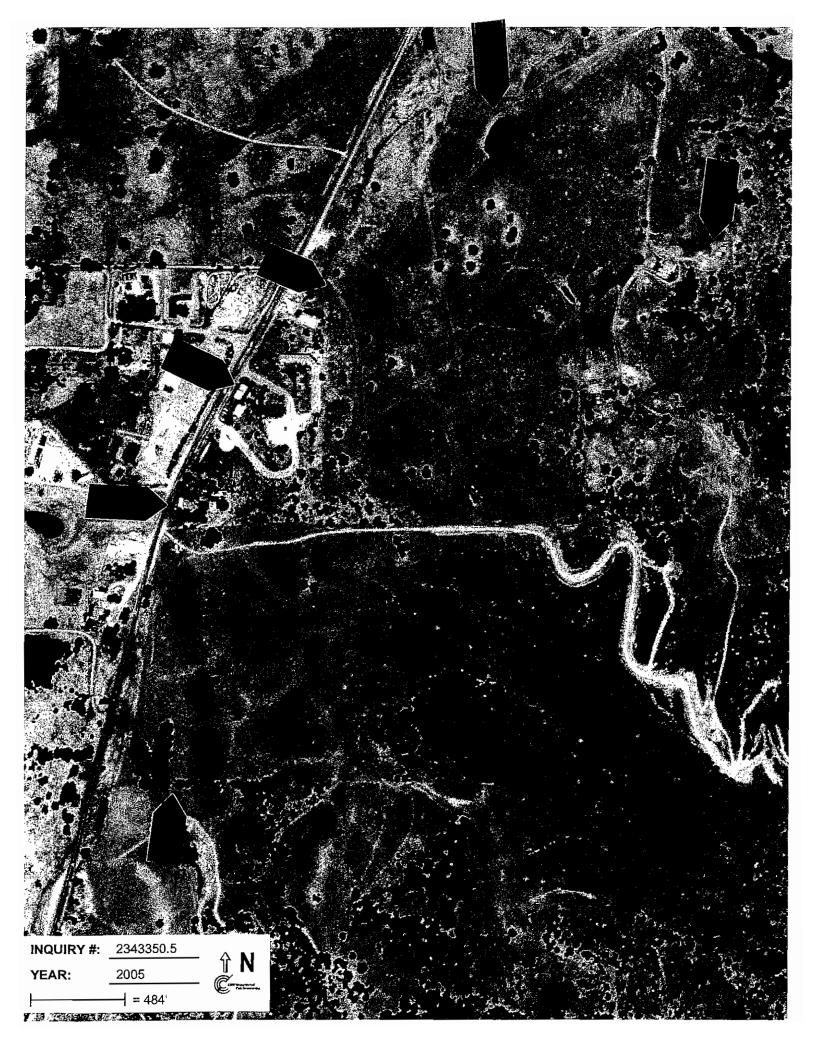






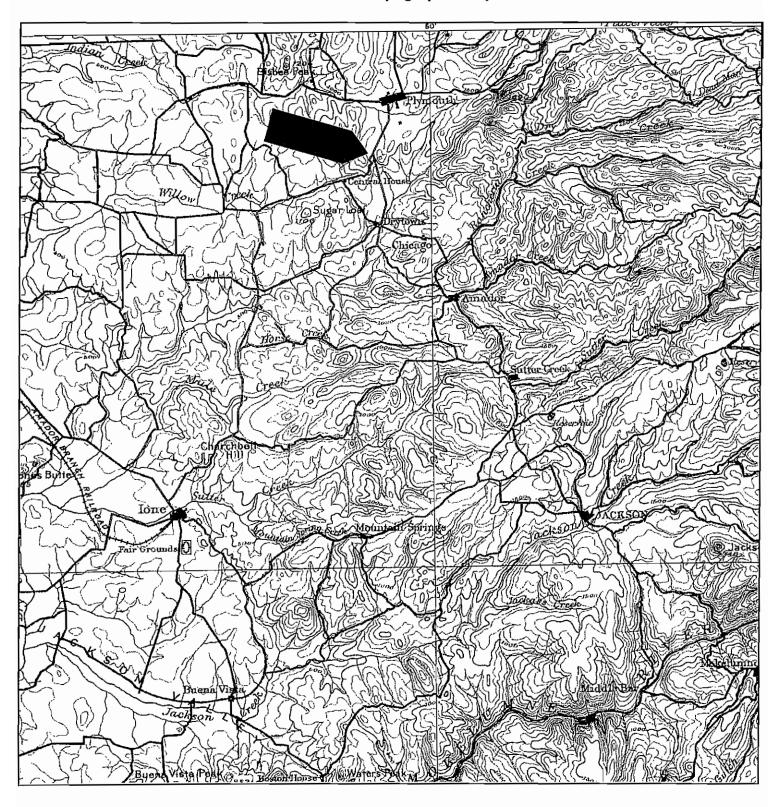






## APPENDIX B

HISTORIC TOPOGRAPHIC MAPS



TARGET QUAD

NAME: **JACKSON** 

MAP YEAR: 1902

30 SERIES: SCALE: 1:125000 ADDRESS:

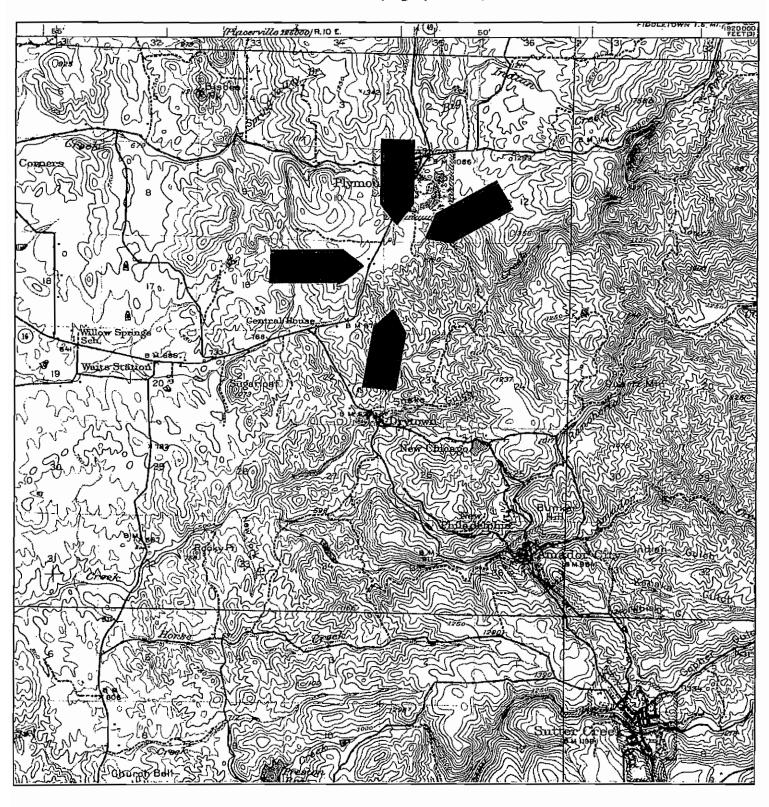
SITE NAME: Ione Caslno Site Hlghway 49

Plymouth, CA 95669

LAT/LONG: 38.4646 / 120.852 CLIENT:

Analytical Environmental Serv.

CONTACT: Pete Connelly INQUIRY#: 2343350.4 **RESEARCH DATE: 10/20/2008** 



TARGET QUAD

NAME: SUTTER CREEK

MAP YEAR: 1944

15 SERIES: 1:62500 SCALE:

SITE NAME: Ione Casino Site

ADDRESS: HIghway 49

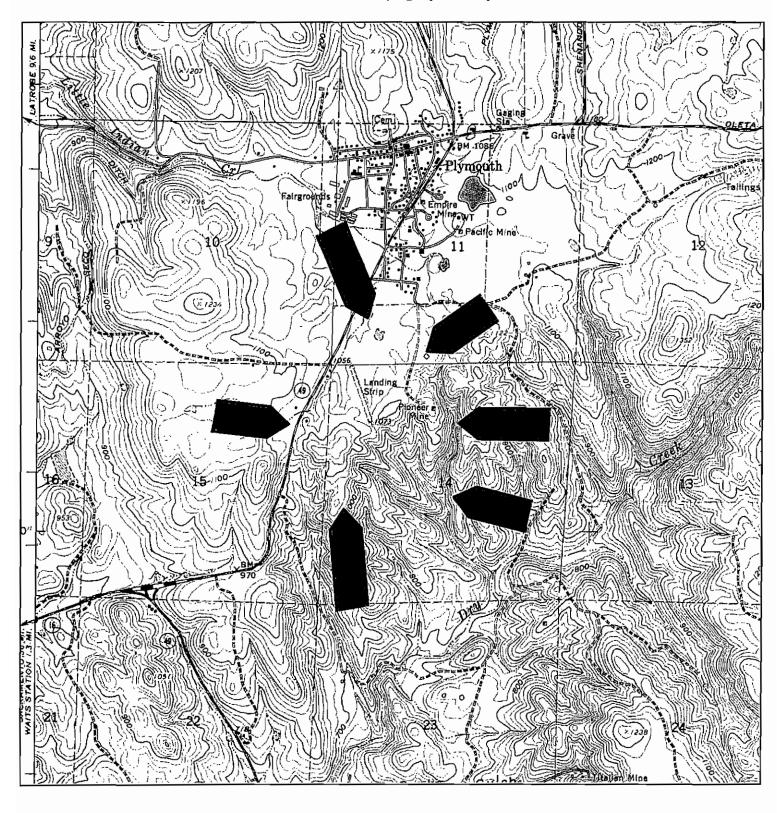
Plymouth, CA 95669

38.4646 / 120.852 LAT/LONG:

CLIENT: Analytical Environmental Serv.

CONTACT: Pets Connelly

INQUIRY#: 2343350.4 RESEARCH DATE: 10/20/2008



TARGET QUAD NAME:

AMADOR CITY

MAP YEAR: 1962

7.5 SERIES: 1:24000 SCALE:

SITE NAME:

Ione Caslno Site ADDRESS:

Highway 49

Plymouth, CA 95669

38.4646 / 120.852 LAT/LONG:

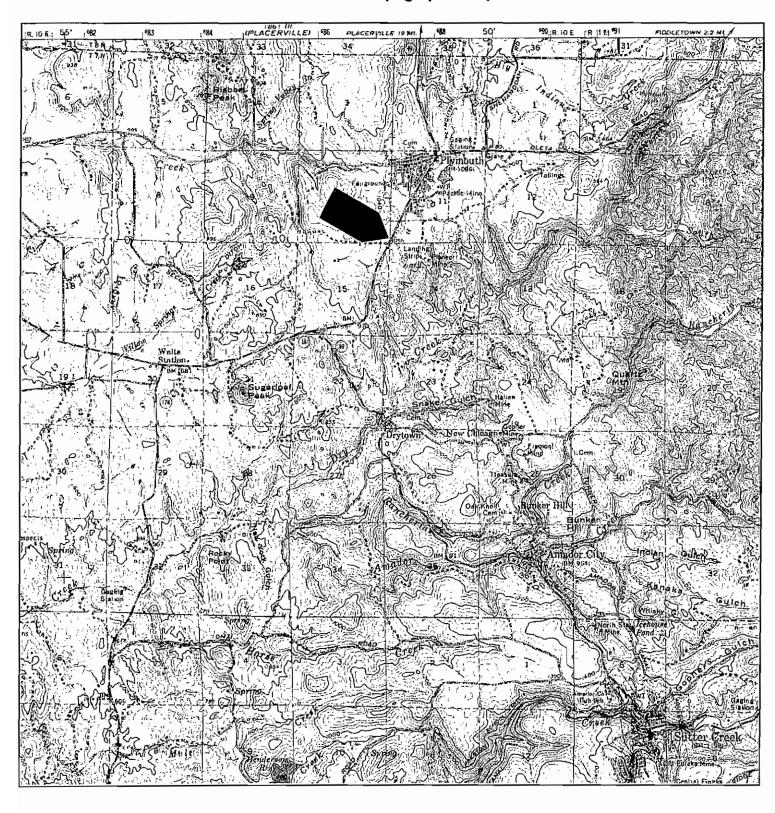
CLIENT:

Analytical Environmental Serv.

CONTACT:

Pete Connelly

2343350.4 INQUIRY#: RESEARCH DATE: 10/20/2008





TARGET QUAD

NAME: SUTTER CREEK

MAP YEAR: 1962

SERIES: 15 SCALE: 1:62500 SITE NAME: lone Casino Site

ADDRESS: Highway 49

Plymouth, CA 95669

LAT/LONG: 38.4646 / 120.852

CLIENT: Analytical Environmental Serv.

CONTACT: Pete Connelly INQUIRY#: 2343350.4 RESEARCH DATE: 10/20/2008

## APPENDIX C

Environmental Data Resources (EDR) Database Report

### Ione Casino Site

Highway 49 Plymouth, CA 95685

Inquiry Number: 2343350.2s

October 20, 2008

# Fig. Edg. Rachus Wardward Ragional William Carles (C



440 Wheelers Farms Road Milford, CT 06461 Toll Free: 800.352,0050 www.edmet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

#### TARGET PROPERTY INFORMATION

#### **ADDRESS**

HIGHWAY 49 PLYMOUTH, CA 95685

#### COORDINATES

Latitude (North): 38.464630 - 38° 27' 52.7" Longitude (West): 120.851750 - 120' 51' 6.3"

Universal Tranverse Mercator: Zone 10 UTM X (Meters): 687429.2 UTM Y (Meters): 4259348.0

Elevation: 1087 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 38120-D7 AMADOR CITY, CA Most Recent Revision: 1962

#### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

#### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

#### FEDERAL RECORDS

NPL..... National Priority List Proposed NPL.....Proposed National Priority List Sites Delisted NPL..... National Priority List Deletions NPL LIENS\_\_\_\_\_Federal Superfund Liens

CERCLIS...... Comprehensive Environmental Response, Compensation, and Liability Information System

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

LIENS 2..... CERCLA Lien Information CORRACTS...... Corrective Action Report

RCRA-TSDF RCRA - Transporters, Storage and Disposal RCRA-LQG RCRA - Large Quantity Generators

RCRA-SQG...... RCRA - Small Quantity Generators

RCRA-CESQG......RCRA - Conditionally Exempt Small Quantity Generator

US INST CONTROL..... Sites with Institutional Controls

ERNS Emergency Response Notification System
HMIRS Hazardous Materials Information Reporting System

DOT OPS...... Incident and Accident Data DOD. Department of Defense Sites FUDS. Formerly Used Defense Sites

LUCIS..... Land Use Control Information System CONSENT..... Superfund (CERCLA) Consent Decrees

UMTRA...... Uranium Mill Tailings Sites
DEBRIS REGION 9...... Torres Martinez Reservation Illegal Dump Site Locations

ODI\_\_\_\_\_Open Dump Inventory MINES..... Mines Master Index File

TRIS...... Toxic Chemical Release Inventory System

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 SCRD DRYCLEANERS..... State Coalition for Redediation of Drycleaners Listing

#### STATE AND LOCAL RECORDS

HIST Cal-Sites ..... Historical Calsites Database CA BOND EXP. PLAN..... Bond Expenditure Plan

SCH..... School Property Evaluation Program

Toxic Pits \_\_\_\_\_ Toxic Pits Cleanup Act Sites WMUDS/SWAT \_\_\_\_\_ Waste Management Unit Database

SWRCY......Recycler Database CA FID UST..... Facility Inventory Database SLIC..... Statewide SLIC Cases UST\_\_\_\_\_ Active UST Facilities

AST\_\_\_\_\_ Aboveground Petroleum Storage Tank Facilities

LIENS..... Environmental Liens Listing

SWEEPS UST..... SWEEPS UST Listing

CHMIRS..... California Hazardous Material Incident Report System

Notify 65 Proposition 65 Records DEED Deed Restriction Listing

VCP..... Voluntary Cleanup Program Properties

DRYCLEANERS..... Cleaner Facilities

WIP...... Well Investigation Program Case List

CDL..... Clandestine Drug Labs RESPONSE..... State Response Sites

..... Emissions Inventory Data HAULERS...... Registered Waste Tire Haulers Listing

#### TRIBAL RECORDS

INDIAN RESERV...... Indian Reservations INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land INDIAN UST..... Underground Storage Tanks on Indian Land

INDIAN VCP..... Voluntary Cleanup Priority Listing

#### **EDR PROPRIETARY RECORDS**

Manufactured Gas Plants..... EDR Proprietary Manufactured Gas Plants

#### 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.

#### STATE AND LOCAL RECORDS

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, and dated 09/08/2008 has revealed that there is 1 SWF/LF site within approximately 1.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PLYMOUTH CITY-COUNTY DUMP	T7NR10E SEC 3 LFT BEND	NW 1 - 2 (1.350 mi.)	C9	14

CA WDS: California Water Resources Control Board - Waste Discharge System.

A review of the CA WDS list, as provided by EDR, and dated 06/19/2007 has revealed that there is 1 CA WDS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FOOTHILL GARAGE & WRECKING	9408 PACIFIC ST	NNE 1/2 - 1 (0.788 mi.)	4	8

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 (Cal-Sites). This listing is no longer updated by the state agency.

A review of the Cortese list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 Cortese sites within approximately 1.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
E-Z SERVE	18725 HWY 49	NW 1/8 - 1/4 (0.244 mi.)	3	7
26TH AGRIC ASSOC	18500 SHERWOOD ST	N 1/2 - 1 (0.967 mi.)	<b>B</b> 6	11

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 07/03/2008 has revealed that there are 2 LUST sites within approximately 1.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
E-Z SERVE Facility Status: Remedial action (clea	18725 HWY 49 anup) Underway	NW 1/8 - 1/4 (0.244 mi.)	3	7
26TH AGRIC ASSOC Facility Status: Case Closed	18500 SHERWOOD ST	N 1/2 - 1 (0.967 mi.)	B6	11

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 are 3 HIST UST sites within approximately 1.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EXXON STATION #506	HIGHWAY 49 I MAIN ST.	0 - 1/8 (0.000 mi.)	A2	6
Lower Elevation	Address	Direction / Distance	Map ID	Page

HAZNET: 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 from non-California manifests & continuation sheets are not included at the present time. 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, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, and dated 12/31/2006 has revealed that there is 1 HAZNET site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SIERRA TRADING POST	HIGHWAY 49 / MAIN STR	0 - 1/8 (0.000 mi.)	A1	6

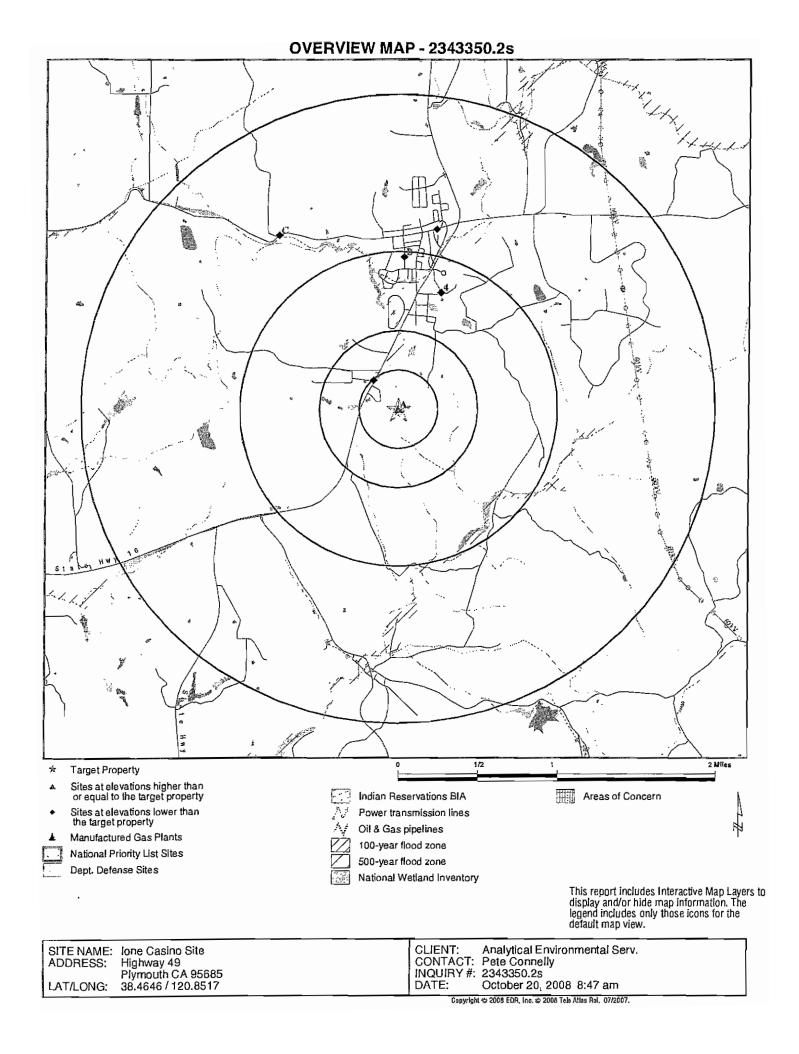
ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: 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.

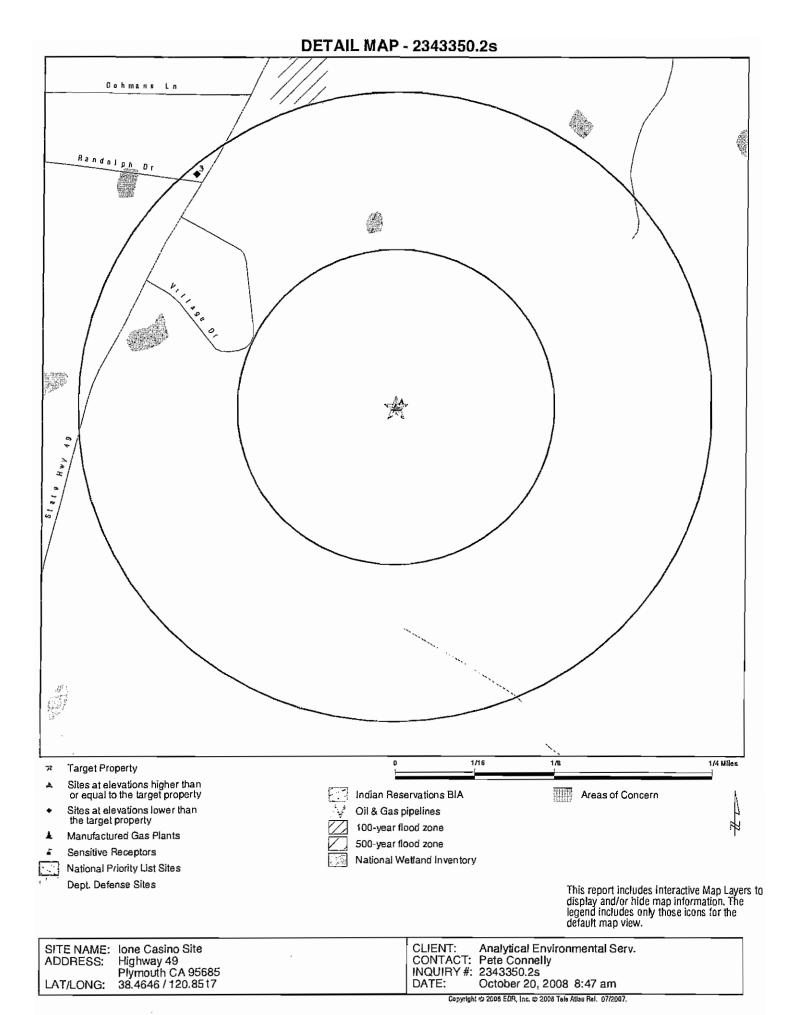
A review of the ENVIROSTOR list, as provided by EDR, and dated 08/25/2008 has revealed that there are 2 ENVIROSTOR sites within approximately 2 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FOOTHILL GARAGE & WRECKING Facility Status; Refer: Other Agency	9408 PACIFIC ST	NNE 1/2 - 1 (0.788 mi.)	4	8
PLYMOUTH DUMP Facility Status: Refer: RWQCB	OLD SACRAMENTO RD / O	NW 1 - 2 (1.338 mi.)	C8	13

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
PLYMOUTH HARDWARE AND FEED SIERRA TRADING POST #6	FTTS SWEEPS UST
FAR HORIZONS 49ER TRAILER VILL	SWEEPS UST
VILLAGE FOOD MART	SWEEPS UST
SIERRA TRADING POST #4	SWEEPS UST
ALLEN RAY JORDON	HAZNET, CDL
SUTTER HILL STATION	LUST, Cortese
CENTRAL EUREKA MINE	CERCLIS, FINDS
SIERRA TRADING POST-PLYMOUTH-#6	UST
SHENANDOAH VILLAGE MART	HAZNET, UST
SIERRA TRADING POST-SUTTER HILL-#4	UST
LINCOLN MINE CENTER	VCP, ENVIROSTOR
SUTTER HILL FFS	AST
ACM MACHINING	HAZNET
ACM MACHINING INC	HAZNET
GRANITE CONSTRUCTION	HAZNET
BRIFMAN RANCH	HAZNET
PACIFIC BELL	RCRA-SQG, FINDS, HAZNET
AMADOR COUNTY USD	HAZNET
VILLAGE MART INC DBA SHENANDOAH	HAŽNET
CDF SUTTER HILL FIRE STATION	HAZNET
DON WILKE'S SUBARUPLUS	HAZNET
PETROLEUM PUMP & METER	HAZNET
BOITANO SITE	FINDS
WILLOW SPRING SHALE MINE	CA WDS
CENTRAL EUREKA MINE	ICIS
TOMRA PACIFIC INC	SWRCY
E-Z SERVE	ENVIROSTOR
RINEHART IRON WORKS	ENVIROSTOR





## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted
FEDERAL RECORDS								
NPL Proposed NPL Delisted NPL NPL LIENS CERCLIS CERC-NFRAP LIENS 2 CORRACTS RCRA-TSDF RCRA-LQG RCRA-SQG RCRA-CESQG RCRA-CESQG RCRA-NonGen US ENG CONTROLS US INST CONTROL ERNS HMIRS DOT OPS US CDL US BROWNFIELDS DOD FUDS LUCIS CONSENT ROD UMTRA DEBRIS REGION 9 ODI MINES TRIS TSCA FTTS HIST FTTS SSTS ICIS PADS MLTS RADINFO		2.000 2.000 1.000 1.500 1.500 1.500 1.500 1.250 1.250 1.250 1.250 1.250 1.500 1.000 1.000 1.000 1.500 2.000 2.000 2.000 1.500 2.000 1.500	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	ZZZZZZZZZZZ XXXXXXXXXXXO00000XXXXXX000000ZZZZZXXXXXXXX	000000000000000000000000000000000000000
FINDS RAATS		1.000 1.000 1.500	0 0 0	0 0 0	0 0 0	0 0 0	NR NR 0	0 0 0
SCRD DRYCLEANERS  STATE AND LOCAL RECOR	DS	1.500	Ū	J	Ü	ŭ	·	-
HIST Cal-Sites CA BOND EXP. PLAN SCH Toxic Pits	_	2.000 2.000 1.250 2.000	0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0 0

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SWF/LF		1.500	0	0	0	0	1	1
WMUDS/SWAT		1.500	0	0	0	0	0	0
CA WDS		1.000	0	0	0	1	NR	1
Cortese		1.500	0	1	0	1	0	2
SWRCY		1.500	0	0	0	0	0	0
LUST		1.500	0	1	0	1	0	2 0
CA FID UST		1.250	0	0	0	0	0	0
SLIC		1.500	0	0	0	0 0	0	0
UST		1.250	0	0	0 0	1	1	3
HISTUST		1.250	1	0	0	Ó	Ó	Ö
AST		1.250	0	0	0	0	NR	0
LIENS		1.000	0 0	0	0	0	0	Ö
SWEEPS UST		1.250 1.000	Ô	Ö	Ŏ	ŏ	NŘ	ŏ
CHMIRS		2.000	0	Ŏ	ő	Ö	Ö	Ö
Notify 65		1.500	ő	Õ	ŏ	ŏ	ō	Ō
DEED VCP		1.500	ŏ	ŏ	ō	ō	Ŏ	0
DRYCLEANERS		1.250	ŏ	ō	0	0	0	0
WIP		1.250	ŏ	Ō	0	0	0	0
CDL		1.000	0	0	0	0	NR	0
RESPONSE		2.000	0	0	0	0	0	0
HAZNET		1.000	1	0	0	0	NR	1
EMI		1.000	0	0	0	0	NR	0
HAULERS		1.000	0	0	0	0	NR	0
ENVIROSTOR		2.000	0	0	0	1	1	2
TRIBAL RECORDS								
INDIAN RESERV		2.000	0	0	0	0	0	0
INDIAN ODI		1.500	0	0	0	0	0	0
INDIAN LUST		1.500	0	0	0	0	0	0
INDIAN UST		1.250	0	0	0	0	0	0
INDIAN VCP		1.500	0	0	0	0	0	0
EDR PROPRIETARY RECOR	DS							
Manufactured Gas Plants		2.000	0	0	0	0	0	0

#### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID MAP FINDINGS Direction Distance EDR ID Number Elevation Site Database(s) EPA ID Number Α1 SIERRA TRADING POST **HAZNET** S102792849 HIGHWAY 49 / MAIN STREET N/A < 1/8 PLYMOUTH, CA 95669 1 ft. Site 1 of 2 in cluster A HAZNET: Relative: CAC000724184 Gepaid: Higher Contact: JIM PRYOR Actual: Telephone: 0000000000 1089 ft. Facility Addr2: Not reported Mailing Name: Not reported Mailing Address: 100 FRENCH BAR ROAD Mailing City, St, Zip: JACKSON, CA 956420000 Gen County: TSD EPA ID: CAD083166728 TSD County: Stanislaus Waste Category: Unspecified oil-containing waste Disposal Method: Recycler Tons: 2.2184 Facility County: A2 **EXXON STATION #506** HIST UST U001613615 HIGHWAY 49 / MAIN ST. N/A < 1/8 PLYMOUTH, CA 95669 1 ft. Site 2 of 2 in cluster A HIST UST: Relative: Higher Region: STATE Facility ID: 00000013387 Actual: Facility Type: Gas Station 1089 ft. Other Type: Not reported Total Tanks: 0003 DICK BROOKS Contact Name: Telephone: 2092231400 E-Z SERVE OF CALIFORNIA, INC. Owner Name: Owner Address: P.O. BOX 3550 Owner City, St, Zip: ONTARIO, CA 91761 Tank Num: 001 Container Num: Year installed: Not reported 00010000 Tank Capacity: PRODUCT Tank Used for:

Type of Fuel: REGULAR Tank Construction: 1/4" inches

Leak Detection: Stock Inventor, None

002 Tank Num: Container Num:

Year Installed: Not reported Tank Capacity: 00010000 **PRODUCT** Tank Used for: UNLEADED Type of Fuel: Tank Construction: 1/4" inches

Leak Detection: Stock Inventor, None

Tank Num: 003 Container Num: 3

Map ID MAP FINDINGS Direction Distance EDR ID Number Elevation Site Database(s) EPA ID Number EXXON STATION #506 (Continued) U001613615 Not reported Year Installed: Tank Capacity: 00001000 PRODUCT Tank Used for: PREMIUM Type of Fuel: Tank Construction: 3/16" inches Leak Detection: Stock Inventor, None E-Z SERVE LUST S101293929 NW 18725 HWY 49 Cortese N/A 1/8-1/4 PLYMOUTH, CA 95669 0.244 mi. 1286 ft. LUST: Relative: Lower Region: STATE Status: Remedial action (cleanup) Underway Actual: Case Number: 030013 1058 ft. Local Case #: Not reported Chemical: Gasoline Qty Leaked: Not reported Abate Method: Not reported Release Date: 1988-06-21 00:00:00 Discover Date: Not reported Report Date: Not reported Enforcement Dt: 2001-05-03 00:00:00 Review Date: Not reported Enter Date: 1988-12-29 00:00:00 Not reported Stop Date: Confirm Leak: 1988-06-21 00:00:00 Case Type: Drinking Water Aquifer affected Cross Street: Not reported Enf Type: Not reported Funding: SEL How Discovered: Not reported How Stopped: Not reported Leak Cause: Not reported Leak Source: Not reported Global Id: T0600500011 Workplan: 2001-04-20 00:00:00 Prelim Assess: 2006-08-14 00:00:00 Pollution Char: 2008-01-23 00:00:00 Remed Plan: 2006-04-24 00:00:00 Remed Action: 2008-02-01 00:00:00 Monitoring: 2003-07-09 00:00:00 MTBE Date: Not reported GW Qualifier: Not reported Soil Qualifier: Not reported Max MTBE GW ppb: Not reported Max MTBE Soil ppb: Not reported County: 03 Org Name: Not reported Reg Board: 58 Contact Person: Not reported SIERRA TRADEING POST Responsible Party:

100 FRENCH BAR RD, #20J, JACKSON, CA 95642

Not reported

LUST

RP Address:

MTBE Class:

Oversight Prgm:

Interim:

Map ID Direction Distance Elevation

Site

#### MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

E-Z SERVE (Continued)

S101293929

MTBE Conc:

MTBE Fuel:

MTBE Tested:

MTBE Detected. Site tested for MTBE and MTBE detected **GTM** 

0

Staff: Staff Initials: Lead Agency:

Not reported Regional Board

Local Agency:

03000

Hydr Basin #: Beneficial:

UNNAMED BASIN MUN

Priority: Cleanup Fund Id:

Not reported Not reported

Work Suspended:

Operator:

Not reported Water System Name: Not reported

No

Well Name: Distance To Lust:

Not reported n

Summary:

Waste Discharge Global ID: Not reported Waste Disch Assigned Name: Not reported

LETTER SENT 09/22/98 BE OWNED BY EZ-SERVE.

HARKEN APPEARS TO

LUST REG 5:

Region:

5

Status:

Remedial action (cleanup) Underway 030013

Case Number:

Case Type: Drinking Water Aquifer affected

Substance: GASOLINE

Staff Initials: **GTM** Lead Agency: Regional Program: LUST MTBE Code: N/A

Cortese:

Region: Facility Addr2:

**CORTESE** 18725 HWY 49

FOOTHILL GARAGE & WRECKING

NNE 9408 PACIFIC ST 1/2-1

PLYMOUTH, CA 95669

0.788 mi. 4161 ft.

Actual:

CA WDS: Relative:

Facility ID: Lower

5S 031003887 Other - Does not fall into the category of Municipal/Domestic,

Facility Type:

Industrial, Agricultural or Solid Waste (Class I, II or III)

1063 ft. Facility Status:

Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

NPDES Number. CAS000001 The 1st 2 characters designate the state. The remaining 7

are assigned by the Regional Board Subregion: n

Facility Telephone:

Facility Contact: Agency Name:

Not reported Not reported CROCKER EARL

Not reported

Agency Address: Agency City,St,Zip:

٥

Agency Contact:

Not reported

CA WDS \$102008326

N/A

ENVIROSTOR

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

S102008326

#### FOOTHILL GARAGE & WRECKING (Continued)

Agency Telephone:

Not reported

Agency Type:

Private

SIC Code: SIC Code 2:

Not reported

Primary Waste: Primary Waste Type: Secondary Waste:

Not reported Not reported Not reported Secondary Waste Type: Not reported

Design Flow: Baseline Flow: 0

Reclamation:

Not reported

POTW:

Not reported

Treat To Water:

Minor Threat to Water Quality, A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to

represent no threat to water quality.

Complexity:

Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as

dairy waste ponds.

ENVIROSTOR:

Acres:

Site Type: Site Type Detailed: Historical \* Historical Not reported

NPL: NO

Regulatory Agencies: NONE SPECIFIED NONE SPECIFIED Lead Agency: Program Manager: Not reported

Supervisor: Referred - Not Assigned

Division Branch: Sacramento Facility ID: 03500003 Site Code: Not reported Assembly: Not reported Senate: Not reported

Special Program: \* Rural County Survey Program

Status: Refer: Other Agency 1995-09-12 00:00:00 Status Date:

Restricted Use:

Funding: Not reported Latitude: 38.4750996159352 Longitude: -120.847667245484 Alias Name: 03500003

Alias Type: Envirostor ID Number

APN: NONE SPECIFIED

APN Description: Not reported

Comments: FACILITY IDENTIFIED 87 PHONE BOOK, SITE SCREENING DONE, PRELIMINARY

ASSESSMENT DONE. SITE INSPECTION LOW PRIORITY RECOMMENDED BASED ON

PAST WASTE HANDLING PRACTICES.

Completed Info:

PROJECT WIDE Completed Area Name:

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

S102008326

#### FOOTHILL GARAGE & WRECKING (Continued)

Completed Sub Area Name: Completed Document Type:

Not reported Discovery

Completed Date:

1987-10-01 00:00:00

Completed Area Name: Completed Sub Area Name:

PROJECT WIDE Not reported Site Screening

Completed Document Type: Completed Date:

1987-11-09 00:00:00

Completed Area Name: Completed Sub Area Name:

PROJECT WIDE Not reported

Completed Document Type:

Preliminary Assessment Report

Completed Date:

1987-11-09 00:00:00

Confirmed:

NONE SPECIFIED Confirmed Description: Not reported Future Area Name: Not reported Future Sub Area Name: Not reported Future Document Type: Not reported

Future Due Date: Not reported Media Affected: 10198, 10199, 20011 Media Affected Desc: Not reported Media Affected Desc: Not reported Media Affected Desc: Not reported

Management:

NONE SPECIFIED Management Required: Management Required Desc: Not reported Potential: NONE SPECIFIED Potenital Description: Not reported Schedule Area Name: Not reported Schedule Sub Area Name: Not reported

Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported NONE SPECIFIED PastUse:

**B**5 CITY OF PLYMOUTH North

18500 SHERWOOD STREET PLYMOUTH, CA 95669

0.967 mi.

1/2-1

5105 ft. Site 1 of 2 in cluster B

Relative: Lower

HIST UST:

Facility ID:

Region: STATE 00000058099

Actual: 1042 ft.

Other Facility Type: Other Type: CITY YARD Total Tanks: 0002 Contact Name: JIM HELTON Telephone: 2092456941

Owner Name: 26TH DISTRICT AGRICULTURAL ASS

Owner Address: P.O. BOX 9 Owner City, St, Zip:

PLYMOUTH, CA 95669

Tank Num: Container Num:

001

Year Installed: Not reported HIST UST

U001613614

N/A

Map ID MAP FINDINGS Direction Distance EDR ID Number Elevation Site EPA ID Number Database(s) CITY OF PLYMOUTH (Continued) U001613614 Tank Capacity: 00000000 PRODUCT Tank Used for: Type of Fuel: UNLEADED Tank Construction: Not reported Leak Detection: None 002 Tank Num: Container Num: Year Installed: Not reported Tank Capacity: 00000000 Tank Used for: **PRODUCT** REGULAR Type of Fuel: Tank Construction: Not reported Leak Detection: None **B6** 26TH AGRIC ASSOC LUST S102423411 North 18500 SHERWOOD ST Cortese N/A 1/2-1 PLYMOUTH, CA 95669 0.967 mi. 5105 ft. Site 2 of 2 in cluster B LUST: Relative: Region: STATE Lower Status: Case Closed Actual: 030007 Case Number: 1042 ft. Local Case #: Not reported Chemical: Gasoline Qty Leaked: Not reported Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site, Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming) Release Date: 1987-10-22 00:00:00 Discover Date: 1987-09-18 00:00:00 Report Date: 1992-08-25 00:00:00 Enforcement Dt: 1965-01-01 00:00:00 1992-08-25 00:00:00 Review Date: Enter Date: 1987-12-02 00:00:00 Stop Date: Not reported Confirm Leak: Not reported Case Type: Soil only Cross Street: Not reported Enf Type: Not reported Funding: Undefined How Discovered: Tank Closure How Stopped: Not reported Leak Cause: Corrosion Leak Source: Tank T0600500006 Global Id: Workplan: Not reported Prelim Assess: 1987-10-22 00:00:00 Pollution Char: Not reported Remed Plan: Not reported Remed Action: Not reported Monitoring: Not reported MTBE Date: Not reported GW Qualifier: Not reported

Soil Qualifier:

Max MTBE GW ppb: Not reported

Not reported

Map ID Direction Distance Elevation MAP FINDINGS

Site

Database(s)

EDR ID Number EPA ID Number

\$102423411

26TH AGRIC ASSOC (Continued)

Max MTBE Soil ppb: Not reported

County:

Org Name: Not reported

Reg Board: 5\$

Contact Person: Not reported

Responsible Party: CA DEPT OF FOOD & AGRICULTURE

RP Address: 18500 SHERWOOD STREET, PLYMOUTH, CA 95669

Interim: Not reported

Oversight Prgm: LUST MTBE Class: MTBE Conc: 0 MTBE Fuel:

MTBE Tested:

Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

Staff: Staff Initials: WIL

Lead Agency: Regional Board

03000 Local Agency:

Hydr Basin #: SAN JOAQUIN VALLEY (

Beneficial: Not reported

Priority: 2

Cleanup Fund Id: Not reported

Work Suspended:

No

Operator: JIM HELTON Water System Name: Not reported Well Name: Not reported

Distance To Lust:

Waste Discharge Global ID: W0600500592 Waste Disch Assigned Name: 0300592-001

BTEX & TPH-D FROM 3 MW'S ND FOR REQUIRED PERIOD. Summary:

LUST REG 5:

Region:

Case Closed Status: Case Number: 030007 Case Type: Soil only Substance: GASOLINE Staff Initials: **GTM** Regional

Lead Agency: Program: LUST MTBE Code: N/A

Cortese:

CORTESE Region:

Facility Addr2: 18500 SHERWOOD ST

WALTER ABERCROMBIE

9414 MAIN ST

PLYMOUTH, CA 95669

1.168 mi. 6166 ft.

7 NNE

> 1

Relative:

HIST UST:

Region: Lower

STATE Facility ID: 00000053690

Actual: 1074 ft. Facility Type: Other Type:

Other BUSINESS

Total Tanks:

0003

U001613626

N/A

HIST UST

MAP FINDINGS Map ID Direction Distance

Database(s)

EDR ID Number EPA ID Number

U001613626

WALTER ABERCROMBIE (Continued)

WALTER ABERCROMBIE Contact Name:

Telephone:

2092456674

Stock Inventor

WALTER ABERCROMBIE Owner Name:

Owner Address:

9414 MAIN ST

Owner City,St,Zip:

Leak Detection:

PLYMOUTH, CA 95669

001 Tank Num: Container Num: 1 Year Installed: 1974 Tank Capacity: 00002000 Tank Used for: PRODUCT Type of Fuel: UNLEADED Tank Construction: 1/4 inches

Tank Num: 002 Container Num: 2 Year Installed: 1974 00002000 Tank Capacity: Tank Used for: PRODUCT Type of Fuel: UNLEADED 1/4 inches Tank Construction: Leak Detection: Stock Inventor

Tank Num: 003 Container Num: 3 1974 Year Installed: 00004000 Tank Capacity: PRODUCT Tank Used for: Type of Fuel: REGULAR Tank Construction: 1/4 inches Leak Detection: Stock Inventor

C8 PLYMOUTH DUMP

NW OLD SACRAMENTO RD / OLD OAKER RD

PLYMOUTH, CA 95669 > 1

1.338 mi.

Elevation

Site

7066 ft. Site 1 of 2 in cluster C

Relative:

ENVIROSTOR: Site Type:

Lower

Historical Site Type Detailed:

Actual: Acres: \* Historical Not reported

NO

964 ft.

NPL: Regulatory Agencies:

NONE SPECIFIED NONE SPECIFIED

Lead Agency: Program Manager:

Not reported

Supervisor:

Referred - Not Assigned

Division Branch: Sacramento Facility ID: 03490003 Site Code: Not reported 10

Assembly: Senate:

01 \* Rural County Survey Program

Special Program: Status:

Refer: RWQCB

Status Date: Restricted Use: Funding:

1988-02-05 00:00:00 NO

Not reported

ENVIROSTOR

S102008318

N/A

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

S102008318

PLYMOUTH DUMP (Continued)

Latitude:

38.480277777778

Longitude: Alias Name: -120.866388888889 03490003

Alias Type:

Envirostor ID Number

APN:

NONE SPECIFIED

APN Description:

Not reported

Comments:

Facility Identified: State Water Resources Control Board (SWRCB)

Calderon List - Rank 6. Site Screening Done: Pending review/action by

SWRCB.

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Discovery

Completed Date:

1988-02-05 00:00:00

Completed Area Name: Completed Sub Area Name: PROJECT WIDE

Completed Document Type: Completed Date:

Site Screening 1988-02-05 00:00:00

Not reported

NONE SPECIFIED Confirmed:

Confirmed Description: Not reported Future Area Name: Future Sub Area Name: Future Document Type: Future Due Date:

Not reported Not reported Not reported Not reported NONE SPECIFIED

Media Affected: Media Affected Desc:

Not reported

Management:

Management Required: NONE SPECIFIED Management Required Desc: Not reported

NONE SPECIFIED

Potential: Potenital Description: Schedule Area Name: Schedule Sub Area Name: Schedule Document Type:

Not reported Not reported Not reported Not reported Not reported

Not reported

Schedule Due Date: Schedule Revised Date: PastUse:

NONE SPECIFIED

**C**9

PLYMOUTH CITY-COUNTY DUMP

NW T7NR10E SEC 3 LFT BEND OF OLD OAKER ROAD > 1 PLYMOUTH, CA

1.350 mi.

7127 ft. Site 2 of 2 in cluster C

Relative: Lower

SWF/LF: Region:

STATE

Actual: 965 ft.

Facility ID: 03-CR-0007 Lat/Long: 38.48666999999997 / -120.86667

Owner Name: Owner Telephone: Gansberg, Fred & Chris

Owner Address: Owner Address2: Owner City, St, Zip: Not reported Not reported 250 Highway 88 NV 89410

Operator:

City Of Paso Robles

S102359725

N/A

SWF/LF

Map ID Direction			MAP FIND	INGS		
Dislance						EDR ID Number
Elevalion	Site				Database(s)	EPA ID Number
				_ ,	 	

## PLYMOUTH CITY-COUNTY DUMP (Continued)

S102359725

Operator Phone: 8052373861
Operator Address: Not reported
Operator Address2: 1000 Spring Street
Operator City, St, Zip: Paso Robles, CA 93446

Operator's Status: Closed
Permit Date: Not reported
Permit Status: Not reported

Permitted Acreage: 0 Activity: S

Solid Waste Disposal Site

Regulation Status: Unpermitted Not reported Landuse Name: GIS Source: Мар Category: Disposal Unit Number. 01 Inspection Frequency: None Accepted Waste: Not reported 12/31/1974 Closure Date: Closure Type: Estimated

Disposal Acreage: 0 Swisnumber: 03-CR-0007

Issue & Observations: Paso Robles, CA 93446

Program Type: Not reported

Permitted Throughput with Units:
Actual Throughput with Units:
Permitted Capacity with Units:
Remaining Capacity:
Remaining Capacity with Units:
Not reported
Not reported
Not reported
Not reported

# ORPHAN SUMMARY

Zip Database(s)	ENTO RD 95669 CA WDS			_	_							E9900	BOOCE	BODGE	69966		95669 HAZNET, UST	95669 HAZNET	95669 SWEEPS UST		TSI 38986								20000	
Site Address	HWY 16 .5 MILE E SACRAMENTO RD	240 HWY 16 #18	240 HWY 16	HWY 16 / JUNCTION 49	HIGHWAY 49	18170 HWY 49	HIGHWAY 49 / MAIN	18265 HIGHWAY 49	22600 HWY 49	18725 HIGHWAY 49	17705 HIGHWAY 49	FIDDLETOWN RD 5 MI FAST OF SH	POPI AR STREET	SHENANDOAH DO NEAD 40400 SUITAN	40604 PHILIPPIN DE T	10001 SHENWOOD ST	1/699 VILLAGE DR	17699 VILLAGE DR	17699 VILLAGE DRIVE	RTE 1 BOX 15-E	500 HIGHWAY 49	11600 HIGHWAY 49	500 HIGHWAY 49	502 HWY 49 STE C	11600 HWY 49	HWY 49 AT BRYSON DR.	HWY 49 AT BRYSON DR.	MILL STREET	STATE ROUTE 49 NEXT TO SUTTER	
Site Name	WILLOW SPRING SHALE MINE	ACM MACHINING	ACM MACHINING INC	GRANITE CONSTRUCTION	SIERRA TRADING POST-PLYMOUTH#6	TOMRA PACIFIC INC	SIERRA TRADING POST #6	FAR HORIZONS 49ER TRAILER VILL	ALLEN RAY JORDON	E-Z SERVE	PLYMOUTH HARDWARE AND FEED	BRIFMAN RANCH	PACIFIC BELL	RINEHART IRON WORKS	AMADOR COUNTY USD	SHENANDOAL VIII AGE MADE	CHERNIA VICE CAN THE VICE CONTRACTOR OF THE V	VILLAGE MARTINC DBA SHENANDOAH	VILLAGE FOOD MART	SUTTER HILL FFS	SIERRA TRADING POST-SUTTER HILL-#4	CDF SUTTER HILL FIRE STATION	SIERRA TRADING POST #4	DON WILKE'S SUBARUPLUS	SUTTER HILL STATION	CENTRAL EUREKA MINE	CENTRAL EUREKA MINE	BOITANO SITE	LINCOLN MINE CENTER	
EDR ID	S106447093 \	\$105723029	S104578625 /	S104571297 (	U003941727	S107138066 -	\$106932209	\$106926049	\$103643471	\$102008331	1010782077	S103953293	1000250932	\$102008313												1011534140	1000926207	1006834340	S108484721	
City	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	PLYMOUTH	РГУМОИТН	PI VMOITH	PLANCO THE	PL INDOM	PLYMOUTH	SUTTER CREEK	SUTTER CREEK	SUTTER CREEK	SUTTER CREEK	SUTTER CREEK	SUTTER CREEK	SUTTER CREEK	SUTTER CREEK	SUTTER CREEK	SUTTER CREEK	- 117 012410

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.

#### FEDERAL RECORDS

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: 08/13/2008 Date Data Arrived at EDR: 08/27/2008

Date Made Active in Reports: 09/23/2008

Number of Days to Update: 27

Source: EPA Telephone: N/A

Last EDR Contact: 09/29/2008

Next Scheduled EDR Contact: 10/27/2008 Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1

EPA Region 6

Telephone 617-918-1143

EPA Region 7

EPA Region 3 Telephone 215-814-5418

Telephone: 913-551-7247

Telephone: 214-655-6659

EPA Region 4

EPA Region 8

Telephone 404-562-8033

Telephone: 303-312-6774

EPA Region 5

EPA Region 9

Telephone 312-886-6686

Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/30/2008 Date Data Arrived at EDR: 05/06/2008

Date Made Active in Reports: 06/09/2008

Number of Days to Update: 34

Source: EPA Telephone: N/A

Last EDR Contact: 08/27/2008

Next Scheduled EDR Contact: 10/27/2008 Data Release Frequency: Quarterly

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: 08/14/2008 Date Data Arrived at EDR: 08/27/2008 Date Made Active in Reports: 09/23/2008

Number of Days to Update: 27

Source: EPA Telephone: N/A

Last EDR Contact: 09/29/2008

Next Scheduled EDR Contact: 10/27/2008 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 Cornact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: No Update Planned

#### 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: 07/09/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 34

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 10/16/2008

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: Quarterly

#### 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: 12/03/2007 Date Data Arrived at EDR: 12/06/2007 Date Made Active in Reports: 02/20/2008

Number of Days to Update: 76

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 09/15/2008

Next Scheduled EDR Contact: 12/15/2008 Data Release Frequency: Quarterly

## 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: 08/19/2008 Date Data Arrived at EDR: 08/29/2008 Date Made Active in Reports: 09/09/2008

Number of Days to Update: 11

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Varies

## CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/11/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 27

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 09/02/2008

Next Scheduled EDR Contact: 12/01/2008 Data Release Frequency: Quarterly

## RCRA-TSDF: RCRA - Transporters, Storage and Disposal

RCRAInfo is EPA's cornprehensive 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: 09/10/2008 Date Data Arrived at EDR: 09/23/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 23

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 09/23/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Quarterly

### 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: 09/10/2008 Date Data Arrived at EDR: 09/23/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 23

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 09/23/2008

Next Scheduled EDR Contact: 11/17/2008 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: 09/10/2008 Date Data Arrived at EDR: 09/23/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 23

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 09/23/2008

Next Scheduled EDR Contact: 11/17/2008 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: 09/10/2008 Date Data Arrived at EDR: 09/23/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 23

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 09/23/2008

Next Scheduled EDR Contact: 11/17/2008

Data Release Frequency: Varies

## RCRA-NonGen: 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: 09/10/2008 Date Data Arrived at EDR: 09/23/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 23

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 09/23/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Varies

#### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/23/2008 Date Data Arrived at EDR: 07/29/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 703-603-0695

Last EDR Contact: 09/29/2008

Next Scheduled EDR Contact: 12/29/2008

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, properly 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: 07/23/2008 Date Data Arrived at EDR: 07/29/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 06/30/2008

Next Scheduled EDR Contact: 09/29/2008

Data Release Frequency: Varies

#### 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: 12/31/2007 Date Data Arrived at EDR: 01/23/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 54

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 07/25/2008

Next Scheduled EDR Contact: t0/20/2008 Data Release Frequency: Annually

## HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 04/30/2008 Date Data Arrived at EDR: 07/15/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 4t

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 10/16/2008

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: Annually

## DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 05/14/2008 Date Data Arrived at EDR: 05/28/2008 Date Made Active in Reports: 08/08/2008

Number of Days to Update: 72

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 08/29/2008

Next Scheduled EDR Contact: 11/24/2008

Data Release Frequency: Varies

## CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 12/28/2007

Number of Days to Update: 25

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 09/23/2008

Next Scheduled EDR Contact: 12/22/2008 Data Release Frequency: Quarterly

#### US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots-minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA, EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 08/25/2008 Date Made Active in Reports: 09/09/2008

Number of Days to Update: 15

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 10/16/2008

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: Semi-Annually

#### 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: 01/1 t/2007

Number of Days to Update: 62

Source: USGS

Telephone: 703-692-880t Last EDR Contact: 08/08/2008

Next Scheduled EDR Contact: 11/03/2008 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: 12/31/2007 Date Data Arrived at EDR: 09/05/2008 Date Made Active in Reports: 09/23/200B

Number of Days to Update: 18

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 09/05/2008

Next Scheduled EDR Contact: 12/29/2008 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: 09/09/2008

Next Scheduled EDR Contact: 12/08/2008 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: 04/25/2008 Date Data Arrived at EDR: 06/12/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 74

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 07/21/2008

Next Scheduled EDR Contact: 10/20/2008 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: 06/18/2008 Date Data Arrived at EDR: 07/11/2008

Date Made Active in Reports: 08/25/2008

Number of Days to Update: 45

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 09/29/2008

Next Scheduled EDR Contact: 12/29/2008 Data Release Frequency: Annually

UMTRA: Uranjum 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: 07/13/2007 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 09/15/2008

Next Scheduled EDR Contact: 12/15/2008

Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 03/25/2008 Date Data Arrived at EDR: 04/17/2008 Date Made Active in Reports: 05/15/2008

Number of Days to Update: 28

Source: EPA, Region 9 Telephone: 415-972-3336 Last EDR Contact: 09/22/2008

Next Scheduled EDR Contact: 12/22/2008

Data Release Frequency: Varies

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: 08/07/2008 Date Data Arrived at EDR: 09/23/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 23

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 09/23/2008

Next Scheduled EDR Contact: 12/22/2008 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: 12/31/2006 Date Data Arrived at EDR: 02/29/2008 Dale Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: EPA

Telephone: 202-566-0250 Last EDR Contact; 09/19/2008

Next Scheduled EDR Contact: 12/15/2008 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

Date of Government Version: 12/31/2002 Date Data Arrived at EDR: 04/14/2006 Date Made Active in Reports: 05/30/2006

Number of Days to Update: 46

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 10/14/2008

Next Scheduled EDR Contact: 01/12/2009 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: 07/12/2008 Date Data Arrived at EDR: 07/18/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 38

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 09/15/2008

Next Scheduled EDR Contact: 12/15/2008 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Comrol Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 07/12/2008 Date Data Arrived at EDR: 07/18/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 38

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 09/15/2008

Next Scheduled EDR Contact: 12/15/2008 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: 12/31/2006 Date Data Arrived at EDR: 03/14/2008 Date Made Active in Reports; 04/18/2008

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/14/2008

Next Scheduled EDR Contact: 01/12/2009 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.

program.

Date of Government Version: 07/31/2008 Date Data Arrived at EDR: 08/13/2008 Date Made Active in Reports: 09/09/2008

Number of Days to Update: 27

Source: Environmental Protection Agency

Telephone: 202-564-5088

Last EDR Contact: 10/14/2008

Next Scheduled EDR Contact: 01/12/2009 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: 12/04/2007 Date Data Arrived at EDR: 02/07/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 39

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 09/18/2008

Next Scheduled EDR Contact: 11/03/2008 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: 07/08/2008 Date Data Arrived at EDR: 08/05/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 20

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 09/29/2008

Next Scheduled EDR Contact: 12/29/2008

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: 07/29/2008 Date Data Arrived at EDR: 07/31/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 25

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 07/31/2008

Next Scheduled EDR Contact: 10/27/2008 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: 07/01/2008 Date Data Arrived at EDR: 07/09/2008 Date Made Active in Reports: 08/25/2008

Number of Days to Update: 47

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 09/29/2008

Next Scheduled EDR Contact: 12/29/2008 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

Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

#### 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: 12/31/2005 Date Data Arrived at EDR: 03/06/2007 Date Made Active in Reports: 04/13/2007

Number of Days to Update: 38

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 09/12/2008

Next Scheduled EDR Contact: 12/08/2008 Data Release Frequency: Biennially

## SCRD DRYCLEANERS: State Coalition for Redediation 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: 09/08/2008 Date Data Arrived at EDR: 09/10/2008 Date Made Active in Reports: 09/23/2008

Number of Days to Update: 13

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 08/25/2008

Next Scheduled EDR Contact: 11/10/2008

Data Release Frequency: Varies

#### STATE AND LOCAL RECORDS

#### 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: 08/25/2008

Next Scheduled EDR Contact: 11/24/2008 Data Release Frequency: No Update Planned

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

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: 08/25/2008
Date Data Arrived at EDR: 08/27/2008
Date Made Active in Reports: 09/03/2008

Number of Days to Update: 7

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/27/2008

Next Scheduled EDR Contact: 11/24/2008 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: 07/28/2008

Next Scheduled EDR Contact: 10/27/2008 Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/08/2008 Date Data Arrived at EDR: 09/09/2008 Date Made Active in Reports: 09/18/2008

Number of Days to Update: 9

Source: Integrated Waste Management Board

Telephone: 916-341-6320 Last EDR Contact: 09/09/2008

Next Scheduled EDR Contact: 12/08/2008 Data Release Frequency: Quarterly

CA 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: 09/29/2008

Next Scheduled EDR Contact: 12/15/2008 Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 10/14/2008

Next Scheduled EDR Contact: 12/01/2008 Data Release Frequency: Quarterly

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). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 05/29/2001 Date Made Active in Reports: 07/26/2001

Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 07/21/2008

Next Scheduled EDR Contact: 10/20/2008 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 07/09/2008 Date Data Arrived at EDR: 07/10/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 21

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 10/08/2008

Next Scheduled EDR Contact: 01/05/2009 Data Release Frequency: Quarterly

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

Date of Government Version: 07/03/2008 Date Data Arrived at EDR: 07/11/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 20

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 10/07/2008

Next Scheduled EDR Contact: 01/05/2009 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: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 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: 10/06/2008

Next Scheduled EDR Contact: 01/05/2009 Data Release Frequency: Quarterly

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: 08/11/2008

Next Scheduled EDR Contact: 11/10/2008 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: 09/23/2008

Next Scheduled EDR Contact; 12/22/2008 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, Kem, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yoto, 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: 07/22/2008

Next Scheduled EDR Contact: 10/20/2008 Data Release Frequency: Quarterly

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)

Telephone: 530-542-5572 Last EDR Contact: 09/02/2008

Next Scheduled EDR Contact: 12/01/2008 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: 09/29/2008

Next Scheduled EDR Confact: 12/29/2008 Data Release Frequency: No Update Planned

#### LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Telephone: 760-776-8943 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: No Update Planned

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001 Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-637-5595 Last EDR Contact: 10/14/2008

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005 Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8) Telephone: 909-782-4496

Last EDR Contact: 08/04/2008

Next Scheduled EDR Contact: 11/03/2008

Data Release Frequency: Varies

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

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: 07/03/2008 Date Data Arrived at EDR: 07/11/2008 Date Made Active in Reports: 07/31/2008 Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 10/07/2008

Number of Days to Update: 20

Next Scheduled EDR Contact: 01/05/2009

Dala 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: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 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: 10/06/2008

Next Scheduled EDR Contact: 01/05/2009 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: 08/11/2008

Next Scheduled EDR Contact: 11/10/2008 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: 07/21/2008

Next Scheduled EDR Contact: 10/20/2008

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: 09/29/2008

Next Scheduled EDR Contact: 12/29/2008 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: 09/29/2008

Next Scheduled EDR Contact: 12/29/2008 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: 09/02/2008

Next Scheduled EDR Contact: 12/01/2008
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.

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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 Updale: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 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: 09/29/2008

Next Scheduled EDR Contact: 12/29/2008 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: 08/25/2008

Next Scheduled EDR Contact: 11/24/2008 Data Release Frequency: Annually

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 07/10/2008 Date Data Arrived at EDR: 07/10/2008 Date Made Active in Reports: 07/25/2008

Number of Days to Update: 15

Source: SWRCB

Telephone: 916-480-1028 Last EDR Contact: 10/07/2008

Next Scheduled EDR Contact: 01/05/2009 Data Release Frequency: Semi-Annually

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 10/06/2008 Date Data Arrived at EDR: 10/06/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 10

Source: Department of Public Health

Telephone: 707-463-4466 Last EDR Contact: 10/06/2008

Next Scheduled EDR Contact: 12/22/2008

Data Release Frequency: Varies

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

AST: Aboveground Petroleum Storage Tank Facilities

Registered Aboveground Storage Tanks.

Date of Government Version: 11/01/2007 Date Data Arrived at EDR: 11/27/2007 Date Made Active in Reports: 02/14/2008

Number of Days to Update: 79

Source: State Water Resources Control Board

Telephone: 916-341-5712 Last EDR Contact: 07/28/2008

Next Scheduled EDR Contact: 10/27/2008 Data Release Frequency: Quarterly

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/04/2008 Date Data Arrived at EDR: 08/08/2008 Date Made Active in Reports: 09/03/2008

Number of Days to Update: 26

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/04/2008

Next Scheduled EDR Contact: 11/03/2008

Data Release Frequency: Varies

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.

TC2343350.2s Page GR-15

Telephone: N/A

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

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Source: State Water Resources Control Board

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System, CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 05/09/2008 Date Made Active in Reports: 06/20/2008

Telephone: 916-845-8400 Last EDR Contact: 08/18/2008

Number of Days to Update: 42

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Varies

Source: Office of Emergency Services

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993 Date Data Arrived at EDR: 11/01/1993 Date Made Active in Reports: 11/19/1993

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 10/14/2008

Number of Days to Update: 18

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: No Update Planned

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: 09/30/2008 Date Data Arrived at EDR: 09/30/2008 Date Made Active in Reports: 10/13/2008 Number of Days to Update: 13

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 09/30/2008

Next Scheduled EDR Contact: 12/29/2008 Data Release Frequency: Semi-Annually

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: 08/25/2008 Date Data Arrived at EDR: 08/27/2008 Date Made Active in Reports: 09/03/2008

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/27/2008

Next Scheduled EDR Contact: 11/24/2008 Data Release Frequency: Quarterly

Number of Days to Update: 7

## 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: 09/23/2008 Date Data Arrived at EDR: 09/24/2008 Date Made Active in Reports: 09/29/2008 Number of Days to Update: 5

Telephone: 916-327-4498 Last EDR Contact: 09/23/2008 Next Scheduled EDR Contact: 12/29/2008 Data Release Frequency: Annually

Source: Department of Toxic Substance Control

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 02/26/2008 Date Data Arrived at EDR: 04/23/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 07/25/2008

Next Scheduled EDR Contact: 10/20/2008

Data Release Frequency: Varies

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: 09/30/2008 Date Data Arrived at EDR: 10/06/2008 Date Made Active in Reports: 10/13/2008

Number of Days to Update: 7

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 09/29/2008

Next Scheduled EDR Contact: 10/20/2008

Data Release Frequency: Varies

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: 08/25/2008 Date Data Arrived at EDR: 08/27/2008 Date Made Active in Reports: 09/03/2008

Number of Days to Update: 7

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/27/2008

Next Scheduled EDR Contact: 11/24/2008 Data Release Frequency: Quarterly

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: 12/31/2006 Date Data Arrived at EDR: 10/04/2007 Date Made Active in Reports: 11/07/2007

Number of Days to Update: 34

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 08/08/2008

Next Scheduled EDR Contact; 11/03/2008 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: 12/31/2005 Date Data Arrived at EDR: 04/17/2007 Date Made Active in Reports: 05/10/2007

Number of Days to Update: 23

Source: California Air Resources Board Telephone: 916-322-2990

Last EDR Contact: 10/16/2008

Next Scheduled EDR Contact: 01/12/2009

Data Release Frequency: Varies

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

Date of Government Version: 09/22/2008 Date Data Arrived at EDR: 09/22/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 7

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 09/08/2008

Next Scheduled EDR Contact: 12/08/2008

Data Release Frequency: Varies

ENVIROSTOR: EnviroStor Dalabase

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: 08/25/2008 Date Data Arrived at EDR: 08/27/2008 Date Made Active in Reports: 09/03/2008

Number of Days to Update: 7

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/27/2008

Next Scheduled EDR Contact: 11/24/2008 Data Release Frequency: Quarterly

TRIBAL RECORDS

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: 08/08/2008

Next Scheduled EDR Contact: 11/03/2008 Data Release Frequency: Semi-Annually

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: 08/25/2008

Next Scheduled EDR Contact: 11/24/2008 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: 08/21/2008 Date Data Arrived at EDR: 09/04/2008 Date Made Active in Reports: 09/09/2008

Number of Days to Update: 5

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/17/2008 Date Data Arrived at EDR: 03/27/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 40

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008

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: 03/17/2008 Date Data Arrived at EDR: 03/27/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 40

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.

Dale of Government Version: 03/12/2008 Date Data Arrived at EDR: 03/14/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 6

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 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: 10/10/2008 Date Data Arrived at EDR: 10/10/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 6

Source: Environmental Protection Agency Telephone: 415-972-3372 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Ataska, Idaho, Oregon and Washington.

Date of Government Version: 08/22/2008 Date Data Arrived at EDR: 08/22/2008 Date Made Active in Reports: 09/09/2008

Number of Days to Update: 18

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 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: 09/05/2008 Date Data Arrived at EDR: 09/05/2008 Date Made Active in Reports: 09/23/2008

Number of Days to Updale: 18

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land A listing of underground storage tank locations on Indian Land.

Date of Government Version: 03/12/2008 Date Data Arrived at EDR: 03/14/2008 Date Made Active in Reports: 03/20/2008

Number of Days to Update: 6

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 03/17/2008 Date Dala Arrived at EDR: 03/27/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Updale: 40

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 09/08/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 27

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 09/05/2008 Date Data Arrived at EDR: 09/05/2008 Date Made Active in Reports: 09/23/2008

Number of Days to Update: 18

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 06/01/2007 Date Data Arrived at EDR: 06/14/2007 Date Made Active in Reports: 07/05/2007

Number of Days to Update: 21

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008

Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 08/21/2008 Date Data Arrived at EDR: 09/04/2008 Date Made Active in Reports: 09/09/2008

Number of Days to Update: 5

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 09/05/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 27

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

No description is available for this data

Date of Government Version: 08/22/2008 Date Data Arrived at EDR: 08/22/2008 Date Made Active in Reports: 09/09/2008

Number of Days to Update: 18

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 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: 04/02/2008 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 1 Telephone: 617-918-1102 Last EDR Contact: 07/21/2008

Next Scheduled EDR Contact: 10/20/2008 Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisiting

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: 07/21/2008

Next Scheduled EDR Contact: 10/20/2008 Data Release Frequency: Varies

## EDR PROPRIETARY RECORDS

Manufactured Gas Plants: 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

#### 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: 08/21/2008 Date Data Arrived at EDR: 08/22/2008 Date Made Active in Reports: 09/03/2008

Number of Days to Update: 12

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 08/20/2008

Next Scheduled EDR Contact: 10/20/2008 Data Release Frequency: Semi-Annually

#### Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 08/21/2008 Date Data Arrived at EDR: 08/22/2008 Date Made Active in Reports: 08/29/2008

Number of Days to Update: 7

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 08/20/2008

Next Scheduled EDR Contact: 10/20/2008 Data Release Frequency: Semi-Annually

#### CONTRA COSTA COUNTY:

#### Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/03/2008 Date Data Arrived at EDR: 09/04/2008 Date Made Active in Reports: 09/18/2008

Number of Days to Update: 14

Source: Contra Costa Health Services Department

Telephone: 925-646-2286 Last EDR Contact: 08/25/2008

Next Scheduled EDR Contact: 11/24/2008 Data Release Frequency: Semi-Annually

#### 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: 08/07/2008 Date Data Arrived at EDR: 08/08/2008 Date Made Active in Reports: 09/03/2008

Number of Days to Update: 26

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 08/04/2008

Next Scheduled EDR Contact: 11/03/2008 Data Release Frequency: Semi-Annually

#### KERN COUNTY:

Underground Storage Tank Sites & Tank Listing Kem County Sites and Tanks Listing.

> Date of Government Version: 09/15/2008 Date Data Arrived at EDR: 09/16/2008 Date Made Active in Reports: 10/01/2008

Number of Days to Update: 15

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700

Last EDR Contact: 09/15/2008

Next Scheduled EDR Contact: 12/01/2008 Data Release Frequency: Quarterly

#### 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: 12/31/1998 Date Data Arrived at EDR: 07/07/1999 Date Made Active in Reports: N/A

Number of Days to Update: 0

Source: EPA Region 9 Telephone: 415-972-3178 Last EDR Contact; 10/14/2008

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: No Update Planned

#### HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/30/2008 Date Data Arrived at EDR: 06/24/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 37

Source: Department of Public Works Telephone: 626-458-3517 Last EDR Contact: 08/11/2008

Next Scheduled EDR Contact: 11/10/2008
Data Release Frequency: Semi-Annually

## List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 08/12/2008 Date Data Arrived at EDR: 08/22/2008 Date Made Active in Reports: 09/03/2008

Number of Days to Update: 12

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 08/13/2008

Next Scheduled EDR Contact: 11/10/2008

Data Release Frequency: Varies

## City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/01/2008 Date Data Arrived at EDR: 03/20/2008 Date Made Active in Reports: 04/14/2008

Number of Days to Update: 25

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 09/08/2008

Next Scheduled EDR Contact: 12/08/2008

Data Release Frequency: Varies

#### Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/14/2008 Date Data Arrived at EDR: 04/10/2008 Date Made Active in Reports: 05/06/2008

Number of Days to Update: 26

Source: Community Health Services Telephone: 323-890-7806 Last EDR Contact: 08/11/2008

Next Scheduled EDR Contact: 11/10/2008 Data Release Frequency: Annually

## City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 10/06/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 10

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 09/10/2008

Next Scheduled EDR Contact: 11/10/2008 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: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 Data Release Frequency: Annually

#### City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 08/26/2008 Date Data Arrived at EDR: 09/11/2008 Date Made Active in Reports: 10/01/2008

Number of Days to Update: 20

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 09/10/2008

Next Scheduled EDR Contact: 11/10/2008 Data Release Frequency: Semi-Annually

## MARIN COUNTY:

## Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/04/2008 Date Data Arrived at EDR: 08/29/2008 Date Made Active in Reports: 09/15/2008

Number of Days to Update: 17

Source: Public Works Department Waste Management

Telephone: 415-499-6647 Last EDR Contact: 07/28/2008

Next Scheduled EDR Contact: 10/27/2008 Data Release Frequency: Semi-Annually

## NAPA COUNTY:

#### Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008 Date Data Arrived at EDR: 07/09/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 22

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 09/22/2008

Next Scheduled EDR Contact: 12/22/2008 Data Release Frequency: Semi-Annually

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: 09/22/2008

Next Scheduled EDR Contact: 12/22/2008 Data Release Frequency: Annually

#### ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 09/02/2008 Date Data Arrived at EDR: 09/16/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 13

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 09/04/2008

Next Scheduled EDR Contact: 12/01/2008 Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 09/02/2008 Date Data Arrived at EDR: 09/17/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 12

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 09/04/2008

Next Scheduled EDR Contact: 12/01/2008 Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 09/02/2008 Date Data Arrived at EDR: 09/25/2008 Date Made Active in Reports: 10/01/2008

Number of Days to Update: 6

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 09/04/2008

Next Scheduled EDR Contact: 12/01/2008 Data Release Frequency: Quarterly

## PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and deanup sites.

Date of Government Version: 07/23/2007 Date Data Arrived at EDR: 07/23/2007 Date Made Active in Reports: 08/09/2007

Number of Days to Update: 17

Source: Placer County Health and Human Services

Telephone: 530-889-7312 Last EDR Contact: 09/15/2008

Next Scheduled EDR Contact: 12/15/2008 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: 07/15/2008 Date Data Arrived at EDR: 07/18/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 13

Source: Department of Public Health Telephone: 951-358-5055 Last EDR Contact: 10/14/2008

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: Quarterly

#### Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/02/2008 Date Data Arrived at EDR: 07/29/2008 Date Made Active in Reports: 08/29/2008

Number of Days to Update: 31

Source: Health Services Agency Telephone: 951-358-5055 Last EDR Contact: 10/14/2008

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: Quarterly

#### SACRAMENTO COUNTY:

#### Contaminated Sites

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/08/2008 Date Data Arrived at EDR: 08/08/2008 Date Made Active in Reports: 09/03/2008

Number of Days to Update: 26

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 07/28/2008

Next Scheduled EDR Contact: 10/27/2008 Data Release Frequency: Quarterly

#### ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/08/2008 Date Data Arrived at EDR: 08/08/2008 Date Made Active in Reports: 09/03/2008

Number of Days to Update: 26

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 07/28/2008

Next Scheduled EDR Contact: 10/27/2008

Next Scheduled EDR Contact: 10/27/20 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: 10/01/2008 Date Data Arrived at E.DR: 10/06/2008 Date Made Active in Reports: 10/13/2008

Number of Days to Update: 7

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 09/02/2008

Next Scheduled EDR Contact: 12/01/2008 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: 05/16/2005 Date Data Arrived at EDR: 05/18/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 29

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 10/02/2008

Next Scheduled EDR Contact: 12/29/2008
Data Release Frequency: Quarterly

#### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 08/01/2007 Date Data Arrived at EDR: 02/05/2008 Date Made Active in Reports: 02/14/2008

Number of Days to Update: 9

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 09/02/2008

Next Scheduled EDR Contact: 11/17/2008

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: 06/04/2008 Date Data Arrived at EDR: 07/25/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 6

Source: San Diego County Department of Environmental Health

Telephone: 619-338-2371 Last EDR Contact: 09/30/2008

Next Scheduled EDR Contact: 12/29/2008

Data Release Frequency: Varies

#### 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: 09/15/2008

Next Scheduled EDR Contact: 12/01/2008 Data Release Frequency: Quarterly

## Underground Storage Tank Information

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: 10/01/2008

Number of Days to Update: 12

Source: Department of Public Health Telephone: 415-252-3920 Last EDR Contact: 09/15/2008

Next Scheduled EDR Contact: 12/01/2008 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: 08/26/2008 Date Dala Arrived at EDR: 08/27/2008 Date Made Active in Reports: 09/15/2008

Number of Days to Update: 19

Source: Environmental Health Department

Telephone: N/A

Last EDR Contact: 10/14/2008

Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: Semi-Annually

## SAN MATEO COUNTY:

#### Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/18/2008 Date Data Arrived at EDR: 06/18/2008 Date Made Active in Reports: 06/20/2008

Number of Days to Update: 2

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 10/06/2008

Next Scheduled EDR Contact: 01/05/2009 Data Release Frequency: Annually

#### Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 10/06/2008 Date Data Arrived at EDR: t0/07/2008 Date Made Active in Reports: 10/13/2008

Number of Days to Update: 6

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 10/06/2008

Next Scheduled EDR Contact: 0 t/05/2009 Data Release Frequency: Semi-Annually

#### SANTA CLARA COUNTY:

## 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: 09/22/2008

Next Scheduled EDR Contact: t2/22/2008 Data Release Frequency: No Update Planned

#### LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 09/24/2008 Date Data Arrived at EDR: 09/25/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 4

Source: Department of Environmental Health

Telephone: 408-918-3417 Last EDR Contact: 09/22/2008

Next Scheduled EDR Contact: 12/22/2008 Data Release Frequency: Varies

#### Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 09/02/2008 Date Data Arrived at EDR: 09/04/2008 Date Made Active in Reports: 09/18/2008

Number of Days to Update: 14

Source: City of San Jose Fire Department

Telephone: 408-277-4659

Last EDR Contact: 09/02/2008 Next Scheduled EDR Contact: 12/01/2008

Data Release Frequency: Annually

#### SOLANO COUNTY:

#### Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/22/2008 Date Data Arrived at EDR: 10/06/2008 Date Made Active in Reports: 10/13/2008

Number of Days to Update: 7

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 09/22/2008

Next Scheduled EDR Contact: 12/22/2008 Data Release Frequency: Quarterly

#### Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 06/22/2008 Date Data Arrived at EDR: 07/03/2008 Date Made Active in Reports: 07/25/2008

Number of Days to Update: 22

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 09/22/2008

Next Scheduled EDR Contact: 12/22/2008 Data Release Frequency: Quarterly

#### SONOMA COUNTY:

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

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: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 07/21/2008

Next Scheduled EDR Contact: 10/20/2008 Data Release Frequency: Quarterly

#### SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 05/04/2007 Date Data Arrived at EDR: 05/04/2007 Date Made Active in Reports: 05/24/2007

Number of Days to Update: 20

Source: Sutter County Department of Agriculture

Telephone: 530-822-7500 Last EDR Contact: 09/29/2008

Next Scheduled EDR Contact: 12/29/2008 Data Release Frequency: Semi-Annually

#### 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: 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: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 09/10/2008

Next Scheduled EDR Contact: 12/08/2008 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: 08/01/2008 Date Data Arrived at EDR: 09/04/2008 Date Made Active in Reports: 09/18/2008

Number of Days to Update: 14

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 08/18/2008

Next Scheduled EDR Contact: 11/17/2008 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: 09/09/2008

Next Scheduled EDR Contact: 09/08/2008 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: 10/01/2008 Date Data Arrived at EDR: 10/08/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 8

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 10/08/2008

Next Scheduled EDR Contact: 01/05/2009 Data Release Frequency: Quarterly

YOLO COUNTY:

Telephone: 530-666-8646

Underground Storage Tank Comprehensive Facility Report Underground storage tank sites located in Yolo county.

Date of Government Version: 08/11/2008 Date Data Arrived at EDR: 08/29/2008 Date Made Active in Reports: 09/15/2008 Number of Days to Update: 17

Last EDR Contact: 10/14/2008 Next Scheduled EDR Contact: 01/12/2009 Data Release Frequency: Annually

Source: Yolo County Department of Health

#### 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 ted facility.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 06/15/2007 Date Made Active in Reports: 08/20/2007

Number of Days to Update: 66

Source: Department of Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 09/12/2008

Next Scheduled EDR Contact: 12/08/2008 Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 09/30/2007 Date Data Arrived at EDR: 12/04/2007

Date Made Active in Reports: 12/31/2007

Number of Days to Update: 27

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 08/08/2008

Next Scheduled EDR Contact: 11/03/2008 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: 07/23/2008 Date Data Arrived at EDR: 08/28/2008 Date Made Active in Reports: 09/11/2008

Number of Days to Update: 14

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 08/28/2008

Next Scheduled EDR Contact: 11/24/2008 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 09/11/2008 Date Made Active in Reports: 10/02/2008

Number of Days to Update: 21

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 09/08/2008

Next Scheduled EDR Contact: 12/08/2008 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 06/03/2008 Date Made Active in Reports: 08/07/2008

Number of Days to Update: 65

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 09/15/2008

Next Scheduled EDR Contact: 12/15/2008 Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 08/22/2008 Date Made Active in Reports: 09/08/2008

Number of Days to Update: 17

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 10/06/2008

Next Scheduled EDR Contact: 01/05/2009 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: PennWell Corporation Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

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 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wellands 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.

## **GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**

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**

IONE CASINO SITE HIGHWAY 49 PLYMOUTH, CA 95685

#### TARGET PROPERTY COORDINATES

Latitude (North):

38.46463 - 38" 27' 52.7"

Longitude (West):

120.85175 - 120' 51' 6.3"

Universal Tranverse Mercator: Zone 10 UTM X (Meters):

UTM Y (Meters):

687429.2 4259348.0

Elevation:

1087 ft. above sea level

#### USGS TOPOGRAPHIC MAP

Target Property Map:

38120-D7 AMADOR CITY, CA

Most Recent Revision:

1962

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

#### GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

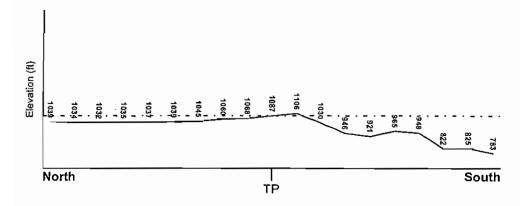
#### TOPOGRAPHIC INFORMATION

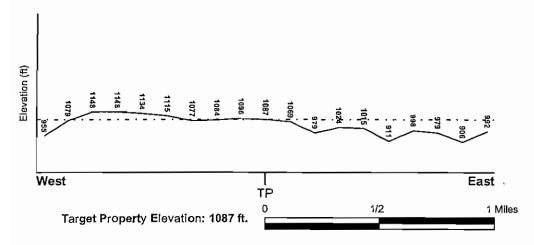
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

#### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

#### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE** 

FEMA Flood

Target Property County

Electronic Data
YES - refer to the Overview Map and Detail Map

AMADOR, CA

0600150017C

Additional Panels in search area:

Flood Plain Panel at Target Property:

0600150018C 0604550001B 0604550002B 0600150028C

0600150027C

NATIONAL WETLAND INVENTORY

NWI Electronic

NWI Quad at Target Property

Data Coverage

AMADOR CITY

YES - refer to the Overview Map and Detail Map

#### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data\*:

Search Radius:

1.25 miles

Status:

Not found

#### **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

LOCATION

GENERAL DIRECTION

MAP ID

FROM TP

GROUNDWATER FLOW

Not Reported

#### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

#### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

#### GEOLOGIC AGE IDENTIFICATION

Era: Mesozoic

Category: Eugeosynclinal Deposits

System:

Lower Jurassic and Upper Triassic

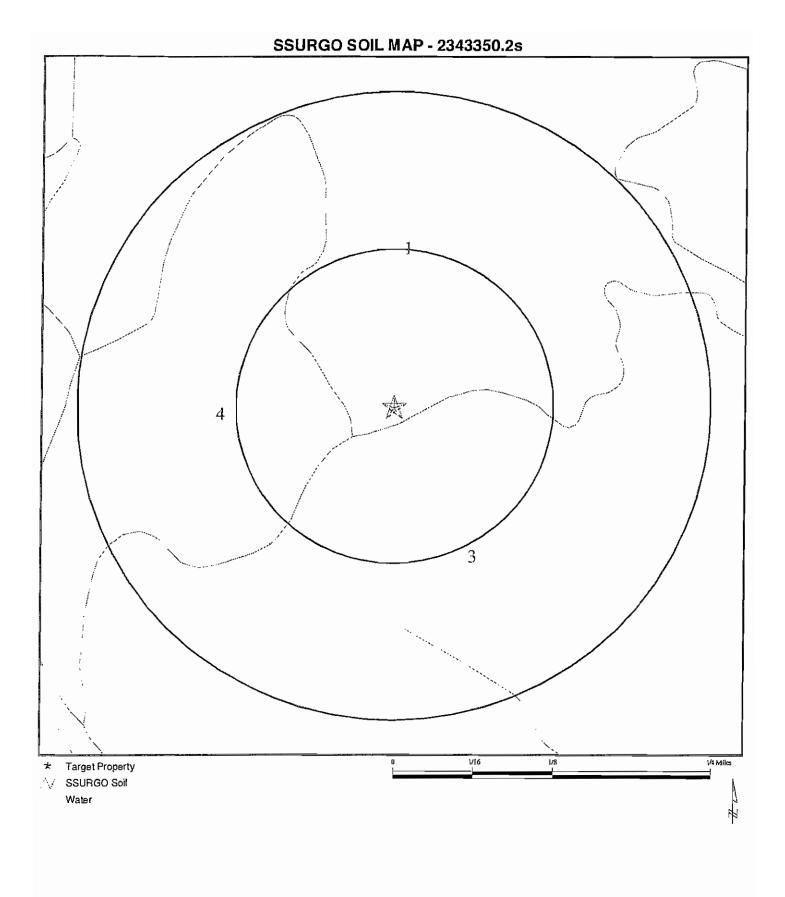
Series:

Lower Mesozoic

Code:

IMze (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).



SITE NAME: lone Casino Site
ADDRESS: Highway 49
Plymouth CA 95685
LAT/LONG: 38.4646 / 120.8517

CLIENT: Analytical Environmental Serv.
CONTACT: Pete Connelly
INQUIRY #: 2343350.2s
DATE: October 20, 2008 8:47 am

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#### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name:

Auburn

Soil Surface Texture:

loam

Hydrologic Group:

Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class:

Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min:

> 15 inches

Depth to Watertable Min:

> 0 inches

Soil Layer Information							
	Воц	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	9 inches	toam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
2	9 inches	14 inches		Silt-Clay Materials (more than 35 pct, passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
3	14 inches	18 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:

Soil Map ID: 2

Soil Component Name:

Auburn

Soil Surface Texture:

silt 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

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min:

> 61 inches

Depth to Watertable Min:

> 0 inches

Soil Layer Information							
Boundary			Classi	Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	hydraulic conductivity micro m/sec	
1	0 inches	11 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
2	11 inches	24 inches	foam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
3	24 inches	29 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
4	29 inches	33 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:

Soil Map ID: 3

Soil Component Name:

Exchequer

Soil Surface Texture:

silt loam

Hydrologic Group:

Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class:

Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min:

> 15 inches

Depth to Watertable Min:

> 0 inches

Soil Layer Information							
	Воц	undary		Classification		Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	5 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 4 Min: 0.07	Max; Min:
2	5 inches	9 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 4 Min: 0.07	Max: Min:

Soil Map ID: 4

Soil Component Name:

Exchequer

Soil Surface Texture:

loam

Hydrologic Group:

Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class:

Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min:

> 15 inches

Depth to Watertable Min:

> 0 inches

Soil Layer Information							
	Воц	ındary		Liassification		Classification Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 4 Min: 0.07	Max: Min:
2	5 inches	9 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 4 Min: 0.07	Max: Min:

#### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

#### WELL SEARCH DISTANCE INFORMATION

DATABASE

SEARCH DISTANCE (miles)

Federal USGS

1.000

Federal FRDS PWS

Nearest PWS within 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

No PWS System Found

Note: PWS System location is not always the same as well location.

### STATE DATABASE WELL INFORMATION

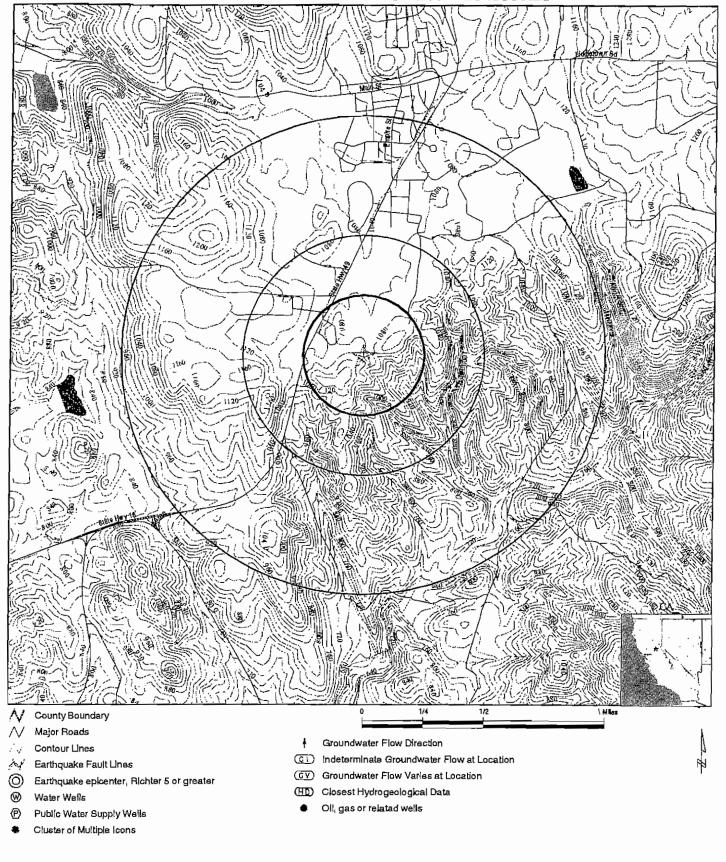
MAP ID

WELL ID

LOCATION FROM TP

No Wells Found

## PHYSICAL SETTING SOURCE MAP - 2343350.2s



SITE NAME: Ione Casino Site Highway 49 Plymouth CA 95685 ADDRESS: LAT/LONG:

38.4646 / 120.8517

CLIENT: CONTACT: Analytical Environmental Serv.

Pete Connelly INQUIRY#: 2343350.2s

October 20, 2008 8:47 am DATE:

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# GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

#### AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
95685	5	1	20.00

#### Federal EPA Radon Zone for AMADOR 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: 95685

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor Living Area - 2nd Floor	0.350 pCi/L Not Reported	100% Not Reported	0% Not Reported	0% Not Reported
Basement	2.400 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 1999 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

AQUIFLOWR 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 - 1t (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

#### **RADON**

State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208 Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

#### STREET AND ADDRESS INFORMATION

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# APPENDIX D

# EDR ENVIRONMENTAL LIEN SEARCH



# The EDR Environmental LienSearch<sup>TM</sup> Report



**Hwy 49** Plymouth, CA 95669 NREIS# D08-053057

Project Number: 2343350.7S

October 27, 2008

# The Standard in **Environmental Risk** Information

440 Wheelers Farm Road Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050

Fax:

1-800-231-6802

Internet: www.edrnet.com

## EDR Environmental LienSearch™ Report

The EDR Environmental LienSearch Report includes results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers follows established procedures to:

- search for parcel information, legal description, and ownership based on client supplied address information;
- research indexes and title repositories;
- obtain a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument (title, parties involved, and description); and
- · provide a copy of the deed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

#### Disclaimer - Copyright and Trademark Notice

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# EDR Environmental LienSearch Report

### TARGET PROPERTY INFORMATION

## **ADDRESS** LONE CASINO SITE **HWY 49** PLYMOUTH, CA 95669 RESEARCH SOURCE Sources: RECORDER OF DEEDS, AMADOR COUNTY, CA **DEED INFORMATION** Type of Deed: WD 🛛 QCD 🗌 Other DEED Title is vested in: IKON GROUP, LLC Title received from: RONALD G. MATULICH AND LINDA MATULICH (MEMORANDUM OF PURCHASE AGREEMENT) Deed Dated: 11-22-2004 Deed Recorded: 12-07-2004 Instrument: 2004-0017015 LEGAL DESCRIPTION SEE ATTACHED EXHIBIT "A" Assessor's Parcel Number: 008-110-009-000 ENVIRONMENTAL LIEN Environmental Lien: Found Not Found 🛛 If yes: 1<sup>st</sup> Party: 2<sup>nd</sup> Party: Dated: Recorded: Book: Page: Comments:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's:

Found 🗍

Not Found

## EDR Environmental LienSearch™ Report

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#### **EXHIBIT A**

REAL PROPERTY IN THE UNINCORPORATED AREA OF THE COUNTY OF AMADOR, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

ALL THOSE PORTIONS OF SECTIONS 14 AND 15, BOTH TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN, SHOWN ON THAT CERTAIN RECORD OF SURVEY OF THE AREA OCCUPIED BY EVERETT AND GLENN FANCHER, FILED JUNE 15, 1982 IN BOOK 35 OF MAPS AND PLATS, AT PAGES 94 AND 95, IN THE OFFICE OF THE COUNTY RECORDER, AMADOR COUNTY, CALIFORNIA.

SAID LAND HERETOFORE BEING DESCRIBED AS:

(A) ALL THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN, THAT LIES EAST OF THE COUNTY ROAD RUNNING FROM PLYMOUTH TO DRYTOWN VIA THE CENTRAL HOUSE, AS SAID ROAD EXISTED APRIL 11, 1896, BEING THE DATE OF THE DEED FROM M. BUTLER, ET UX, TO THOMAS BOYSON, RECORDED APRIL 18, 1896 IN BOOK 13 OF DEEDS, PAGE 120, RECORDS OF AMADOR COUNTY.

EXCEPT ALL THAT PORTION THEREOF DESCRIBED IN DEED FROM EVERETT FANCHER, ET AL, TO THE STATE OF CALIFORNIA RECORDED AUGUST 11, 1969 IN BOOK 186, PAGE 202, OFFICIAL RECORDS OF AMADOR COUNTY.

EXCEPT AND TOGETHER WITH ALL THAT REAL PROPERTY MORE PARTICULARLY REFERRED TO IN THAT CERTAIN BOUNDARY LINE AGREEMENT BY AND BETWEEN NORMAN V. WHEELER, ET UX, AND EVERETT FANCHER, ET AL RECORDED JANUARY 4, 1989 IN BOOK 560, PAGE 28, OFFICIAL RECORDS OF AMADOR COUNTY.

(B) LOTS 8 AND 10 AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OP SECTION 14, TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN.

EXCEPT AND TOGETHER WITH ALL THAT REAL PROPERTY MORE PARTICULARLY REFERRED TO IN THAT CERTAIN BOUNDARY LINE AGREEMENT BY AND BETWEEN RONALD G. MATULICH, ET UX, AND EVELYN JEAN SMITH, ET AL, RECORDED JANUARY 27, 1999, INSTRUMENT NO. 1999-000877, OFFICIAL RECORDS OF AMADOR

# EDR Environmental LienSearch™ Report

The second

#### COUNTY.

- (C) THE PIONEER QUARTZ MINE, BEING LOT 87 OF SECTION 14, TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN.
- (D) GOVERNMENT LOT 93 IN SECTION 14, TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN, BEING ALSO KNOWN AS THE FORTY-NINE GOLD QUARTZ MINE.

EXCEPT AND TOGETHER WITH ALL THAT REAL PROPERTY MORE PARTICULARLY REFERRED TO IN THAT CERTAIN BOUNDARY LINE AGREEMENT BY AND BETWEEN RONALD G. MATULICH, ET UX, AND EVELYN JEAN SMITH, ET AL, RECORDED JANUARY 27, 1999, INSTRUMENT NO. 1999-000877, OFFICIAL RECORDS OF AMADOR COUNTY.

Amador County Recorder Sheldon D. Johnson

DOC- 2004-0017016-00

Acet 2-First American Title Co Tuesday, DEC 07, 2004 89:58:00 Ttl Pd \$18.00 Nor-0000095495

SDJ/R1/1-5

Recording requested by, and when recorded, mail to:

IKON GROUP, LLC c'o Patrick A. Sheehan, Attorney 179 Lameuse St. Biloxi, Mississippi 39530

27179531

# MEMORANDUM OF PURCHASE AGREEMENT

This Memorandum of Purchase Agreement ("Memorandum"), is executed in order to memorialize of record that certain Purchase Agreement and Deposit Receipt ("Purchase Agreement"), dated March 12, 2003, between RONALD G. MATULICH and LINDA MATULICH ("Seller") and IKON GROUP, LLC, and/or Assigns ("Buyer"), wherein Seller contracted to sell to Buyer certain real property more particularly described in attached Exhibit A, incorporated in this Memorandum ("Real Property").

## Section 1 Amendment

As of the date of this Memorandum, the Purchase Agreement has been amended, by instrument dated December 16, 2003 ("Amendment"), and further amended by instrument dated September 28, 2004, which are an integral parts of the Purchase Agreement and the underlying agreement of the parties.

#### Section 2 Term

The term of the Purchase Agreement, as amended, began on March 12, 2003, and continues until September 10, 2003 ("Term"), unless terminated sooner in accordance with the Purchase Agreement and Amendment.

# Section 3 Extensions

Extensions are available to the Buyer as specified in the Purchase Agreement, as amended; and these extensions may extend the term of the Purchase Agreement period to September 4, 2006.

X:U N D I A MIONELLANAMEMOS OF OPTION (RECORDING) WATULICH MEMO of Pur Agr-J 1-11-04 doc

### Section 4 Termination

The Purchase Agreement shall automatically terminate and shall have no further force upon the first of the following events to occur:

- (a) The purchase of the Property by Buyer or his assign;
- (b) The end of the term of the Purchase Agreement, as amended, and any extensions thereof.

# Section 5 Price and Terms

The parties have executed and recorded this instrument to give notice of the Purchase Agreement and the respective rights and obligations of Buyer and Seller. The price and other terms are set out in the unrecorded Purchase Agreement and Amendment, which are incorporated by reference in its entirety in this Memorandum. In the event of any inconsistency between this Memorandum and the Purchase Agreement, the Purchase Agreement and Amendment shall control.

### Section 6 Assignment

The Purchase Agreement may be assigned by the Buyer.

## Section 7 Successors and Assigns

This Memorandum and the Purchase Agreement shall bind and inure to the benefit of the parties and their respective heirs, successors and assigns.

## Section 8 Governing Law

This Memorandum and the Purchase Agreement are governed by California law.

The parties have executed this Memorandum as of the date first written above.

SELLER:

BUYER:

CONNEXT I

7

Willard E. Smith, Project Manager

Linde Metalich

#### ACKNOWLEDGMENT

STATE OF CALIFORNIA)

) \$5

COUNTY OF AMADOR )

On 1-22, 2004, before me, a Notary Public for the State of California, duly commissioned and sworn, personally appeared RONALD G. MATULICH, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal,

EVELYN RYAN COMM. #1521330 NOTARY PUBLIC - CALIFORNIA AMADOR COUNTY My Comm. Expires Oct. 23, 2008

My Commission Expires:

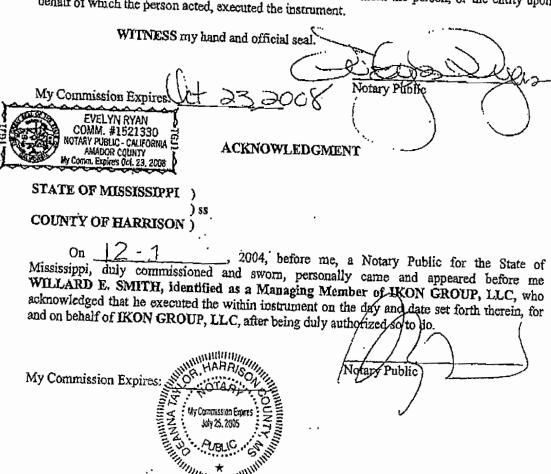
Notary Public

X:II N D I A NYONELLANDMEMOS OF OPTION (RECORDING) MATULICE MEMO of Par Agr-11-11-04 doe

## ACKNOWLEDGMENT

# STATE OF CALIFORNIA ) COUNTY OF AMADOR )

On \_\_\_\_\_\_, 2004, before me, a Notary Public for the State of California, duly commissioned and sworn, personally appeared LINDA MATULICH, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.



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#### LEGAL DESCRIPTION

Real property in the unincorporated area of the County of Amador, State of California, described as follows:

ALL THOSE PORTIONS OF SECTIONS 14 AND 15, BOTH TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN, SHOWN ON THAT CERTAIN RECORD OF SURVEY OF THE AREA OCCUPIED BY EVERETT AND GLENN FANCHER, FILED JUNE 15, 1982 IN BOOK 35 OF MAPS AND PLATS, AT PAGES 94 AND 95, IN THE OFFICE OF THE COUNTY RECORDER, AMADOR COUNTY, CALIFORNIA.

SAID LAND HERETOFORE BEING DESCRIBED AS:

(A) ALL THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN, THAT LIES EAST OF THE COUNTY ROAD RUNNING FROM PLYMOUTH TO DRYTOWN VIA THE CENTRAL HOUSE, AS SAID ROAD EXISTED APRIL 11, 1896, BEING THE DATE OF THE DEED FROM M, BUTLER, ET UX, TO THOMAS BOYSON, RECORDED APRIL 18, 1896 IN BOOK 13 OF DEEDS, PAGE 120, RECORDS OF AMADOR COUNTY.

EXCEPT ALL THAT PORTION THEREOF DESCRIBED IN DEED FROM EVERETT FANCHER, ET AL, TO THE STATE OF CALIFORNIA RECORDED AUGUST 11, 1969 IN BOOK 186, PAGE 202, OFFICIAL RECORDS OF AMADOR COUNTY.

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(B) LOTS 8 AND 10 AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN.

EXCEPT AND TOGETHER WITH ALL THAT REAL PROPERTY MORE PARTICULARLY REFERRED TO IN THAT CERTAIN BOUNDARY LINE AGREEMENT BY AND BETWEEN RONALD G. MATULICH, ET UX, AND EVELYN JEAN SMITH, ET AL, RECORDED JANUARY 27, 1999, INSTRUMENT NO. 1999-000877, OFFICIAL RECORDS OF AMADOR COUNTY.

- (C) THE PIONEER QUARTZ MINE, BEING LOT 87 OF SECTION 14, TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN.
- (D) GOVERNMENT LOT 93 IN SECTION 14, TOWNSHIP 7 NORTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN, BEING ALSO KNOWN AS THE "FORTY-NINE GOLD QUARTZ MINE".

EXCEPT AND TOGETHER WITH ALL THAT REAL PROPERTY MORE PARTICULARLY REFERRED TO IN THAT CERTAIN BOUNDARY LINE AGREEMENT BY AND BETWEEN RONALD G. MATULICH, ET UX, AND EYELYN JEAN SMITH, ET AL, RECORDED JANUARY 27, 1999, INSTRUMENT NO. 1999-000877, OFFICIAL RECORDS OF AMADOR COUNTY.

APN: 008-110-009

EXHIBIT A

· "END OF DOCUMENT"

# APPENDIX E

# PROPERTY OWNER AND USER QUESTIONNAIRES



# Analytical Environmental Services

November 4, 2008

RE: Phase I Environmental Site Assessment for

**RE:** Phase I Environmental Site Assessment for APNs 010-20-06 (1.65 acres), 010-20-07 (1.19 acres), 010-20-08 (0.53 acres), 010-20-09 (0.81 acres), 010-20-10 (1.56 acres), 010-20-11 (1.22 acres), 08-011-026 (60 acres), 08-110-022 (7.86 acres), and 08-110-009 (137.78 acres).

Please complete the questionnaire below with regard to the indicated property. You are being asked to provide this information and insight to assist in the preparation of an environmental site assessment for this property. Please provide as much information as you can to assist in this effort and feel free to attach extra sheets/reports if the space provided is insufficient.

Please fax/sent the completed form to:

Analytical Environmental Services Attn: Pete Connelly 1801 7<sup>th</sup> Street, Suite 100 Sacramento, CA 95814

Telephone (916) 447-3479 Fax (916) 447-1665

Thank you for your help and cooperation.

Property Address: See	attached pascel numbers	
	1	
Assessors Parcel Number	<u> </u>	

Question	Answer	Responses to "Yes" Questions
<ol> <li>Is the property or any</li> </ol>	Property: NO UNK YES	
adjoining property currently used for	Adjoining: NOUNK YES	
industrial purposes?		
2. To the best of your	Property: NOUNK YES	
knowledge, has the	Adjoining: (NO UNK YES	
property or any adjoining		
property been used for		
industrial purposes in the	The state of the s	
past?	Downson Story Day (25)	
3. Is the property or any	Property: NO UNK VAS	Andriana an etation
adjoining property used as a gasoline station, motor	Adjoining: NO UNICYES	Boung 98 station
repair facility, commercial	}	
printing facility, dry		
cleaners, photo developing		
laboratory, junkyard or		
landfill, or as a waste		
treatment, storage,		
disposal, processing, or recycling facility?		
4. To the best of your	Property: (NO UNK YES	
knowledge, has the		
property or any adjoining	Adjoining: (NO UNK YES	1
property been used as a		
gasoline station, motor		J
repair facility, commercial		
printing facility, dry		
cleaners, photo developing		
laboratory, junkyard or		
landfill, or as a waste		J
treatment, storage,		
disposal, processing, or		
recycling facility?		
5. Has fill dirt been brought	NO UNK YES	
onto the property that	_	
originated from a		
contaminated site or that is		
of an unknown origin?		

<ol><li>Are there currently, or to</li></ol>	New?: NO UNK YES
the best of your knowledge	Days of LDUK VEO
have there been	Past?: (NO UNK YES
previously, any damaged	
or discarded automotive or	
industrial batteries, or	
•	
pesticides, paints, or other	
chemicals in individual	
containers of greater than	
five gallons (19 liters) in	
the aggregate, stored on or	
used at the property or at	
the facility?	
7. Are there currently, or to	New?: (NO UNK YES
the best of your knowledge	
have there been	Past?: N UNK YES
previously, any industrial	
drums (typically 55 gallon	
1 1	
[208 liters]) or sacks of	
chemicals located on the	
property or at the facility?	
8. Are there currently, or to	New?: W UNK YES
the best of your knowledge	Past?: (NOUNK YES
have there been	Fastr: (NO ONK TES
previously, any pits,	
ponds, or lagoons located	
on the property in	
connection with waste	
treatment or waste	
disposal?	N2 (IOLIDIK VEC
9. Is there currently, or to the	New?: (10) UNK YES
best of your knowledge	Past?:/ NO UNK YES
has there been previously,	111111111111111111111111111111111111111
any areas of stained soil on	
the property?	
10. Are there currently, or to	New?: NO UNK YES
the best of your knowledge	
have there been	Past?: (NO UNK YES
previously, any registered	
or unregistered storage	
tanks (above or	
underground) located on	
the property?	

11. Are there currently, or to	New?: NOUNK YES	
the best of your knowledge	Past?: NO UNK YES	
have there been	Tasiii (ilg Sitik TES	
previously, any vent pipes,	[	
fill pipes, or access ways		
indicating a fill pipe		
protruding from the		
ground on the property or		
adjacent to any structure		
located on the property?		
12. Are there currently, or to	New?: (NO) UNK YES	
the best of your knowledge	Past?: NO UNK YES	
have there been	Taskii Also Oliki 1128	
previously, any flooring,		
drains, or walls located		
within the facility that are		
stained by substances		
other than water or are		
emitting foul odors?		
13. If the property is served by	NOUNKIYES	
a private well or non-		
public water system, have		
contaminants been		
identified in the well or		
system that exceed	}	
guidelines applicable to		
the water system or has the		
well been designated as		
contaminated by any		
government		
environment/health		
agency?	- Circle and American	
14. Does the owner or	(NO)UNK YES	
occupant of the property		
have any knowledge of		
environmental liens or		
governmental notification		
relating to past or		
recurrent violations of		
environmental laws with		
respect to the property or		
any facility located on the		
property?		

of the property been informed of the past or current existence of hazardous substances or petroleum products or	ng unk yes	
informed of the past or current existence of hazardous substances or		
current existence of hazardous substances or		
hazardous substances or		
netroleum products or		
penoteum products of		
environmental violations		
with respect to the		
property or any facility		
located on the property?		
16. Does the owner or	NO UNK YES	
occupant of the property		
have any knowledge of		
any environmental site		
assessment of the property		
or facility that indicated		
the presence of hazardous		
substances or petroleum		
products on, or		
contamination of, the		
property or recommended		
further assessment of the		
property?		
17. Does the owner or	(NO)UNK YES	_
occupant of the property		}
know of any past,		
threatened, or pending		
lawsuits or administrative		
proceedings concerning a		
release or threatened		
release of any hazardous		
substance or petroleum		
products involving the		
property by any owner or		
occupant of the property?	(0	
18. Does the property	NO UNK YES	
discharge waste water on		
or adjacent to the property		
other than storm water into		
a sanitary sewer system?		
property by any owner or occupant of the property?  18. Does the property discharge waste water on or adjacent to the property	NO UNK YES	

19. To the best of your knowledge, have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive	NO UNK YES	
or industrial batteries or any other waste materials been dumped above grade, buried, and/or burned on the property?		
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?	(ng/unk yes	

21. How do you currently use the property and how have you used the property in the past (please be specific).

Vacant, Cottle, Residentia)

22. What is your understanding of how the property was used before your ownership/occupancy?

I hereby certify that to the best of my knowledge all of the information provided in this environmental questionaire is true and correct.
Signature: De Charles
Print Name/Address: Completed though telephone interview in the Johnny "6:1" Juneson Tribal Vice Chair Ione Band of Minsk Indians
Phone: (918) 447-3479
Date complete: 11/4/2-008
Relation to property: owner operator manager tenant  Cousultant for fride X



#### Analytical Environmental Services

October 24, 2008

#### RE: Phase I Environmental Site Assessment update for the Plymouth Casino site.

You have been identified as the representative and/or the legal owner of the legal parcels listed in the table below. Please complete the attached questionnaire below with regard to the indicated property. You are being asked to provide this information and insight to assist in the preparation of an environmental site assessment for this property. Please provide as much information as you can to assist in this effort and feel free to attach extra sheets/reports if the space provided is insufficient.

Ione Band of Miwok Indians Fcc-to-Trust Subject Property Parcels

Parce		A 040000	Location	
1	APN number	Acreage		
1	08-110-009	137.78	Unincorporated Amador County	
2	08-110-022	7.86	Unincorporated Amador County	
3	08-10-026	60	Unincorporated Amador County	
4	10-200-003	0.64	City of Plymouth	
5	10-200-004	2.68	City of Plymouth	
6	10-200-006	1.65	City of Plymouth	
7	10-200-007	1.19	City of Plymouth	
8	10-200-008	0.53	City of Plymouth	
9	10-200-009	0.81	City of Plymouth	
10	10-200-010	1.56	City of Plymouth	
11	10-200-110	1.22	City of Plymouth	
12	08-110-021	12.12	Unincorporated Amador County	

Please fax/sent the completed form to:

Analytical Environmental Services Attn: Pete Connelly 1801 7th Street, Suite 100 Sacramento, CA 95814

Telephone (916) 447-3479 Fax (916) 447-1665

Thank you for your help and cooperation.

Property Address:		
Assessors Parcel Number		·
Ouestion	Answer	Responses to "Yes" Questions
Is the property or any adjoining property currently used for industrial purposes?	Property: (NO UNK YES  Adjoining: NO UNK YES	
To the best of your knowledge, luss the property or any adjoining property been used for industrial purposes in the past?	Property: NOUNK YES  Adjoining: NO UNK YES	
3. Is the property or any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Property: (NOUNK YES  Adjoining: NOUNK YES)	
4. To the best of your knowledge, has the property or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Property: NO UNK YES  Adjoining: NO UNK YES	
5. Has fill dirt been brought onto the property that originated from a contaminated site or that is of an unknown origin?	(NO)UNK YES	
of your knowledge have there been	New?:[NO]UNK YES	

7. Are there currently, or to the best	New? (NO)UNK YES
of your knowledge have there been	7
previously, any industrial drums	Past?: NO UNK YES
(typically 55 gailon [208 liters]) or	
sacks of chemicals located on the	]
property or at the facility?	[
8. Are there currently, or to the best	New?: (NOUNK YES
of your knowledge have there been	
previously, any pits, ponds, or	Past?: NO UNK YES
lagoons located on the property in	
connection with waste treatment or	1
waste disposal?	
9. Is there currently, or to the best of	New? (NO)UNK YES
your knowledge has there been	The state of the s
previously, any areas of stained	Past7: NOUNK YES
soil on the property?	
	New?(NO)JNK YES
10. Are there currently, or to the	New MODING XES
best of your knowledge have there	Past?:(NO)JNK YES
been previously, any registered or	
unregistered storage tanks (above	
or underground) located on the	
property?	
11. Are there currently, or to the	New? NOUNK YES
best of your knowledge have there	Past? NO UNK YES
been previously, any vent pipes,	Tashi (to pink the
fill pipes, or access ways	1
indicating a fill pipe protruding	
from the ground on the property or	
adjacent to any structure located on	
the property?	
12. Are there currently, or to the	New A NO UNK YES
best of your knowledge have there	Past?: NOUNK YES
been previously, any flooring,	Pastr. 1000NA 1123
drains, or walls located within the	
facility that are stained by	
substances other than water or arc	
emitting foul odors?	
13. If the property is served by a	(NO)JNK YES
private well or non-public water	
system, have contaminants been	
identified in the well or system	
that exceed guidelines applicable	
to the water system or has the well	
been designated as contaminated	
by any government	
environment/health agency?	

<ol><li>Does the owner or occupant of</li></ol>	NO JINK YES	
the property have any knowledge		†
of environmental liens or	}	[
governmental notification relating	1	1
to past or recurrent violations of	1	
environmental laws with respect to		
the property or any facility located		
on the property?		}
15. Has the owner or occupant of	NO UNK YES	<u> </u>
the property been informed of the	MOCNETES	
past or current existence of	_	
1 E	]	
hazardous substances or petrolcum		}
products or environmental		]
violations with respect to the		
property or any facility located on		{
the property?	And not the	
16. Does the owner or occupant of	(NO) JNK YES	
the property have any knowledge	<u> </u>	[
of any environmental site		
assessment of the property or		}
facility that indicated the presence		
of hazardous substances or		
petroleum products on, or		}
contamination of, the property or		
recommended further assessment		
of the property?		
17. Does the owner or occupant of	(NOUNK YES	
the property know of any past,		
threatened, or pending lawsuits or	1	
administrative proceedings	,	
concerning a release or threatened	}	
release of any hazardous substance		
or petroleum products involving		
the property by any owner or		
occupant of the property?		
18. Does the property discharge	( NO/UNK YES	
waste water on or adjacent to the		
property other than storm water		1
into a sanitary sewer system?		
<ol><li>To the best of your knowledge,</li></ol>	( NO )INK YES	
have any hazardous substances or	` 🔾	
petroleum products, unidentified		
waste materials, tires, automotive		
or industrial batteries or any other		
waste materials been dumped		
above grade, buried, and/or burned		
on the property?		
		, , , , , , , , , , , , , , , , , , ,

- 20. Is there a transformer,
  capacitor, or any hydraulic
  equipment for which there are any
  records indicating the presence of
  PCBs?
- 21. How do you currently use the property and how have you used the property in the past (please be specific).

Currently, the land is primarly left en us so not been used by us. Vacant pastue

22. What is your understanding of how the property was used before your ownership/occupancy?

thous is located on the property.

I hereby certify that to the best of my knowledge all of the information provided in this

Print Name/Address: Jamela Baumgailaer 14 west main lime. Ca 95440

Phone: 209-274 6753

Relation to property: owner \_\_\_\_ operator \_\_\_\_ manager \_\_\_\_ tenant \_\_\_\_

Date complete: 10/24/08



#### **Analytical Environmental Services**

CLIENT QUESTIONNAIRE

Per ASTM Standard Practice E 1527-05, Section 6, User Responsibilities, the User of an ESA has specific obligations for performing tasks during the ESA that will help identify the possibility of recognized environmental conditions in connection with the Site. Failure by the User to fully comply with the requirements may result in a data gap being identified in the report and may impact the ability to use the report to help qualify for Landowner Liability Protections (LLPs) under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). If this questionnaire is not returned to Analytical Environmental Services (AES) prior to issuance of the draft Phase I report, then AES assumes that the User does not have any information or actual knowledge pursuant to ASTM Standard Practice E 1527-05, Section 6, User Responsibilities. AES makes no representations or warranties regarding a User's qualification for protection under any federal, state or local laws, rules or regulations.

Please complete the following and return immediately via email or fax to the attention of:

Pete Connelly
E-mail: pconnelly@analyticalcorp.com
Fax: (916) 447-1665

If other parties are intending to be the Users of the ESA report, then please forward a copy of this questionnaire for them to complete and return to AES.

Please provide the following information (if available) per the requirements of ASTM E 1527-05.

1. Environmental cleanup liens that are filed or recorded against the site (40 CFR

Are you aware of any environmental cleanup liens against the site that are filed or recorded under federal, tribal, state or local law? Yes or No lif yes, please provide a description of the lien(s).

2. Activity and land use limitations (AULs) 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 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 or No lif yes, please provide.

	_				
3.	Specia the La	alized knowledge ndowner Liability	or experience of the or experience of the or	he person seeking t FR 312.28)	o qualify for
	rela line pro pro	ated to the site or of business as perty so that yo cesses used by the	nearby properties? the current or form u would have spenis typetof business?	For example, are you ner occupants of the cialized knowledge	wledge or experience u involved in the same e site or an adjoining of the chemicals a <b>n</b> d
4.		nship of the pure ot contaminated		air market value of	the site if it
	a. 		chase price being pof the site? Yes	aid for this site reas or No	onably reflect the fair
	b.		e price is because		ensidered whether the own or believed to be
		Yes []	or No	If yes, please exp	olain. 
			1		

# 5. Commonly known or reasonably ascertainable information about the site (40 CFR 312.30)

Are you aware of commonly known or reasonably ascertainable information about the site that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

	a. 	If yes, please state.
	—— b.	Do you know of specific chemicals that are present or once were
		present at the site? Yes □ or No □ If yes, please state.
	c.	Do you know of spills or other chemical releases that have taken place at the site?  Yes   or No If yes, please state.
-		
Dog		now of any environmental cleanups that have taken place at the site?  or No I ges, please state.
-		

As the user of this ESA, based on your knowledge and experience related to the site

7. The degree of obviousness of the presence or likely presence of contamination at the site, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)

are there any obvious indicators that point to the presence or likely presence of contamination at the site?
Yes or No If yes, please explain.
This questionnaire was completed by:
Name Pamela Bourgartner and Tothry Ramos
Title Jinbay Administrator and project percloper Signature ( of moles) By and Lean Kenny
Signature James Box and Juny Kanas
Company of User Long Band of millor Ondreis
Address of User 14 w main f.D. BX 1190
Uno, CA 95640
Date 11/33/08

# Property Owner Questionaire for APNs 10-200-003 and 100-200-004 (0.64 and 2.68 ACRES)

PROPERTY OWNER: USHA PATEL



#### Analytical Environmental Services

October 23, 2008

RE: Phase I Environmental Site Assessment for the Ione Casino Site.

Dear Ms Patel,

You have been identified as the representative and/or the legal owner of the property located at 17674 Village Drive, Plymouth CA. APNs 010-200-003 (0.64 acres), 010-200-004 (2.68 acres).

Please complete the questionnaire below with regard to the indicated property. You are being asked to provide this information and insight to assist in the preparation of an environmental site assessment for this property and the . Please provide as much information as you can to assist in this effort and feel free to attach extra sheets/reports if the space provided is insufficient.

Please fax/sent the completed form to:

Analytical Environmental Services Attn: Pete Connelly 1801 7<sup>th</sup> Street, Suite 100 Sacramento, CA 95814

Telephone (916) 447-3479 Fax (916) 447-1665

Thank you for your help and cooperation.

Property Address:	17674	Village	Drive	 	_
Assessors Parcel Nur	mber				

Question	Answer	Responses to "Yes" Questions
Is the property or any adjoining property currently used for industrial purposes?	Property: OUNK YES  Adjoining: NO UNK YES	
2. To the best of your knowledge, has the property or any adjoining property been used for industrial purposes in the past?	Property: NO UNK YES  Adjoining: NO UNK YES	
3. Is the property or any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Property: NOUNK YES  Adjoining: (NO UNK YES	
4. To the best of your knowledge, has the property or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Property: NO UNK YES  Adjoining: NO UNK YES	
5. Has fill dirt been brought onto the property that originated from a contaminated site or that is of an unknown origin?	NO UNK YES	

6. Are there currently, or to	New?: (NØ UNK YES
the best of your knowledge	Past?: 10 UNK YES
have there been	Past!. NO UNA LES
previously, any damaged	
or discarded automotive or	
industrial batteries, or	
pesticides, paints, or other	
chemicals in individual	
containers of greater than	
five gallons (19 liters) in	
the aggregate, stored on or	
used at the property or at	
the facility?	
7. Are there currently, or to	New?: NOUNK YES
the best of your knowledge	Past?: (NO UNK YES
have there been	Tast:. INV ONE TES
previously, any industrial	
drums (typically 55 gallon	
[208 liters]) or sacks of	
chemicals located on the	
property or at the facility?	
8. Are there currently, or to	New?: NOUNK YES
the best of your knowledge	Past?: (N) UNK YES
have there been	
previously, any pits,	
ponds, or lagoons located	
on the property in	
connection with waste	
treatment or waste	
disposal?	New?: No UNK YES
9. Is there currently, or to the	New!. Go ONK 1ES
best of your knowledge	Past?: 10 UNK YES
has there been previously,	
any areas of stained soil on	
the property?	New?: NO UNK YES
10. Are there currently, or to the best of your knowledge	
have there been	Past?: (NO UNK YES
previously, any registered	_
or unregistered storage	
tanks (above or	
underground) located on	·
the property?	
the property:	

11. Are there currently, or to	New?: NOUNK YES
the best of your knowledge	Past?: NO UNK YES
have there been	Past: NO UNK YES
previously, any vent pipes,	
fill pipes, or access ways	
indicating a fill pipe	
protruding from the	
ground on the property or	
adjacent to any structure	
located on the property?	
12. Are there currently, or to	New?: NO UNK YES
the best of your knowledge	Past?: (NO UNK YES
have there been	Taskii kiig orine Tab
previously, any flooring,	
drains, or walls located	
within the facility that are	
stained by substances	
other than water or are	
emitting foul odors?	√A
13. If the property is served by	NO UNK YES
a private well or non-	
public water system, have	
contaminants been	
identified in the well or	
system that exceed	
guidelines applicable to	
the water system or has the	
well been designated as	
contaminated by any	
government environment/health	
agency?  14. Does the owner or	(NØ UNK YES
occupant of the property	0
have any knowledge of	
environmental liens or	
governmental notification	
relating to past or	
recurrent violations of	
environmental laws with	
respect to the property or	
any facility located on the	
property?	
F11.	

15. Has the owner or occupant of the property been informed of the past or current existence of hazardous substances or petroleum products or	
informed of the past or current existence of hazardous substances or	
current existence of hazardous substances or	
hazardous substances or	
petroleum products or	
1	
environmental violations	
with respect to the	
property or any facility	
located on the property?	
16. Does the owner or NO UNK YES	
occupant of the property	
have any knowledge of	
any environmental site	
assessment of the property	
or facility that indicated	
the presence of hazardous	
substances or petroleum	
products on, or	
contamination of, the	
property or recommended	
further assessment of the	
property?	
17. Does the owner or NO UNK YES	
occupant of the property	ľ
know of any past,	
threatened, or pending	ł
lawsuits or administrative	
proceedings concerning a	
release or threatened	
release of any hazardous	
substance or petroleum	
products involving the	
property by any owner or	
occupant of the property?	
18. Does the property (NO UNK YES	
discharge waste water on	
or adjacent to the property	
other than storm water into	
a sanitary sewer system?	

19. To the best of your	MO UNK YES	
knowledge, have any	)	1
hazardous substances or		
petroleum products,		
unidentified waste		
materials, tires, automotive		}
or industrial batteries or		
any other waste materials		}
been dumped above grade,		
buried, and/or burned on		
the property?	$\sim$	
20. Is there a transformer,	NO UNK YES	
capacitor, or any hydraulic	<b>O</b>	
equipment for which there		
are any records indicating		
the presence of PCBs?		

21. How do you currently use the property and how have you used the property in the past (please be specific).

Hotel hospitality business.

22. What is your understanding of how the property was used before your ownership/occupancy?

Htel hospitality bismess

PAGE 08/08

#### **ENVIRONMENTAL QUESTIONAIRE**

I hereby certify that to the best of my knowledge all of the information provided in this environmental questionaire is true and correct.

Signature: <u>Ilaha latel</u>
Print Name/Address: USHA PATEL / 17674 VILLAGE DRIVE PLYNOUTH, CA 95669
Phone: (209) 245 4491
Date complete: 10/23/08
Relation to property: owneroperator manager tenant

# PROPERTY OWNER QUESTIONAIRE FOR APN 08-110-009 (137.78 ACRES)

PROPERTY OWNER: RON MATULICH

October 7, 2003

To: Ron Matulich (Property Owner APN 08-110-009) (Parcel 1)

**RE: Phase I Environmental Site Assessment for APNs** 010-20-03 (0.64 acres), 010-20-04 (2.68 acres), 010-20-06 (1.65 acres), 010-20-07 (1.19 acres), 010-20-08 (0.53 acres), 010-20-09 (0.81 acres), 010-20-10 (1.56 acres), 010-20-11 (1.22 acres), 08-011-026 (60 acres), 08-110-022 (7.86 acres), and 08-110-009 (137.78 acres).

#### Dear Sir/Madam:

You have been identified as the one most knowledgeable of the history of the indicated property(s). Please complete the questionnaire below with regard to the indicated property and Assessor's Parcel Number(s) (APN). You are being asked to provide this information and insight to assist in the preparation of an environmental site assessment for this property. Please provide as much information as you can to assist in this effort and feel free to attach extra sheets/reports if the space provided is insufficient.

Please return the completed form to:

Analytical Environmental Services Attn: Pete Connelly 2021 "N" Street, Suite 200 Sacramento, CA 95814

Telephone (916) 447-3479 Fax (916) 447-1665

Thank you for your help and cooperation.

 Is the property or any adjoining property currently used for industrial purposes? Property: NOUNK YES

Adjoining: NOUNK YES

2. To the best of your knowledge, has the property or any adjoining property been used for industrial purposes in the past?

Property: NO UNK YES > 1 1

YES MINZING

ny adjoining Adjoining: NO UNK YES

3. Is the property or any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

Property: NOUNK YES

Adjoining: WOUNK YES

4. To the best of your knowledge, has the property or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

Property: NO UNK YES

Adjoining: NOUNK YES

5. Has fill dirt been brought onto the property that originated from a contaminated site or that is of an unknown origin? (NO)UNK YES

6. Are there currently, or to the best of your knowledge have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than five gallons (19 liters) in the aggregate, stored on or used at the property or at the facility?

New?: NOUNK YES
Past?: (NO UNK YES

7. Are there currently, or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon [208 liters]) or sacks of chemicals located on the property or at the facility?

New?: NO UNK YES Past?: NO UNK YES

8. Are there currently, or to the best of your knowledge have there been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?

New NOUNK YES Past?: NOUNK YES

9. Is there currently, or to the best of your knowledge has there been previously, any areas of stained soil on the property? New? NO UNK YES
Past? NO UNK YES

10. Are there currently, or to the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the property?

New?: NO UNK YES
Past?: NO UNK YES

11. Are there currently, or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?

New?: NOUNK YES
Past?: (NO UNK YES

12. Are there currently, or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?

New?: NO JINK YES Past?: NO JINK YES

13. If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environment/health agency?

NO JINK YES

- 14. Does the owner or occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?
- NO UNK YES

15. Has the owner or occupant of the property been informed of the past or current existence of hazardous substances or petroleum products or environmental violations with respect to the property or any facility located on the property?

NO UNK YES

16. Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?

( NO UNK YES

- 17. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?
- NO UNK YES

NO UNK YES

- 18. Does the property discharge waste water on or adjacent to the property other than storm water into a sanitary sewer system?
- NO UNK YES
- 19. To the best of your knowledge, have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried, and/or burned on the property?
- NO UNK YES
- 20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?

21. How do you currently use the property and how have you used the property in the past (please be specific).
DRY PASTURE
22. What is your understanding of how the property was used before your ownership/occupancy?
ownership/occupancy?  DRY/AND PASTURE
/
Completed by: Smald The Manual
Phone: 209-245-6656
Date completed: 10 - 07 - 03
Relation to property: owner operator manager tenan

PROPERTY OWNER QUESTIONAIRE FOR APNS 10-200-006, 10-200-007, 10-200-008, 10-200-009, 10-200-010, AND 10-200-011 (PARCELS 6, 7, 8, 9, 10, AND 11)

PROPERTY OWNER: NORMAN WHEELER

October 28, 2003

Property Owner

**RE: Phase I Environmental Site Assessment for APN**) 010-20-06 (1.65 acres), 010-20-007 (1.19 acres), 010-20-008 (0.53 acres), 010-20-009 (0.81 acres), 010-20-010 (1.56 acres), and 010-20-011.

Dear Sir/Madam:

You have been identified as the one most knowledgeable of the history of the indicated property(s). Please complete the questionnaire below with regard to the indicated property and Assessor's Parcel Number(s) (APN). You are being asked to provide this information and insight to assist in the preparation of an environmental site assessment for this property. Please provide as much information as you can to assist in this effort and feel free to attach extra sheets/reports if the space provided is insufficient.

Please return the completed form to:

Analytical Environmental Services Attn: Pete Connelly 2021 "N" Street, Suite 200 Sacramento, CA 95814

Telephone (916) 447-3479 Fax (916) 447-1665

Thank you for your help and cooperation.

 Is the property or any adjoining property currently used for industrial purposes? Property: WUNK YES

Adjoining: NO UNK YES

Shanno Sheugelock Inn

2. To the best of your knowledge, has the property or any adjoining property been used for industrial purposes in the past?

Property: NOUNK YES

Adjoining: NOUNK YES

3. Is the property or any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

Property: WO'UNK YES

Adjoining NOUNK YES

4. To the best of your knowledge, has the property or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

Property: WOUNK YES

Adjoining: NO UNK YES

5. Has fill dirt been brought onto the property that originated from a contaminated site or that is of an unknown origin?

NOUNK YES

6. Are there currently, or to the best of your knowledge have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than five gallons (19 liters) in the aggregate, stored on or used at the property or at the facility?

New? NO UNK YES
Past?: NO UNK YES

7. Are there currently, or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon [208 liters]) or sacks of chemicals located on the property or at the facility?

New?: NO UNK YES
Past?: NO UNK YES

8. Are there currently, or to the best of your knowledge have there been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?

New?: New?: YES

Past?: NO UNK YES

9. Is there currently, or to the best of your knowledge has there been previously, any areas of stained soil on the property? New?: NO UNK YES

Past?: NOUNK YES

10. Are there currently, or to the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the property? New?: NOUNK YES

Past?: NOUNK YES

11. Are there currently, or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?

New?: NO UNK YES

Past?: NOUNK YES

12. Are there currently, or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?

New?: NO WINK YES

Past?: NO UNK YES

13. If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environment/health agency?

NO UNK YES

Well on parcel 100-200-007 Is not suited for druking hater

- 14. Does the owner or occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?
- NO UNK YES

NOUNK YES

15. Has the owner or occupant of the property been informed of the past or current existence of hazardous substances or petroleum products or environmental violations with respect to the property or any facility located on the property?

NO UNK YES

16. Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?

- 17. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?
- MOUNK YES

- 18. Does the property discharge waste water on or adjacent to the property other than storm water into a sanitary sewer system?
- NO UNK YES
- 19. To the best of your knowledge, have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried, and/or burned on the property?
- NO UNK YES

20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs? NO DNK YES

21.	How do you currently use the property and how have you used the property in the
	past (please be specific).

Parcels 8,7, and 10 are unchainlyped.
Parcels 8 and 9 developed residential.

22. What is your understanding of how the property was used before your ownership/occupancy?

Temporary 6142145 of Cathle.

Completed by: Rte Councily AES Via phone Interview with Norman Wheeler Phone: 10/28/07 2:09-2-67-5772

Date completed: 10/28/03

Relation to property: \_\_\_\_\_ owner \_\_\_\_ operator \_\_\_\_\_ manager \_\_\_\_\_ tenant

# PROPERTY OWNER QUESTIONAIRE FOR APNS 10-200-003 AND 10-200-004 (0.64 AND 2.68 ACRES)

PROPERTY OWNER: USHA PATEL

October 28, 2003

Property Owner

RE: Phase I Environmental Site Assessment for APN ) 010-20-06 (1.65 acres), 010-20-07 (1.19 acres), 010-20-08 (0.53 acres), 010-20-09 (0.81 acres), 010-20-10 (1.56 acres).

Dear Sir/Madam:

٠-١

You have been identified as the one most knowledgeable of the history of the indicated property(s). Please complete the questionnaire below with regard to the indicated property and Assessor's Parcel Number(s) (APN). You are being asked to provide this information and insight to assist in the preparation of an environmental site assessment for this property. Please provide as much information as you can to assist in this effort and feel free to attach extra sheets/reports if the space provided is insufficient.

Please return the completed form to:

Environmental Science Associates Atm: Pete Connelly 2021 "N" Street, Suite 200 Sacramento, CA 95814

Telephone (916) 447-3479 Fax (916) 447-1665

Thank you for your help and cooperation.

 Is the property or any adjoining property currently used for industrial purposes? Property: NO JNK YES
Adjoining: NO JNK YES

2. To the best of your knowledge, has the property or any adjoining property been used for industrial purposes in the past? Property: NOUNK YES
Adjoining: NOUNK YES

3. Is the property or any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

Property: NO UNK YES

Adjoining: NO UNK YES

Texaco

4. To the best of your knowledge, has the property or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

Property: NOUNK YES

Adjoining: NO UNK YES

Texaco

5. Has fill dirt been brought onto the property that originated from a contaminated site or that is of an unknown origin? NOUNK YES

6. Are there currently, or to the best of your knowledge have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than five gallons (19 liters) in the aggregate, stored on or used at the property or at the facility?

New?:(NO)UNK YES
Past?:(NO)UNK YES

7. Are there currently, or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon [208 liters]) or sacks of chemicals located on the property or at the facility?

New? NO UNK YES
Past? NO UNK YES

8. Are there currently, or to the best of your knowledge have there been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?

New?:(NO UNK YES Past?: (NO UNK YES

9. Is there currently, or to the best of your knowledge has there been previously, any areas of stained soil on the property? New?: (NO UNK YES Past?: (NO UNK YES 10. Are there currently, or to the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the property? New?: NOUNK YES
Past?: NOUNK YES

11. Are there currently, or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?

New? NO UNK YES
Past?: (NO)UNK YES

12. Are there currently, or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?

New?:(NO UNK YES Past?:(NO UNK YES

13. If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environment/health agency?

NO UNK YES

- 14. Does the owner or occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?
- 15. Has the owner or occupant of the property been informed of the past or current existence of hazardous substances or petroleum products or environmental violations with respect to the property or any facility located on the property?
- 16. Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?



(NO)UNK YES

NO)UNK YES

17. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?

NO UNK YES

NO UNK YES

18. Does the property
discharge waste water on
or adjacent to the property
other than storm water into
a sanitary sewer system?

(no)unk yes

19. To the best of your knowledge, have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried, and/or burned on the property?

(NO UNK YES

20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?

## APPENDIX F

RESUMES



#### DAVID ZWEIG, P.E.

Principal Engineer

David Zweig, a Civil Engineer and graduate from UC Berkley, has 15 years experience in Environmental Impact Reporting, Phase I and Phase II Site Assessments, Water Permitting and Regulatory Compliance, and Project Management. Prior to forming AES, Mr. Zweig was the Sacramento Office Manager for Environmental Science Associates. He led ESA's Engineering group in the areas of environmental analysis; hazardous materials; water project permitting and regulatory compliance; water quality studies, water rights; and public infrastructure project coordination. Mr. Zweig has provided technical oversight and completed numerous Phase I and Phase II hazardous materials investigations for public agencies and private parties throughout California and the U.S.

REGISTRATION

AND LICENSES California Professional Engineer

Washington Professional Engineer

California Department of Health Services Water Treatment Plant Operator

**EDUCATION** University of California, Berkeley

Bachelor of Science in Civil Engineering Degree

#### REPRESENTATIVE

**PROJECTS** 

- Defense Distribution Region West Sharpe Depot Effluent and Receiving Water Quality Assessment, Lathrop, California. Under contract to the US Army Corps of Engineers, prepared an ERWQA for the depot's wastewater treatment plant effluent discharge. Effluent is treated at a secondary facility onsite, and discharged into an irrigation ditch that is tributary to French Camp Slough. Water quality concerns associated with the implementation of the Inland Surface Water Plan prompted the Regional Water Quality Control Board to require an ERWQA as a condition in the plant's Waste Discharge Requirements. Based on a limited number of lab tests, a work plan was prepared for the ERWQA to assess the impact of continued effluent discharges on the receiving water and possibly lead to treatment process and/or operational modifications.
- Sacramento Municipal Utilitles District Phase I and II Environmental Assessments. Performed Phase I and Phase II environmental site assessments on two cogeneration plant sites. The assessments consisted of records searches, interviews with representatives from regulatory agencies, field reconnaissance, sampling of surface soils, laboratory testing, and analysis of data. The assessments resulted in recommendations regarding the need for additional subsurface investigations and the risks associated with disposing of soil from the sites.

- City of Willits Sanitary Survey, Mendocino County. Managed the preparation of a watershed sanitary survey for the City Water Department for submission to the Department of Health Services to comply with the California Surface Water Treatment Regulation. In accordance with AWWA guidelines, the survey identifies potential contaminant sources within the watershed, and suggests methods for effectively managing the watershed. Potential contaminant sources within the 3,200-acre watershed include septic systems, mining, and a police shooting range.
- Carmichael Water District Bajamont Way Phase I Environmental Site Assessment and Disposal Area Preliminary Assessment. Performed a Phase I environmental assessment on the District's Corporation Yard site. The assessment consisted of a records search, interviews with representatives from regulatory agencies, field reconnaissance, sampling of surface soils, laboratory testing, and analysis of data. The assessment resulted in recommendations regarding the need for additional subsurface investigations and the risks associated with disposing of soil from the site. A preliminary assessment of a spoils disposal area at the site was also performed.
- City of San Leandro Groundwater Monitoring Program. Developed and implemented a groundwater monitoring program for the City's Dredged Material Management Site, adjacent to San Francisco Bay. The site is used to dewater dredged material from the City's marina prior to land disposal. As a condition of the City's NPDES permit, ESA developed and implemented a groundwater investigation that included the installation and quarterly sampling of six monitoring wells. Four quarterly reports were prepared and submitted to the Regional Water Quality Control Board.
- Auto Park Treatment Tank Relocation Engineering, Environmental Review, and Land Acquisition. Relocated Calgon activated carbon adsorption system, consisting of two tanks each with 20,000 pounds of granular activated carbon. Project included installing water and sewer pipelines, booster pump station, and electronic controls, so as to allow continued use of a 1,000+ gpm well. The treatment system had been temporarily sited as an emergency measure to treat PCE contamination discovered in water from an existing well. Community concerns about visual impacts necessitated relocation.
- Strasbaugh Well Nitrate Treatment Engineering Studies. Studied the feasibility of providing nitrate removal for a contaminated groundwater source. Proven groundwater supplies were unusable because of nitrate contamination in the area. The contamination was the result of decades of intensive agricultural activity. An ion exchange process designed to remove nitrates from well water, and supporting infrastructure, was evaluated.

- American I Cogeneration Facility Spill Prevention Control and Countermeasure Plan. In cooperation with Sage Environmental, prepared a SPCCP for a cogeneration facility in King City. The American I facility uses a gas turbine cogeneration unit to generate electricity and provide steam and hot water to a neighboring food processing plant. Because of the large quantities of fuels and other chemicals stored at the facility, a SPCCP was required by the Regional Water Quality Control Board (RWQCB). In requiring the SPCCP, the RWQCB was implementing the regulations contained in Title 40 of the Code of Federal Regulations, Part 112. The SPCCP consists of an inventory of storage tanks and containment systems at the facility and recommendations to prevent hazardous materials from being released into nearby surface waters.
- Defense Distribution Region West Sharpe Depot Storm Water Pollution Prevention Plan, Lathrop, California. Under contract to the US Army Corps of Engineers, prepared a SWPPP for the 300 acre Sharpe Depot. The depot receives, warehouses, and ships out military supplies and equipment. Shipments of bulk chemicals, mechanical parts, weapons, ammunition, and supplies arrive at the depot by air, rail, and truck. Previous spills at the depot have caused groundwater contamination and required remedial actions. To comply with Regional Water Quality Control Board NPDES permit requirements, a SWPPP was prepared that inventoried possible sources of stormwater pollution, and recommended measures to prevent those pollutants from entering storm water.

### PROFESSIONAL AFFILIATIONS

Association of California Water Agencies American Water Works Association

American Society of Civil Engineers California Water Reuse Association

State Water Resources Control Board Inland Surface Water Plan Task Force, 1994-

Sacramento Metropolitan Water Authority Board of Directors, 1995-1996

Citrus Heights Water District Board of Directors, 1994-1997 Pismo Beach Public Works Commission, Vice President, 1992-93



#### PETER J. CONNELLY, REA I (#30018)

#### Environmental Scientist

Mr. Connelly is an environmental scientist with experience in ecological and human health risk assessment and numerous Phase I Environmental Site Assessments (ESAs). Mr Connelly also has over five years experience in conducting pollution characterization and Phase I ESAs. He has professional level experience in site assessments for the purposes of conducting screening level ecological and human health risk assessments and groundwater quality assessments. Additionally, Pete has experience in preparing Phase I ESAs using the American Society of Testing Materials (ASTM) Standard Practice E1527-00 and ASTM Standard 1527-05. Mr Connelly also has experience in writing sampling and analysis plans (SAPs), storm water pollution prevention plans (SWPPPs), and conducting groundwater and surface water monitoring. As an AES associate, Mr. Connelly has prepared numerous CEQA and NEPA documents, Phase I ESAs, SAPs, and SWPPPs for Tribal and private clients. Mr. Connelly has authored over 25 Phase I ESAs of which a partial list is provided below.

#### **EDUCATION**

University of California, Davis

BACHELOR OF SCIENCE IN ENVIRONMENTAL TOXICOLOGY (2001)

#### PROFESSIONAL EXPERIENCE

#### Phase I Environmental Site Assessment Partial List

- Overnite Transportation: 10000 Waterman Road Phase I ESA: The ESA involved an approximate 54.7 acre site located in Elk Grove, California. Deputy Project Manager and primary author.
- MJL Properties: 3516 Fair Oaks Boulevard Phase I ESA. This Phase I involved an approximate 0.36 acre parcel with a pre-existing retail commercial building located in Sacramento California. Deputy Project Manager and primary author.
- Auburn Rancheria Parcels Phase I ESA. The project consists of the transfer of 2.84 acres in Placer County, California from fee to trust status. The proposed use for the site includes a school and administration office space for the Tribe. Primary author for the ESA in coordination with Tribal members and governmental agencies.
- Auburn Rancheria Phase I ESA: Sunset Athens Connector Road. The project consists of a road right-of-way through approximately 21-acres on undeveloped land. The United Auburn Indian Community (UAIC) proposes to construct a public road, "Athens Road," to connect Athens Avenue to Sunset

Boulevard in Placer County, CA. Primary author for the ESA in coordination with Tribal members and governmental agencies.

- Auburn Rancheria: Phase I ESA 1100-Acre Residential Site. The project consists of the transfer from fee to trust of 1100 acres located near the town of Sheridan in Placer County, California. Primary author for the ESA in coordination with Tribal members and governmental agencies.
- Cache Creek Casino/Capay Hills Golf Course Phase I ESA. The project consists of the expansion of the existing gaming facility and construction of a golf course on the Rumsey Rancheria.
- Timbisha Shoshone Phase I ESA. The ESA was a supporting document for the transfer from fee to trust 58.08-acres located in the incorporated City of Hesperia in San Bernardino County, California. Primary author.
- Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians Phase I ESA. One parcel of approximately the 98.2 ± acres in size located in Lane County Oregon. Primary author.
- Ione Band of Miwok Indians 228.04-acres Fee to Trust Project Phase I ESA. The ESA consisted of twelve parcels located in Amador County, California. Primary author.
- Scotts Valley, 155 Parr Boulevard Phase I ESA: The project consists of the transfer from fee to trust two parcels located in unincorporated Contra Costa County, immediately adjacent to the City of Richmond, California. Primary author.
- Santa Ynez Band of Chumash Indians: Phase I ESA Parker Property. The ESA involved an area of approximately 748-acres located in Santa Barbara County, California. Deputy project manager and primary author.
- Santa Ynez Band of Chumash Indians: Phase I ESA Federico's Restaurant. The ESA involved a 15,000 square foot restaurant located in Santa Barbara County, California. Deputy project manager and primary author.
- Santa Ynez Band of Chumash Indians: Phase I ESA Royal Scandinavian Inn. The ESA involved an approximate 79,000 square foot hotel and restaurant located in Santa Barbara County, California. Deputy Project Manager and primary author.
- Torres Martinez Phase I ESA: The ESA involved the assessment of an area approximately 20-acres in size to support the construction of a truck stop and gas station located on Tribal land off State Highway 86, approximately 45 miles south of Palm Springs, CA. Primary author.

- North Fork Rancheria Phase I ESA: The ESA involved the assessment of the North Fork Rancheria, an area approximately 80-acres in size located approximately 10 miles south of the City of Oakhurst, in an unincorporated area of Madera County, CA. Primary author.
- North Fork Casino Phase I ESA: This ESA involved the assessment of 305 acres of agricultural land with associated residence, barns and outbuildings located in Madera County, approximately 25 miles north of the City of Fresno, CA. Primary author.
- L Street Phase I ESA. This ESA involved an approximate 0.22 acre parcel with a pre-existing 8,800 square foot commercial building with dental office located in Sacramento, California. Deputy project manager and primary author.
- **2000 O Street Phase I ESA.** This ESA involved three parcels of which one had an approximate 28,500 square foot medical and commercial building located in Sacramento, California. Deputy project manager and primary author.
- Fearrian Property Phase I ESA. This ESA involved the assessment of approximately 125 acres of pasture and wooded riparian area located in Humbolt County, California. Pre-existing on the Subject Property was a residence, outbuildings, barn and corral area. Deputy project manager and primary author.
- Lytton Windsor Property Phase I ESA. This ESA involved the assessment of approximately 50.46 acres of undeveloped wooded land located on outside the town of Windsor in Sonoma County, California. Deputy project manager and primary author.
- Sonoma Land Acquisition Phase I ESA. This ESA involved the assessment of approximately 5.0 acres of vacant agricultural land approximately 3.5 miles south of the City of Santa Rosa, CA. Deputy project manager and primary author.
- Elden Property Phase I ESA. The assessment covered approximately 215 acres of vacant land located in Brooks, CA. Deputy project manager and primary author.
- Sugarloaf Ranch Phase I ESA. This Phase I covered five legal parcels totaling approximately 836 acres of rural residential, native and non-native grassland, steep oak savannah, and riparian areas adjacent to Cache Creek. The Subject Property is located outside Brooks, CA approximately ten miles west of the City of Woodland, CA.

# APPENDIX G SOIL SAMPLING RESULTS

Table 1

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Composite Sample ID Numbers

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Sample Constituents WR-1 WR-2 WR-3 W	WR-1	WR-2	WR-3	WR.4	WR-5	WR-6	WR.7	WR-8	WR:9	R.4 WR.5 WR.6 WR.7 WR.8 WR.9 WR.10	BG-1 BG-2	1 1564.50	BG-3	BG-3 Commercial PRG	Residential PRG
Analyte															
Antimony (ppm)	QN	ND	QN	ND	ΩN	ND	3.3	ND	ND	2.8	ND	ND	QN	410	31
Arsenic (ppm)	220	180	23	280	190	270	32	21	18	110	9.3	10	∞	1.622*	0.39*
8arium (ppm)	75	41	62	160	63	92	7.1	54	91	110	82	100	120	190,000	15,000
8eryllium (ppm)	2	9	Q.	Q	S	Ω	S	g	2	₽ N	Q	ND ND	운	1,900	150
Cadmium (ppm)	0.81	0.65	0.51	0.86	0.86	1	S	Ω	Q.	N N	Q.	QN.	2	810	70
Chromium (ppm)	9.3	10	16	12	13	14	16	15	20	16	35	32	25	1400*	230*
Cobalt (ppm)	11	12	12	12	11	13	9.2	8.6	7.1	12	12	13	9	1,900	150
Copper (ppm)	49	25	48	63	51	22	S	40	45	51	35	37	24	41,000	3,100
Lead (ppm)	35	20	13	14	19	25	48	14	56	17	14	16	9	AN	400
Mercury (ppm)	0.19	0.19	0.11	0.22	0.25	0.22	0.14	0.19	0.16	0.19	QN	2	呈	28	6.7
Molybdenum (ppm)	3.9	4.8	3.2	3.1	3.2	3.4	3.5	2.3	3.3	2.8	2.8	2.8	1.9	5,100	390
Nickel (ppm)	78	31	35	36	33	36	34	26	31	32	42	43	56	1,600	20,000
Selenium (ppm)	S	QN	QN	QN	Q	QN	Q.	2	Q	S	Q	S	₽	5,100	390
Silver (ppm)	2.0	1.9	1.5	1.7	1.4	1.8	1.6	1.0	1.5	1.7	1.8	1.9	1.5	5,100	390
Thallium (ppm)	9	2	g	9	Q	QN	ΩN	N <sub>D</sub>	S	9	QN	Ω	9	99	5.1
Vanadium (ppm)	8.8	8.2	14	1	7	13	15	14	21	15	29	27	78	7,200	550
Zinc (ppm)	110	75	26	89	110	120	110	100	96	110	100	100	9/	310,000	23,000
NOA (Naturally Occuring Asbestos)	g Asbesto	(\$(													
Asbestos Fibers	2	Q	2	9	QN	S	ΩN	2	ΔN	Q.	9	9	2	CARB	CARB Method 435
enacheenve ekolikai blod ai beka amet * :aekol	: hold ::	o openio	T C C C C C C C C C C C C C C C C C C C	Pro oct	C of the DDC										

Notes: \* Items noted in bold indicate exceedances of the PRG

United States Environmetral Protection Agency Preliminary Remediation Goals (PRG)

<sup>&</sup>lt;sup>2</sup> California Modified PRG

<sup>&</sup>lt;sup>3</sup> ppm = part per million (mg/kg) <sup>4</sup> ND = Not detected <sup>5</sup>California Air Resources Board Method 435 asbestos fibers is reported in persent asbestos present in bulk samples

#### Study of State Soil Arsenic Regulations

Conducted by the Association for the Environmental Health of Soils 150 Fearing Street, Amherst, MA 01002

For Questions Contact: Linda Baldwin or Heather McCreary

> Tel: 413-549-5170 Fax: 413-549-0579 email: linda@aehs.com heather@aehs.com

Objective: The objective of the survey is to determine how arsenic in soil is regulated nationally. The following series of questions were developed to help define how soil screening thresholds and remedial action levels are established, and how risk assessment is used in the process.

As of December 1, 1998 a total of 34 (out of 50) states had responded. These include: Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Denver, Florida, Hawaii, Illinois, Iowa, Kansas, Kentucky, Maine, Maryland, Michigan, Mississippi, Missouri, Montana, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Virginia, Washington, Wyoming.

#### Section I - General Information

- 2a. What is the range of naturally occurring background concentrations for soil arsenic in your state? (see Table 2)
- How was this background concentration established? (see Table 2) 2b.
- 2c. How does your state use background concentration in soil criteria? (see Table 2)
- 2d. Does your state consider adjacent property backgrounds, even if above naturally occurring background, in enforcing cleanup levels?

Yes 21 No Don't Know 4

Yes - AL, AR, CA, DE, FL, IL, HI<sup>2</sup>, KY<sup>3</sup>, ME, MD, MI<sup>4</sup>, MS, MO, NJ<sup>5</sup>, NY, ND, OK, SC, TX, WA, WY

No - AK, AZ, CO<sup>1</sup>, CT, KS, NH, OH, OR, VA

Don't know - IA, MT, NM, TN

Notes- Colorado: Primary consideration is whether adjacent property was impacted by Waste or not.

Hawaii: Sometimes.2

Kentucky: To determine levels that must be remediated.3

Michigan: Sometimes, but only if it is not attributable to a release.4

New Jersey: Adjacent property levels are considered only if they represent natural background.<sup>5</sup>

Table 2

State	Range 2a.	Established 2h.	Use 2c.
AK	17.3 mg/kg	Geochemical Atlas of Alaska	Compare the statistical mean conc for each Hazd substance/compare the max hazd substance conc detected.
AL	.1 - 10	US Geological Survey 1984	RCRA clean closure: to indicate disposal activities
AZ	1.4 - 97 mg/kg	USGS sampling of surficial soils in Boerngen & Shacklette, 1981, USGS Open-file Report 81-197.	Naturally occurring contaminate levels can be used as cleanup levels.
AR	1.1 - 16.7 ppm	Regional numbers	Considered on site specific basis after screening process.
CA	5-40(SF Bay Area) 5-20(southern cal.) thousands(gold country)	Background levels of trace elements in Southern California soils, Contract #89-T0081, Cal. EPA/Protocol for determining background conc of metals in soils at Lawrence Berkeley National Laboratory, 1995.	Realistic standard in setting cleanup levels.
СО	4 - 40 ppm	Site-specific data collection	If risk-based clean-up levels fall below background, the background values are used as the clean-up standards
CT	Up to 10 ppm	DEP paper covering New England w/CT data	Criterion for soil cleanup
DE	0.4 mg/kg	From historical site investigations	Risk assessments, remediation standard requirements
FL	0 - 3 mg/kg	Empirically	To modify the SCTL (Soil Concentration Target Limit)
ні	0.93 to 5 mg/kg	The background samples are collected from noncontamina- ted areas or from subsurface of the study areas. Statistical analyses were applied. Further studies are needed to confirm naturally occurring background concentrations.	To establish action levels
1L	0.35 - 24.0 ppm	Survey of data reported to agency during site investigation.	Chemicals may be excluded as chemical of concern for a site by comparison to background and background conc. may be used as remediation objectives.
lA	5 - 10 mg/kg	Approximation based on experience	Informally, no action required when near background levels.
KS	Non detect - <100 mg/kg	Review of data selected from various sites across the state.	As a Tier 1 approach, use background if exceeds 10 <sup>-6</sup> cancer or H.I. = 1.0
KY	0.1 - 10 mg/kg	Based on analyzing samples from across the state which were labeled as "background"	To determine presence or absence of contamination
ME	1 - 28 mg/kg	Based on data available from 5 sites in Maine	Inorganic contaminants present at concentrations greater than soil criteria; background is considered the critical benchmark
MD	No background est.	Not available	No state soil criteria
MI	0.1 - 11.0	Background as conc established through a Ml background soil survey conducted by Waste Management Division.	A background concentration is used as a default cleanup criterion when it is higher than the calculated criteria.
MS	mg/kg 0 - 26 ppm (4 - 10 Avg.)	USGS paper 1270- Elemental Concentration in Soils & Other Surficial Materials	Background concentration can be considered as an alternative cleanup standard.
МО	Not available	Chemical analysis of many soil samples taken during an agriculture soil survey which included soil ehemical characteristic information.	Don't usually set cleanup goals lower than proven background concentrations.
ΜT	Non detect – 100's ppm in geothermie areas.	Via soil testing (mostly XRF).	Take them into account, but use risk based human health numbers as action levels.
NH	0 - 12 mg/kg	From a database of soil samples from playgrounds and background levels at sites that are then used for biosolid applications. The 95th percentile value of the data is used.	Background is used as a cleanup standard when risk based numbers are lower.
NM	.015 - 17.00 mg/kg	Testing done by Sandia Labs	To establish cleanup of contaminated sites.
NJ	0.02 – 350 ppm	DEP background testing and review of sites under DEP oversight	Legislation states that remediation is not to be required below regional natural background levels.
NY	3 - 12 ppm	Site specific data is preferred but literature data is used	For inorganic materials, background is used as the starting point in determining the soil cleanup level.
ND	<0.1 - 34 mg/kg	Use of documented studies by USGS in Region	Comparative background to established contamination
ОН	Non detect - 30 ppm	Using site data from several RCRA facilities that established background conc. for their sites	Setting up cleanup standards for metals only.
OK	0 - 32 mg/kg	USGS Soil survey and site specific background determinations for a variety of sites.	Sometimes criteria for no further action – sometimes for screening.
OR	1 - 10 ppm	Limited survey of cleanup sites	Natural background is considered to be protective of human health & the environnment. Cleanup to background concentration, if higher than risk-based concentration.

#### Table 2 (continued)

State	Range 2a.	Established 2b.	Use 2c.
SC	2 - 11 mg/kg	Average of sites sampled statewide	To determine clean-up levels in most cases.
TN	0.1 - 120 ppm	TN Division of Superfund - from EPA or state site inspections.	Used to evaluate whether concentrations at a site are within natural background. Not all Divs. use background
TX	1 18 ppm	US Geological Survey	It can be used to screen contaminants from a risk assessment; it can be used as a cleanup level.
VA	Varies from site to site	By sampling	Not available
WA	0.5 - 28.6 mg/kg	Background soil survey	Background concentration of 20 mg/kg is used as the cleanup standard if the human health value is below background. 1.67 mg/kg for human health
WY	Not available	Not available	Site specific only - won't allow use of regional background

#### 3a. What are the sources of soil arsenic at contaminated INDUSTRIAL sites?

Source	States Reporting Sources
Mining wastes	AK, AL, AR, AZ, CA(>100 sites), CO(>25 sites), FL, KY, ME, MD, MT(>50 sites), OH(2 sites), OK(2 sites), OR, SC, TN, WA, WY
Coal dust	AL, AZ, DE, FL, KS(20-25 manufactured eoal gas sites), KY, MD, NH(>2 sites), OR, SC, TN, WA
Coal gasification facility	FL(23 sites), ND(1 site)
Fly ash	AK, AL, AR, AZ, FL, KY, ME, OH(3 sites), SC, TN, TX, WA
Foundries	KY
Glass manufacturing	FL(1 site), IL(1 site)
Hazardous Waste	OH ————————————————————————————————————
Treatment	
Highway recycling	ND(1 site)
facility	
Phosphate fertilizers	AL, AR, AZ, DE, FL, KS(at least 1 site), MS, TN, TX, WA
Treated wood	AK, AL(5 sites), AR, AZ, CA(>100 sites), CO(~5 sites), DE, FL, HI, IL(2 sites), ME, MD, MS, MO(at least 1 site), NH(>1 site), NY, OH(4 sites), OK (10-15 sites), OR, SC, TN, TX, WA, WY
Pesticides, herbicides,	AL(3 sites), AR, AZ, CA(>1000 sites), CO(~5 sites), FL, HI, IL(several sites), ME, MD, MS,
defoliants, ripening	MO(>3 sites), NH(>2 apple orchard sites), NJ, NY, OH(2 sites), OK, OR, TN, TX, WA
agent	
Potliners (AL	AL(2 sites)
production)	
Recovered screened	FL, MD, NH(>3 sites), OR, TN, WA
material (RSMs) or other	
backfilled materials	
Land applied domestic	AL, FL, KY, OR, SC, TN, TX, WA
wastewater sludge	
Land applied industrial	AL, FL, MS, OR, SC, TN, TX, WA
wastewater sludge	<u> </u>
Landfilled	IA(2 sites)
pharmaceutical waste &	
wastewater sludge	
Lead-acid battery	FL
recycling	
Livestock dip vats	AL, AR, FL, MS, OK, OR, TN, TX, WA
Metal finishing	OH
Metal plates	KY
Paint shops	OH
Raw materials assoc.	NJ
with manufacturing	
processes	\
Sand and gravel	MD
facilities/operations	A.V.
Shot rock	AK OVOZ i A NEW
Smelters	OK(17 sites), TX
Steel production waste	AL(2 sites), FL(3 sites)
Waste management facility	NH(1 site)

Note: Industrial site source data not available for - CT, MI, NM and VA.

## 3b. What ranges of soil arsenic contamination are found in your state's Industrial sites?

Range	States that reported
<1 mg/kg	AR, FL, KY, MD, MT, NJ, ND, OH, TN, TX
1-10 mg/kg	AR, AZ, DE, FL, IL, IA, KY, MD, MS, MT, NJ, ND, OH, OR, TN, TX
10-100 mg/kg	AR, AZ, CA, CO, DE, FL, HI, IL, KY, ME, MD, MS, MT, NH, NJ, ND, OH, OK, OR,
	SC, TN, TX
100-1000 mg/kg	AR, AZ, CA, CO, DE, FL, HI, IL, KY, ME, MD, MS, MT, NJ, ND, OK, OR, SC, TN, TX
>1000 mg/kg	CA, CO, DE, FL, HI, IA, KS, KY, MS, MO, MT, NJ, OR, TN, TX, WA

Note: New York reported – Approx ½ dozen inactive hazardous waste sites have been driven by arsenic contamination with levels in the hundreds and thousands of ppm.

## 4a. What are the sources of soil arsenic at contaminated RESIDENTIAL/RECREATIONAL sites?

Source	States Reporting Sources
Mining wastes	AK, AR, AZ, CA(>1000 sites), CO(>25 sites), MD, MO(at least 2 sites), MT(>50 sites), OH, OK(2
	sites), OR, SC, TN, WA
Coal dust	KS(20-25 manufactured coal gas sites), KY, MD, OR, TN, WA
Fly ash	AK, AZ, FL, OH, TN, WA
Glass manufacturing	IL(1 site)
Phosphate fertilizers	AR, AZ, FL, MS, SC, TN, TX, WA
Treated wood	AK, CA (~20 sites), CO(~5 sites), CT, FL, MD, OK, OR, TN, TX, WA
Pesticides,	AR, AZ, CA(>1000 sites), CO(~5 sites), CT(many sites), FL, HI, KY, MD, NH, ND, NY, OK, TN,
herbicides,	TX, WA
defoliants, ripening	
agent	
Agricultural uses	AZ, CA(>1000 sites), CT(many sites), FL, HI, KY, MS, NH(2 sites), NJ, ND, OR, TX, WA
Right-of-way	AZ, CA(>1000 sites), FL, MS, OR, WA
Manufacturing	OR, TX, WA
Golf course	AZ, FL, NJ, OR, WA
Recovered screened	MD, NH(1 thermally treated site), OR, TN, WA
material (RSMs) or	
other backfilled	
materials	
Land applied	OR, TN, WA
domestic wastewater	
sludge	
Land applied	OR, TN, WA
industrial	
wastewater sludge	
Landfilled	IA(2 sites)
pharmaceutical	
waste & wastewater	
sludge	
Livestock dip vats	FL, OK, OR, TN, WA
Shot rock	AK
Smelters	OK(17 sites), TX, WA
Plating activities	TX

Note: Residential source data not reported for: AL, DE, ME, MI, NM, VA, WY

4b. What ranges of soil arsenic contamination are found in your state's Residential sites?

Range	States that reported
<1 mg/kg	AL, AR, AZ, DE, FL, KS, KY, MD, MS, MT, NJ, ND, OH, TX
1-10 mg/kg	AL, AR, AZ, CA, DE, FL, IA, KS, KY, MD, MS, MT, NJ, ND, OH, OK, OR, SC, TX
10-100 mg/kg	AL, AR, AZ, CA, CO, CT, FL, HI, IL, IA, KS, MD, MS, MO, MT, NH, NJ, ND, OK,
	OR, SC, TN, TX, WA(estimate)
100-1000 mg/kg	CA, CO, FL, MT, ND, OR, TX
>1000 mg/kg	CA, CO, MT, OR, TX, WA

5a. What are the sources of soil arsenic at contaminated AGRICULTURAL sites?

Source	State reporting source
Phosphate fertilizers	AZ, FL, SC, TX, WA
Pesticides	AR, AZ, CA, CT <sup>1</sup> (many sites), FL, HI, KY, MS, NH(2 sites), NJ, ND, TX, WA
Herbicides	AR, AZ, CA, FL, HI, KY, MS, TX, WA
Defoliants	AR, AZ, CA, FL, KY, MS, TX, WA
Ripening Agents	AZ, TX, WA
Land applied domestic	AZ, KY, WA
wastewater sludge	
Land applied industrial	AZ, SC, WA
wastewater sludge	
Landfilled	IA(2 sites)
pharmaceutical waste	
& wastewater sludge	
Livestock dip vats	FL, MS, TX, WA
Mine smelting fallout	MT(>10 sites)

Note: Agricultural sources not reported for: AK, AL, CO, DE, IL, KS, MD, ME, MI, MO, NM, NY, OH, OK, OR, TN, VA, WY

CT1- agricultural sites are not affected by remediation standards

5b. What ranges of soil arsenic contamination are found in your state's Agricultural sites?

Range	States that reported
<1 mg/kg	AZ, KY, MS, MT, ND, TX
1-10 mg/kg	AZ, CA, FL, KY, MS, MT, ND, SC, TX
10-100 mg/kg	AZ, CA, CT, FL, KY, MS, MT, NH, NJ, ND, SC, TX, WA
100-1000 mg/kg	FL, MS, MT, NJ, ND, SC, WA
>1000 mg/kg	MS, MT

#### **SECTION II - REGULATIONS**

#### **Definitions**

Notification level: The level at which the state must be notified.

Action level (soil screen level): The level at which some type of action must be

undertaken (e.g., risk assessment, institutional controls).

Cleanup level: The level to which remediation methods must attain.

6. Does your state have notification levels for soil arsenic?

Yes 4 No 27 Don't Know 3

Yes - AL, DE, NM, SC

No - AK, AR, AZ, CA, CT, FL, HI, IL, IA, KS, KY, MD, MI, MS, MT, NH, NJ, ND,

NY, OH, OK, OR, TN, TX, VA, WA, WY

Don't Know - CO, ME, MO

If yes, please specify what level and give the rationale for it:

State	Area	Level	Rationale
AL	Industrial	5 ppm	TCLP for RCRA at generation
DE	Restricted	61 ppm	Protection of Human health
DE	Non-restricted	2 ppm	Protection of Human health
NM	Industrial	5 mg/L	RCRA reg limit for spills
NM	Residential	5 mg/L	RCRA reg limit for spills
NM	Agricultural	5 mg/L	RCRA reg limit for spille
NM	Recreational	5 mg/L	RCRA reg limit for spills
SC	Industrial	5 ppm	RCRA TCLP limit as hazardous waste

7. Does your state have action levels (i.e. soil screening levels) for soil arsenic?

Yes 23 No 8 Don't know 1

Yes - AK, AL, AR, CA, CO, FL, HI, IL, KS, KY, MD, MI, MS, MO, MT, NH, NJ, ND, OH, OK, OR, SC, TX

No - AZ, CT, IA, ME, NY, VA, WA, WY

Don't Know - NM

#### 7. Continued:

If yes, please specify what level and give the rationale for it:

#### Industrial

State	Level	Rationale	
AL	Background	Or Region 3 guidance RAGS, Region 4 CA guidance	
AR	2.4 ppm	Carcinogenic effects	
CO	4 ppm	Carcinogenic risk at 10 <sup>-6</sup> (Region III screening tables)	
FL	3.7 mg/kg	1.0E-06 acceptable cancer risk level	
HI	22 mg/kg	Based on non-carcinogenic effects; site specific risk assessment using	
		industrial exposure factors may result in higher cleanup values	
IL	3.0 ppm	1.0E-06 acceptable cancer risk level	
KS	29 mg/kg	Threat to groundwater leachate dilution factor = 20	
KY	0.85 mg/kg	Risk - based cleanup	
MD	3.8 mg/kg	USEPA Region III Risk-Based Concentration (RBC), Maryland also considers	
		issues such as mobility, populations exposed, ARARS	
MI	23,000 ppb	Threat to groundwater leachate; based on drinking water criteria	
MO	Il ppm	Any use soil levels. Above this level, institutional controls are required, then	
		levels are based on risk	
MT	500 ppm	Cancer risk (EPA)	
NH	12 ppm	Background	
ИJ	20 ppm	Based on background studies and the 95 <sup>th</sup> percentile of background levels at sites under review	
ND		Above background	
OH	~9.0 mg/kg	Site-specific cleanup standard based on a 1x10 <sup>-5</sup> risk goal and using industrial	
		exposure factors	
OK	20 mg/kg	Related to natural occurance	
OR	3 mg/kg	Risk-based (or natural background if higher)	
SC	3.8 mg/kg	EPA Region III RBC Table	
TX	200 ppm	Health-based policy level; can be lowered due to cross-media concems	

#### 7. Continued:

#### Residential

State	Level	Rationale
AK	0.1 mg/kg	Migration to groundwater
AR	0.38 ppm	Carcinogenic effects
AR	22 ppm	Non-carcinogenic effects
CO	0.4 ppm	Carcinogenic risk at 10 <sup>-6</sup> (region III screening tables)
FL	0.8 ppm	1.0E-06 acceptable cancer risk level using default exposure assumptions
Ш	22 mg/kg	Based on non-carcinogenic effects
IL	0.4 ppm	1.0E-06 Cancer risk
KS	Background or	10 <sup>-5</sup> cancer risk per KAR 28-78-11
	ll mg/kg	
KY	0.14 mg/kg	Risk-based cleanup
MD	0.43 mg/kg	USEPA Region III RBC
MI	6,600 ppb	Protection for human health via long-term soil ingestion and dermal exposure
MS		10 <sup>-6</sup> risk
MO	11 ppm	
MT	250 ppm	Cancer risk (EPA)
NJ	20 ppm	Based on background studies and the 95th percentile of background levels at
		sites under review
ND		Above background
OH	~4.0 mg/kg	Site-specific cleanup standard based on a 1x10 <sup>-5</sup> risk goal using residential
		exposure factors
OK	0.4 mg/kg	From EPA SSL document or natural background for the area
OR	0.4 mg/kg	Risk-based (or natural background if higher)
SC	0.43 mg/kg	EPA Region III RBC Table
TX	20 ppm	Health-based policy level; can be lowered due to cross-media concerns

#### Agricultural

State	Level	Rationale
MD	0.43 mg/kg	USEPA Region III RBC
МО	11 ppm	Any use soil levels. Above this level, institutional controls are required, then levels are based on risk
NJ	20 ppm	Based on background studies and the 95th percentile of background levels at sites under review
OH	~4.0 mg/kg	Site-specific cleanup standard based on a 1x10 <sup>-5</sup> risk goal using residential exposure factors
OR	Site-specific	Risk-based (or natural background if higher)

#### Recreational

State	Level	Rationale
MD	0.43 mg/kg	USEPA Region III RBC
МО	11 ppm	Any use soil levels. Above this level, institutional controls are required, then levels are based on risk
MT	1000 ppm	Cancer risk (EPA)
NJ	20 ppm	Based on background studies and the 95th percentile of background levels at sites under review
OH	~4.0 mg/kg	Site-specific cleanup standard based on a 1x10 <sup>-5</sup> risk goal using residential exposure factors
OR	Site-specific	Risk-based (or natural background if higher)

8. Does your state have specific cleanup levels for soil arsenic?

Yes 21 No 11 Don't know (

Yes- AK, AL, AZ, CT, FL, IL, KS, KY, ME, MI, MO, NH, NJ, NM, NY, OH, OR, SC, TN, TX, WA

No- AR, CA, CO, HI, IA, MD, MS, MT, ND, VA, WY

State	Comment
CO	Cleanup levels are site-specific and based on risk assessment considerations
HI	Site specific based on risk assessment
Ml	The specific cleanup level is dependent upon the pathway that exceeds Ml's Part 201 cleanup criteria
NM	RCRA regulatory limit threshold of 5.0 mg/l
NY	Determination of soil cleanup levels occurs on a site specific basis; the process starts with numerical soil cleanup objectives and ends with a site specific cleanup level after consideration of the alternatives
ОН	Regarding SSLs, we do not have SSLs but do calculate site-specific cleanup standards based on a 1 X 10 <sup>-5</sup> risk goal; usually site-specific background concentrations are used; background standards have very specific criteria
OK	Site-specific
SC	Normally we would require cleanup to background level(s)

8. continued: If yes: a. please specify what level and give the rationale for it:

#### INDUSTRIAL

State	Level	Rationale
AL	Background	(RCRA) or site-specific risk based similar to Superfund RAG and Region 4 Guidance
ΑZ	10 mg/kg	Statewide average background level
CO	100-1000 ppm	Site-specific and based on risk assessment considerations
CT	10 ppm	Background
FL	3.7 mg/kg or site-specific	1 X 10 <sup>-6</sup> acceptable cancer risk level
lL	3.0 ppm	1 X 10 <sup>-6</sup> cancer risk; Tier 1 (baseline) cleanup level, which may be modified by site-specific information and/or exclusion of pathways of exposure
KS	29 mg/kg	Tier 2 number; threat to groundwater, leachate dilution factor = 20
KY	0.85 mg/kg	Risk-based cleanup
ME	30 mg/kg	Direct contact risk to human health
МО	11 ppm	Deed restrictions and/or registry of the site is required if less than residential cleanup (11 ppm) is used
NH	12 ppm	background
NJ	20 ppm	Based on background studies and the 95 <sup>th</sup> percentile of background levels found at sites under review
OR	Site-specific	Risk-based or natural background if higher
TN	16 ppm	We use EPA's proposed RPI Guidance Levels and proposed subpart S Fed. Reg. 7-27, 1990, vol. 55 (only one level for sites – 16 ppm)
WA	200 ppm	Human-health
TX	200 ppm	Health-based policy level; can be lowered due to cross-media concerns

#### 8. continued:

#### RESIDENTIAL

State	Level	Rationale
AK	8 mg/kg (ingestion)	Arctic Zone - based on climate variations throughout state
AK	5 mg/kg (ingestion)	Under 40 inch zone - based on climate variations throughout state
AK	0.1 mg/kg (migration to	Under 40 inch zone - based on climate variations throughout state;
	groundwater)	Over 40 inch zone - based on climate variations throughout state
AK	4 mg/kg (ingestion)	Over 40 inch zone - based on climate variations throughout state
AZ	10 mg/kg	Statewide average background level
CO	40-250 ppm	Site-specific and based on risk assessment considerations
CT	10 ppm	Background
FL	0.8 mg/kg	1 X 10 <sup>-6</sup> acceptable cancer risk level using default exposure
		assumptions
IL	0.4 ppm	1 X 10 <sup>-6</sup> cancer risk; Tier 1 (baseline) cleanup level, which may be
		modified by site-specific information and/or exclusion of pathways of
		exposure
KS	11 mg/kg	Tier 2 number; I X 10 <sup>-5</sup> cancer risk per KAR 28-78-11
KY	0.14 mg/kg	Risk-based cleanup
ME	10 mg/kg	Direct contact risk to human health
MO	11 ppm	Any use level established by state health department
NH	12 ppm	Background
NJ	20 ppm	Based on background studies and the 95th percentile of background
		levels found at sites under review
NY	7.5 ppm	Background
OR	Site-specific	Risk-based or natural background if higher
TN	16 ppm	We use EPA's proposed RPI Guidance Levels and proposed subpart S
		Fed. Reg. 7-27, 1990, vol. 55 (only one level for sites – 16 ppm)
TX	20 ppm	Health-based policy level; can be lowered due to cross-media concerns
WA	20 ppm	Background - Note: proposed level of 7 ppm is under consideration

#### AGRICULTURAL

State	Level	Rationale
FL	Site-specific	1 X 10 <sup>-6</sup> acceptable cancer risk level using default exposure assumptions
МО	11 ppm	Deed restrictions and/or registry of the site is required if less than residential cleanup (11 ppm) is used
NH	12 ppm	Background
NJ	20 ppm	Based on background studies and the 95 <sup>th</sup> percentile of background levels found at sites under review
OR	Site-specific	Risk-based or natural background if higher
TN	16 ppm	We use EPA's proposed RPI Guidance Levels and proposed subpart S Fed. Reg. 7-27, 1990, vol. 55 (only one level for sites – 16 ppm)

#### 8. continued:

#### RECREATIONAL

State	Level	Rationale
СО	100-1000 ppm	Site-specific and based on risk assessment considerations
FL	Site-specific	1 X 10 <sup>-6</sup> acceptable cancer risk level using default exposure assumptions
MO	11 ppm	Deed restrictions and/or registry of the site is required if less than residential cleanup (11 ppm) is used
NH	12 ppm	Background
NJ	20 ppm	Based on background studies and the 95 <sup>th</sup> percentile of background levels found at sites under review
OR	Site-specific	Risk-based or natural background if higher
TN	16 ppm	We use EPA's proposed RPI Guidance Levels and proposed subpart S Fed. Reg. 7-27, 1990, vol. 55 (only one level for sites – 16 ppm)

## 8. continued

b. If yes, are the cleanup levels:

The following 26 states replied: AK, AL, AZ, CA, CO, CT, FL, HI, IL, IA, KS, KY, ME, MI, MS, MO, NH, NJ, NM, NY, OH, OK, OR, SC, TX, WA Note: NJ - because arsenic criteria are based on background and background is greater than the health based level, there is no need for criteria based on land use. Everything basically defaults to background.

NY -- cleanup objectives are based on unrestricted use which is the starting point in determining soil cleanup levels on a site specific basis.

	Yes	No	Don't know Planned	Planned
Tiered?	AK, AL, AZ, FL, IL, KS, ME <sup>1</sup> , MI, NH, TX, WA	CT, KY, OH, OR, SC	MO, NM	ΙΆ
Based on current use?	.A, CO, FL, HI, IL, KS, KY, ME, MI, MS, NH, K, WA	ст, мо, он	NM	IA
Based on future use?	, FL, HI, IL, KS, KY, ME, MI, MS, MO, , TX, WA	CT	NM	IA
Based on groundwater considerations?	``A., CO⁴, FL, IL, KS, ME, MI, MS, OK, OR, SC,	CT, HI, IA, MO, NH, OH <sup>5</sup> ,	NM	

<sup>&</sup>lt;sup>1</sup> ME - we have a default level, a guide method for multiple contamination, and a full risk assessment option

AL - non residential standards requiring contingent management standards.

<sup>&</sup>lt;sup>3</sup>OH – residential or industrial; if industrial must be deed restricted.

<sup>&</sup>lt;sup>4</sup>CO – sometimes based on groundwater considerations.

<sup>&</sup>lt;sup>5</sup>OH - the cleanup standard given (4 ppm) was not based on any groundwater considerations; however, if groundwater is an issue at the site, the cleanup standard would be adjusted.

What regulations drive soil arsenic cleanup levels at contaminated sites? Check as many as apply. 9.

The following 34 states replied: AK, AL, AR, AZ, CA, CO, CT, DE, FL, HI, IL, IA, KS, KY, ME, MD, MI, MS, MO, MT, NH, NJ, NM, ND, NY, OH, OK, OR, SC, TN, TX, VA, WA, WY

Note:

DE – any combination of any regulatory agency listed below. TN – RCRA and drinking water standards dictate guidance levels. VA – risk-based, site-specific.

	Industrial	Residential	Agricultural	Recreational
CERCLA	AK, AL, AZ, CO, FL, HI, IL,		AK, AL, AZ, FL, HI, KY,	AK, AL, AZ, CO, FL, HI,
	IA, KS, KY, ME, MD, MI,		ME, MI, MO, NY, OK	KY, ME, MI, MO, MT, NY
	MO, MT, NH, ND, NY, OH,			
	OK, SC, TX, WA			
TSCA	MI	MI, MS	MI	MI
RCRA	AK, AL, AR, AZ, CA, FL,	AK, AL, AR, AZ, CA, FL, KS,	AK, AL, AR, AZ, FL, KY,	AK, AL, AR, AZ, FL, KY,
	IL, KS, KY, MI, MO, NH,	KY, MI, MS, MO, NM, OH,	MI, MO, NM, OK, WY	MI, MO, NM, WY
	NM, ND, OH, OK, SC, TX,	OK, TX, WA, WY		
	WA, WY			
Drinking water standards	AK, AL, AR, AZ, CA, CO,	AK, AL, AR, AZ, CA, CO, FL,	AK, AL, AR, AZ, CA, FL,	AK, AL, AR, AZ, CA, CO,
	FL, IL, KS, KY, ME, MD,	IL, KS, KY, ME, MD, MI, MO,	KY, ME, MI, MO, ND, NY,	FL, KY, ME, MI, MO, MT,
	MI, MO, MT, ND, NY, OH,	MT, ND, NY, OH, OK, SC,	WY	ND, NY, WY
	SC, TX, WA, WY	TX, WA, WY		
Surface water standards	AK, AR, AZ, FL, KS, KY,	AK, AR, AZ, FL, KS, KY, ME,	AK, AR, AZ, FL, KY, ME,	AK, AR, AZ, FL, KY, MB,
	ME, MD, MI, MT, ND, NY,	MD, MT, ND, NY, OH, OK,	ND, NY, OK, WY	MT, ND, NY, OK, WY
	OH, TX, WA, WY	TX, WA, WY		
State regulations	AK, AL, AR, AZ, CT, FL,	AK, AL, AR, AZ, CT, FL, IL,	AK, AL, AR, AZ, FL, IA, KY,	AK, AL, AR, AZ, FL, IA,
	IL, IA, KS, KY, ME, MD,	IA, KS, KY, ME, MD, MS,	ME, MO, NH, NJ, NM, NY,	KY, ME, MO, MT, NH, NJ,
	MI, MO, MT, NH, NJ, NM,	MO, MT, NH, NJ, NM, NY,	OK, OR, WY	NM, NY, OK, OR, WY
	NY, OH, OK, OR, SC, TX,	OH, OK, OR, SC, TX, WA,		
	WA, WY	WY		
County regulations				
Municipal regulations				
Other (please specifiy)				
Voluntary cleanup & property	KS	KS		
redevelopinelli program				

What other issues drive soil arsenic cleanup levels at contaminated sites? Check as many as apply. 10.

The following 27 states replied: AL, AR, AZ, CA, CO, DE, FL, IL, IA, KS, KY, ME, MI, MS, MO, MT, NJ, ND, NY, OH, OK, OR, SC, TN, TX, WA, WY

Note: MI – depends on the specifics of the site in question. TN uses their own Guidance Levels to drive cleanup levels.

	Industrial	Residential	Agricultural	Recreational
Legislative mandate	DE, FL, IL, IA, KS, KY, MO, NJ, OR, SC	DE, FL, IL, IA, KS, KY, NJ, OR	FL, IA, NJ, OR	FL, IA, NJ, OR
Action groups	DE, FL, KS, ND, SC	CA, DE, FL, KS, NY	FL, SC	CA, FL
Public concern/awareness	AZ, DE, FL, ME, MT, ND, OH, OK, SC, WY	AZ, CA, DE, FL, ME, MT, ND, NY, OH, OK, WY	AZ, FL, ME, OK, SC, WY	AZ, CA, FL, ME, MT, OK, WY
r pathway/	AL, AR, AZ, CA, CO, DE,	AL, AR, AZ, CA, CO, DE, FL,	AL, AR, AZ, CA, FL, ME,	AL, AR, AZ, CA, FL, ME,
Leachability	MT, ND, OH, OK, SC, TX, WA, WY	OH, OK, TX, WA, WY	(IV, 50, 11 t	M. L. (M.) (M.) 11 L
Surface water pathway	AL, AR, AZ, CA, CO, DE, FL, KS, ME, MT, ND, OH, OK, SC, TX, WA, WY	AL, AR, AZ, CA, CO, DE, FL, KS, ME, MS, MT, ND, NY, OH, OK, TX, WA, WY	AL, AR, AZ, CA, FL, ME, OK, SC, WY	AL, AR, AZ, CA, FL, KY, ME, MT, ND, OK, WY
Wildlife criteria	AL, AR, AZ, FL, MB, OH, OK, SC, TX, WY	AL, AR, AZ, FL, ME, MS, NY, OH, OK, TX, WY	AL, AR, AZ, CA, FL, ME, OK, SC, WY	AL, AR, AZ, CA, CO, FL, ME, ND, OK, WY
Politics	CO, DE, FL, MO, OH, SC, WA	CA, CO, DE, FL, OH, WA	FL	CA, CO, FL
Other (please specify)				
State regulatory agencies		CO		00

11a. Does your state have regulations similar to the US EPA's Part 503 regulations that govern the land application of biosolids derived from domestic wastewater sludges?

Yes 22

No

Don't know 11

Yes-

AK, AZ, CA, FL, HI, IL, IA, KY, MD, MI, MS, MO, NH, NJ,

NM, NY, OK, OR, SC, TX, WA, WY

No-

KS

Don't know- AL, AR, CO, CT, DE, ME, MT, ND, OH, TN

1

11b. If yes, do these regulations set arsenic levels in biosolids?

Yes 15

No 5

Don't know 8

Yes-

AK, AZ, CA, FL, HI, IA, MI, MO, NH, NJ, OR, SC, TX, WA,

WY

No-

IL, KY, MD, MS, NY

Don't know- AL, ME, MT, NM, ND, OH, TN

If yes:

a. What are the acceptable levels for arsenic in biosolids?

State	Acceptable levels for arsenic in biosolids
AK	Ranges from 30-73 mg/kg (dry weight basis) - depending on monofill conditions
AZ	Same as EPA - 75 mg/kg ceiling pollutant concentration, 41 kg/hectare (≈19 mg/kg) cumulative loading rate
CA	Proposed regulation of 200 mg/kg
FL	40 mg/kg
HI	Same as EPA's Part 503 regulations
IA	50 mg/kg
MI	Same as Part 503 - 41 mg/kg dry weight
MO	Same as EPA's
NH	Current standard is 75 mg/kg; proposed future standard is 32 mg/kg; both are based on dry weight
NJ	Same as presented in Part 503 regulations
OR	41 mg/kg monthly average and 75 mg/kg maximum
SC	41 mg/kg
TX	Ceiling concentration of 75 mg/kg (dry wt basis); monthly average sludge concentration of 41 mg/kg (dry wt basis)
WY	The standards are analogous to those in the Federal Regulations

#### 11b. continued

b. How do these regulations interact with your state's soil arsenic cleanup requirements?

State	Interaction
AK	No interaction
AZ	Biosolids for application/cleanup levels for required remediations.  Exceeding the application concentration does not trigger cleanup
CA	No interaction whatsoever
FL	Not consistent
IA	They do not
MI	Unable to answer
MO	No known interaction
NH	There is little interaction
NJ	No problem in the interaction noted
OR	They do not
SC	They are in line and acceptable as total metal concentrations
WY	Limited interaction since WY does not have soil arsenic cleanup requirements

# SECTION III - REMEDIATION

Please indicate the types of soil arsenic remedial technologies that your state allows. Of those allowed, which have shown success (please indicate percent successful if appropriate)? Check as many as apply.

12.

The following 30 states replied: AK, AL, AR, AZ, CA, CO, DE, FL, HI, IL, IA, KS, KY, MD, MI, MS, MO, MT, NH, ND, NJ, NY, OH, OK, OR, SC, TN, TX, WA, WY

Technology	Allowed	Successful	Unsuccessful
In situ soil washing	DE, IL, KY, MI, MS, MO, ND, OH, OR, TX, WA	MI	
Ex situ soil washing	AZ, CO, DE, FL, IL, KY, MI, MS, MO, ND, OH, OR, TX, WA	AZ, CO, MI (100%), OR	
Excavation/landfill disposal	AL (2), AZ, CA, CO, DE, FL, IL, KS, KY, MD, MI, MS, MO, MT, NH, ND, NY, OH, OK, OR, SC, TX, WA, WY	AL (2), AZ, CA, CO, DE, FL, KS, KY, MI (100%), MT, NH, NJ, NY, OH, OK, OR, SC, TX, WY	
Electrokinetics	DE, FL, IL, KY, MI, MS, MO, ND, OH, OR, TX, WA	MI (has not been tried yet)	
Phytoremediation	DE, FL, IL, KY, MI, MS, MO, ND, OH, OR, TX, WA	MI (red stage only)	
Stabilization	AL (1), AZ, DE, FL, IL, KS, KY, MI, MS, MO, MT, ND, NY, OH, OK, OR, SC, TX, WA	AL (1), AZ, DE, FL, MI (100%), MT, NJ, NY, OH, OK, OR, SC	
Vitrification	AZ, DE, FL, IL, KY, MI, MS, MO, MT, ND, OH, OR, TX, WA	AZ, MI (100%), MT	
Other (please specify)			
Cover to mitigate	00	00	
Direct exposure	00		
Phosphate amendment	00		
Capping/Slurry wall	FL, IA, TX	FL, IA, TX	
Soil dilution	MT	MT	

# 12. continued

State	State Comment
AK	In my experience, arsenic has not driven any cleanups; any of the below (technologies) could be considered
AĽ	None are specifically disallowed; selection is site-specific
AR	Determined on case-by-case basis during Feasibility Studies
DE	Phytoremediation is under consideration on current site
H	HI will consider any technology but effectiveness must be shown
H	There is no prohibition on remedial technologies, but demonstrations of effectiveness may be required
KS	Would consider any technology provided it met acceptable criteria
МО	Technologies used are considered on a site specific basis. Compliance with cleanup goals, cost and implementability
	are considered. Unaware of any regulations that prohibit use of any specific technology.
Z	Allow available technology once it is determined to be appropriate and feasible at a site.
НО	Only RCRA closure program has had experience with removal/excavation or landfill disposal of arsenic
	contamination above background levels or risk-based standards, whichever is applicable.
TN	All technologies would be considered on a site specific basis.
WA	A lot has been tried with varying degrees of success.

13. Can reducing exposure (e.g., prevention of possible exposure via restricted access or barriers such as pavement) impact cleanup activities?

Yes

30

1

No

Don't know 1

Yes-

AK, AL, AR, AZ, CA, CO, DE, FL, HI, IL, IA, KS, KY, ME, MD, MI, MS,

MO, MT, NH, ND, NJ, NY, OH, OK, OR, SC, TN, TX, WA

No-

WY

Don't know- NM

If yes, is an institutional control (e.g., deed restriction, deed notification) required? If yes, please specify what type.

Yes 27 No

Don't know 3

Yes-

 $AK,\,AL,\,AR,\,AZ,\,CA,\,CO,\,DE,\,FL,\,IL,\,IA,\,KS,\,KY,\,ME,\,MD,\,MI,\,MS,\,MO,$ 

MT, NH, NJ, NY, OH, OK, OR, SC, TX, WA

1

No-

Don't know- NM, ND, TN

State	
AK	Restriction or notification depending upon site factors could be applied
AL	Deed restriction (RCRA)
AR	Dependent on site specific conditions whether a restriction or notification is warranted
AZ	A legal mechanism such as post-closure permit or deed restriction
CA	Restriction which accompanies title to property
CO	Barriers must be maintained via legal mechanisms (unsure of extent of mechanisms)
FL	Deed restriction, deed notification, record in books of public record
IL	Restrictions on property use and/or groundwater use are included in "No Further Remediation" letter, and must be filed with county recorder
IA	Per proposed rules only - environmental easement granted to the state
KS	Groundwater use, fencing, land-use
KY	Deed restriction if waste left in-place
ME	We prefere deed restriction/notices
MI	Deed restrictions
MS	Deed restrictions
МО	The property would be placed on MO Registry of Contaminated Sites; this also contains requirements for notification of prospective buyers, state approval for change of use and notices in the property chain of title
MT	Currently in process – will probably be a deed restriction
NH	Activity and use restriction placed in the deed
NJ	Deed notice
OH	Deed restriction
OK	Notice to deed
OR	Deed restriction of use of property
SC	Land use restriction
TX	Deed notification is required by the state; deed restriction may be requested by the property owner where wastes are to be left on site

# SECTION IV - ANALYTICAL

What analytical methods for soil arsenic detection does your state require? Use? Allow? Check as many as apply. 14a.

The following 29 states replied: AK, AL, AZ, CA, CO, DE, FL, HI, IL, KS, KY, ME, MD, MI, MS, MO, MT, NH, NM, ND, NY, OH, OK, OR, SC, TN, TX, WA, WY

Note: AL: any that are appropriate SW-846 methods;

TN: any appropriate SW-846 Method;

WY: no specific requirements.

NH: 7060A is preferred; data from other appropriate SW846 methods will be accepted

Instrumental Analysis Method	Required	Used	Allowed
US EPA SW-846 Method 6010		AZ, CA, CO, DE, FL, KS, ME,	AK, CA, CO, DE, FL, HI, IL, KS, ME, MD,
(ICP-AES)		MD, MT, NJ, ND, NY, OH, OK,	MI, MS, NM, ND, NJ, NY, OH, OR, TX
		OR, TX, WA	
US EPA SW-846 Method 6020		AZ, CA, CO, DE, FL, KS, ND,	AK, CA, CO, DE, FL, HI, IL, KS, ME, MD,
(ICP-MS)		NY, OK, TX, WA	MI, MS, NM, ND, NI, NY, OH, OR, TX
US EPA SW-846 Method 7060A	HN	AZ, CA, CO, DE, FL, KS, KY,	AK, CA, CO, DE, FL, HI, IL, KS, ME, MD,
(AA, furnace technique)		ME, MD, MO, MT, NH, NJ, OH,	MI, MS, NM, ND, NJ, OH, OR, SC, TX
		OK, OR, TX, WA	
US EPA SW-846 Method 7061A		AZ, CA, CO, DE, FL, KS, NY,	AK, CA, CO, DE, FL, HI, IL, KS, ME, MD,
(AA, gaseous hydride)		OH, TX, WA	MI, MS, NM, ND, NJ, NY, OH, OR, SC, TX
US EPA SW-846 Method 7062		CO, DE, FL, KS, NY, OH	AK, CO, DE, FL, HI, IL, KS, ME, MI, MS,
(AA, gaseous borohydride)			NM, ND, NJ, NY, OH, OR
US EPA SW-846 Method 7063		DE, KS, NY, OH	AK, DE, HI, IL, KS, ME, MS, NJ, NM, ND,
(anode stripping voltametry)			NY, OH, OR
Other (please specify)			
Water Methods 200.7		IL	
US EPA SW-846 Method 6010B	SC		

14a. continued

Extraction/Digestion Method	Required	Used	Allowed
US EPA SW-846 Method 3050	K	CA, CO, DE, FL, IL, KS,	AK, CA, CO, DE, FL, HI, IL, KS, MD, MI, MS,
		MD, NH, NJ, NY, TX	NM, ND, NJ, NY, OH, OR, TX
US EPA SW-846 Method 3050B		CA, CO, DE, KS, MD, NJ,	AK, CA, CO, DE, HI, IL, KS, ME, MD, MI,
		NY, OR, TX	MS, NM, ND, NJ, NY, OH, OR, SC, TX
US EPA SW-846 Method 3051		CA, CO, DE, FL, KS, NJ,	AK, CA, CO, DE, FL, HI, IL, KS, MI, MS, NM,
		NY, OR, TX	ND, NJ, NY, OH, OR, SC, TX
US EPA SW-846 Method 3051A	OK	CA, CO, DE, FL, MO, TX	AK, CA, CO, DE, FL, HI, IL, ME, MI, MS,
			NM, ND, OH, TX
US EPA SW-846 Method 3052		CA, CO, DE, FL, KS, NJ,	AK, CA, CO, DE, FL, HI, IL, KS, ME, MI, MS,
		NY	NM, ND, NJ, NY, OH, OR, SC
Other (please specify)			
WET (Waste Extraction Test, CA	CA		
Code of Regulations) Title 22, ch.			
11, Article 5, Appendix 11			
TCLP (as developed by CA)	CA		
US EPA SW-846 Method 3050A		II	
State derived method based on SW-		T	
864 Method 3050A			
Method 1311	SC		

14b. Has your state compared the recoveries obtainable from each method? If yes, please specify.

15

Yes 3

No

Don't know 10

Yes-

CA, DE, FL

No-

AK, HI, KS, KY, ME, MI, MS, MO, NH, NY, OH, OK, OR, TX,

WY

Don't know- AL, AZ, IL, IA, MT, ND, NJ, SC, TN, WA

State	
CA	WET test vs others
DE	Required by all laboratories as part of approval process to perform work under HSCA
FL	It is being done by the University of Florida
MI	The recoveries obtainable from each method have been compared by the EPA

### **Definitions**

PQL: practical quantitation limit. MDL: method detection limit.

15. Are MDLs or PQLs specified in the analytical methods used by your state for soil arsenic?

Yes 18 No 5 Don't know 6

Yes- AK, AZ, CA, DE, IL, KS, KY, MI, MS, NH, NJ, NY, OH, OK,

OR, SC, TX (laboratory specified; values below are generally used), WA

No- CO, FL, HI, IA, ME

Don't know- AL, MO, MT, NM, ND, TN

If yes: a. What MDL and PQL values are used?

Instrumental Analysis Method	MDL	PQL
US EPA SW-846 Method 6010	5 ppm (NY)	25 ppm (WA soil)
(ICP-AES)	0.2 mg/kg (OR)	50 μg/L (TX)
	2.5 ppm (WA soil)	
US EPA SW-846 Method 6020	5 ppb (MI)	1 ppm (NY)
(ICP-MS)	40 ppb (NY)	20 μg/L (TX)
US EPA SW-846 Method 7060A	0.015 mg/kg (KY)	0.1 ppm (IL)
(AA, furnace technique)	5 ppb (MI)	$\cong$ 500 µg/kg (MO)
	≅ 200 μg/kg (MO)	0.5 ppm (WA soil)
	1 mg/kg (NH)	•• • •
	0.5 mg/kg (OR)	
	0.05 ppm (WA soil)	
US EPA SW-846 Method 7061A	5 ppb (MI)	1 ppm (WA soil)
(AA, gaseous hydride)	0.1 ppm (WA soil)	5 μg/L (TX)
US EPA SW-846 Method 7062	5 ppb (MI)	
(AA, gaseous borohydride)		
US EPA SW-846 Method 7063	5 ppb (MI)	
(anode stripping voltametry)		
Other (please specify)		
IL Method 200.7	2.0 ppm (IL)	
Groundwater 7061	2 ppb (WA)	20 ppb (WA)
Groundwater 6010	53 ppb (WA)	530 ppb (WA)

Extraction/Digestion Method	MDL	PQL
US EPA SW-864 Method 3050	0.015 mg/kg (KY)	
	5 ppb (MI)	
	< 0.5 mg/kg (NH)	
US EPA SW-864 Method 3050B	5 ppb (MI)	
US EPA SW-864 Method 3051	5 ppb (MI)	
US EPA SW-864 Method 3051A	5 ppb (MI)	
US EPA SW-846 Method 3052		
Other (please specify)		

# 15a. continued:

State	What MDL and PQL values are used?
AK	As specified by EPA method
AL	40CFR264 App. IX
ΑZ	MDLs from SW-846; PQLs established by lab when applying for
	licensure through AZ Dept. of Health Services
CA	Based upon statistical calculation of replicate sample matrix spikes. CA
	maintains a large hazardous materials laboratory to advise on MDL &
	PQL for individual matrices.
DE	MDLs are laboratory specific; PQLs are laboratory specific from HSCA
	samples.
IA	Will be developed under proposed rules
MO	Indicated 'don't know' but gave values in 15a
MS	MDLs are in each of the EPA methods and PQLs are media specific
NJ	All analytical work must be generated by a certified lab. Lab regulations
	require the lab to develop method specific and instrument specific
	MDLs. For the PQL's, the DEP uses what ever the method states
NY	MDLs and PQLs are not required for sample preparation
OH	MDLs for RCRA; MDLs vary - method and instrument specific; PQLs
	are 5 to 10 times MDL
OK	Depends on the lab
SC	Uses SW-846 Methods 6010 and 1311 for MDLs

# b. How were the MDL and PQLs derived?

The following 13 states replied: DE, IL, KS, KY, MI, MS, MO, NH, NY, OH, OR, SC, TX

State	MDL Derivation
DE	Federal Register outlined
ΊL	By laboratory
KS	40 CFR 136 App. B
KY	40 CFR 136 App. A
MI	Survey of MI labs and published methods – to meet risk-based levels
MS	EPA method, EPA derivation see methods
MO	CFR 40 MDL calculation derives what can be seen in a matrix; we take this
	value and multiply by the appropriate dilution factors to convert to μg/kg
NH	State lab sets an estimated quantitation limit based on available analytical
	literature
NY	Actual MDLs are sample dependent and may vary as the matrix varies.
OH	SW-846 Chapter 3, Inorganic Analytes
OR	As specified in 40 CRF Part 136 App. B
SC	Spike sample analyzed at reporting level method 200.7 EPA Drinking Water
TX	Should be determined using protocol in 40CFR Part 136, App B, and include
	the optional step 7 to verify the reasonableness of the calculated MDL

# 15b. continued:

State	PQL Derivation
DE	HSCA samples
IL	From SW-846
KS	40 CFR 136 App. B
MS	EPA method, EPA derivation – see methods
MO	CFR 40 MDL calculation derives what can be seen in a matrix; we
	take this value and multiply by the appropriate dilution factors to
	convert to µg/kg
NY	Quantitation limits are set at the concentrations equivalent to the
	concentration of the lowest calibration standard
TX	Should be equal to or greater than the lowest non-zero standard in
	the calibration curve

16a. Does your state have any regulatory definitions for MDL or PQL? If yes, please specify:

Yes 12 No 12

No 12 Don't know 6

Yes-No-AK, DE, FL, IL, MI, NJ, NY, OH, OR, SC, TX, WA CA, CO, HI, IA, KS, KY, ME, MS, NH, ND, OK, WY

Don't know- AL, AZ, MO, MT, NM, TN

State	
DE	Outlined SOPCAP of HSCA
FL	FAC Chapter 62-4; MDL = smallest concentration of an analyte that can be measured and reported with 99% confidence that the concentration will be greater than zero; PQL = lowest level that can be reliably achieved during routine laboratory operative conditions within specified limits of precision and accuracy
IL -	ADL (Acceptable Detection Limit) = the detectable concentration of a substance which is equal to the lowest appropriate Practical Quantitation Limit (PQL); PQL = Practical Quantitation Limit or estimated quantitation limit which is the lowest concentration that can be reliably measured within specified limits of precision and accuracy for a specified laboratory analytical method during routine laboratory operating conditions in accordance with "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA SW-846). When applied to filtered water samples, PQL includes the method detection limit or estimated detection limit in accordance with the applicable method revision in "Methods for the Determination of Organic Compounds in Drinking Water, Supplement II" (EPA/600/4-88/039), and "Methods for the Determination of Organic Chemicals in Drinking Water, Supplement III" (EPA/600/R-95/131).
MI _	CFR 40 Part I36 Appendix B
NJ	PQL's are specified for individual compounds in the groundwater quality standards (GWQS). MDL's are specified in the state lab. Certification regulations.
NŸ	MDL = the amount of material necessary to produce a detector response that can be identified and reliably quantified; these numbers are not absolute detection limits; actual MDLs are sample dependent and may vary as the matrix varies. PQL = quantitation limits set at the concentration equivalent to the concentration of lowest calibration standard. NOTE: the moisture content of the soil samples is not considered in the MDL or PQL/CRQL calculation; however, soil sample results for arsenic are required to be reported corrected for moisture content.
OH	Same definition as in SW-846 and RAGS
OR	Consistent with 40 CER 136 App. B
SC	Standard methods
TX	30 TAC 335 Subchapter S defines PQL as the concentration of an analyte which can be reliably quantified within specific limits of precision and accuracy during routine laboratory operating conditions
WA	May be used; too complicated to explain here

16b. Has your state conducted any independent testing to determine MDLs and PQLs for soil arsenate or other analytes? If yes, please specify:

Yes 4 No 17 Don't know 8

Yes- CA, DE, FL, OR

No- AK, CO, HI, IA, KS, KY, MI, MS, MO, NH, ND, NY, OH, OK, SC, TX, WY

Don't know- AZ, IL, ME, MT, NJ, NM, TN, WA

State	
CA	Routinely done by the CA Hazardous Materials Laboratory
OR	Precision and accuracy testing with other national, state and private labs

### **Definitions**

TCLP: Toxicity Characteristic Leaching Procedure. SPLP: Synthetic Precipitation Leaching Procedure.

17a. Does your state use the TCLP or SPLP procedure to evaluate the leaching potential of arsenic in soils? If yes, please specify:

Yes 31 No 1 Don't know 0

Yes- AK, AL, AR, AZ, CA, CO, DE, FL, HI, IA, IL, KY, ME, MD, MI, MO, MS, MT, ND, NH, NJ, NM, NY, OH, OK, OR, SC, TN, TX, WA, WY

No- KS

Procedure	State
TCLP	AL, CA, KY, ME, MO, MS, MT, ND, NM, NH, NY,
	SC, WA
SPLP	
TCLP & SPLP	AK, AR, AZ, CO, FL, IL, MI, NJ OH, OK, OR, TX
Not specified	DE, HI, MD, TN, WY

State	
AZ	Guidance for determining potential impacts to groundwater relies on
	relationship between total metals concentration and leachable fraction using
	TCLP or SPLP
CO	Definition of hazardous waste (TCLP) and to simulate rainfall leaching
	(SPLP)
HI	For RCRA disposal of hazardous wastes
IA	For evaluating "special waste authorization" to landfills only
IL	Both methods are allowed, resulting aqueous concentration is compared
	directly with the groundwater standard or health advisory concentration
MD	Used to determine if a waste can be classified as "hazardous"
NH	TCLP is used for RCRA disposal of hazardous waste decisions
NJ	TCLP is used for disposal classification. SPLP is one of the options used to
	determine a site specific impact to groundwater criteria.
OH	TCLP for waste analysis purposes and for determining potential leachability
	of contaminated soil' SPLP for voluntary action program sites
OK	TCLP usually, occasionally SPLP
OR	Either method depending on objective of analysis
TN	On a site specific basis to determine potential to impact groundwater
TX	TCLP for disposal; SPLP for soils to be left in place
WA	TCLP has been used although not a requirement

17b. If your state does not use the TCLP or SPLP procedure, are other procedures used? If yes, please specify:

Yes 8

No 3

Don't know 2

Yes-

CA, DE, FL, KS, NH, NJ, OK, WA

No-

IA, MO, OH

Don't know- NM, TN

State	
CA	The WET test
DE	Developed procedure of all pH levels to determine the
	leachability of lead, arsenic oxides in a stabilization process
FL	Partition equations, etc.
KS	Various models approved by KDHE that are public domain
NH	EP toxicity test is used for hazardous waste disposal
NJ	Modeling using SESOIL is an option; other models proposed by
	RPs will be evaluated
OK	Did not specify
WA	Batch tests (desorption)

18. Does your state have any policies or regulations that prohibit the regulation of soil contaminants like arsenic at or below the MDL or PQL? If yes, please specify

Yes 10

No 13

Don't know 8

Yes-

FL, DE, IA, IL, MS, NH, NJ OH, OK, TX

No- AK, AZ, CO, HI, IA, KY, MI, ND, NY, OR, SC, WA, WY

Don't know- AR, CA, KS, ME, MO, MT, NM, TN

Note: IA proposed rules only

State	
FL	62-770 and 62-785 FAC
DE	Remediation standards are above the PQL; client may use formal risk-
	based approach if they so choose
IL	If a risk-based remediation objective is less than the Acceptable
	Detection Limit (ADL) <sup>1</sup> , then the ADL becomes the remediation
	objections
MI	Criteria defaults to MDL
MS	We have specific guidance which allows for the MDL to be considered
	but not the PQL
NH	Risk-based standards are not set below MDL's. Arsenic background is
	above the MDL so this does not drive the risk based cleanup level for
	arsenic.
NJ	GWQS specify the use of the higher of the PQL or the human health
	based criteria. The policy for soil is to use the PQL, if the human health
	based criteria is less than the PQL. For arsenic, this is irrelevant due to
	the background arsenic levels.
OH	We do not regulate below the MDL; below the MDL is considered clean
OK	Cleanup levels will not be set below PQLs
TX	30 TAC 335 specifies if the cleanup level or background concentration is
	less than the PQL, then the PQL becomes the cleanup level

<sup>&</sup>lt;sup>1</sup>ADL = the detectable concentration of a substance which is equal to the lowest appropriate practical concentration limit (PQL).

19. Does your state have a special sampling protocol/procedure for heavy metals in soils? If yes, please specify.

Yes 9 No 17 Don't know 4

Yes- CA, CO, DE, KY, ME, MS, MT, OK, SC

No- AK, AZ, FL, HI, IA, KS, MI, MO, NH, NJ, ND, NY, OH, OR,

TX, WA, WY

Don't know- AR, IL, NM, TN

Note: OH only requires representative samples

State	Sampling Protocol/Procedure
CA	Defined in "HML Users Manual" Section 3.4, Revision 7, Dec. 31, 1993
CO	Protocols require collection of surface soil samples 0-2 in and sieving of
	soil to <250 um fraction
DE	SOPQAP and QAPP (Quality Assurance Project Plan)
KY	SOP for state personnel
ME	Based on guidance from EPA/SW846 Methods
MS	Allow for the use of an EPA developed protocol/procedure
MT	Several site specific protocols/procedures
OK	Depends on site and type of contamination
SC	SOP's based on Region IV EPA SOPQAM

# SECTION V - RISK ASSESSMENT

For risk assessment purposes, what value does your state use for soil ingestion? 20.

The following 24 states replied: AK, AL, AZ, CA, CO, FL, IL, IA, KS, KY, ME, MD, MI, MS, NH, NJ, NY, OH, OK, OR, SC, TX, VA, WA, WY

	Industrial		Residential		Agricultural		Recreational	
State	Child	Adult	Child	Adult	Child	Adult	Child	Adult
AK			4 mg/kg					
AR	200 mg/d	50 mg/d	200 mg/d	100 mg/d	200 mg/d	50-100 mg/d	200 mg/d	50-100 mg/d
ΑZ		50 mg/d(non- residential)	200 mg/d	100 mg/d				
CA	NA	50 mg/d	200 mg/d	100 mg/d	NA	480 mg/d	Site specific	Site specific
CO	NA	50 mg/kg/d	200 mg/kg/d	100 mg/kg/d	Site specific	Site specific	Site specific	Site specific
FL		50 mg/d	200 mg/d					
IL	NA	50/480 mg/d <sup>2</sup>	200/114 3	NA				
ΙĄ		50 mg/d	200 mg/d	100 mg/d				
KS	NA	38	11	11				
KY		0.85 mg/kg		0.14 mg/kg				
ME	100 mg/d	50 mg/d	200 mg/d	100 mg/d	Site specific	Site specific	Site specific	Site specific
QV QV		50 mg	200 mg	100 mg				
IW		50 mg/d	200 mg/d	100 mg/d				
MS			200 mg/d	100 mg/d				
HN	200/100 mg/d <sup>4</sup>	100 mg/d	200/100 mg/d	100 mg/d	200/100 mg/d	100 mg/d	200/100 mg/d	100 mg/d
Ν̈́		100 mg/d	200 mg/d		Site specific	Site specific	Site specific	Site specific
NY		~34 mg/d	p/gm 89~	~10 mg/d	Site specific; ~68	Site specific; ~10	Site specific; ~68	Site specific; ~10
					mg/d default	mg/d default	mg/d default	mg/d default
ЮН	Not considered	Site specific	Site specific	Site specific			Site specific	Site specific
		(~9 mg/kg)	(-4 mg/kg)	(~4 mg/kg)			(~4 mg/kg)	(~4 mg/kg)
OK	NA	50 or 480	200	100	100	50	100	50
O.R.	NA	50 mg/d	200 mg/d	100 mg/d	Site specific	Site specific	Site specific	Site specific
SC	1.9 mg/kg	3.8 mg/kg	0.022 mg/kg	0.043 mg/kg				
Ϋ́		50 mg/day	200 mg/day	100 mg/day				
VA	Site specific	Site specific	Site specific	Site specific	Site specific	Site specific	Site specific	Site specific
WA		50 mg/d		200 mg/d				
ΜĀ	Not established	Not est.	Not est.	Not est.	Not est.	Not est.	Not est.	Not est.

# If other (e.g., pica children), please specify

State	Other
AL	AL uses Superfund RAGS & RCRA Guidance
AR	Site specific conditions could warrant greater or lesser levels being used. Age-adjusted ingestion factor for soils 114 (mg.yr)/(kg.dy)
ΑZ	Allow site specific risk assessment option
FL	Residential aggregate value of 120 mg/d
ME	ME considers both children < 6 (200 mg/d) and children 6-18 (100 mg/d) as well as adults in risk assessments
MD MD	Construction workers = 480 mg; trespassers = 100 mg
N	NJ follows EPA guidance
NX	Acute soil ingestion by children = 1g/d
OH	Do not generally consider pica children/other sensitive subpopulations in RCRA program. Use RME values

NA = not applicable

AK applies this value to both children and adults based on childhood exposure

50 mg/d for industrial/commercial workers, 480 for construction/emergeney repair workers

200 for non-carcinogens, 114 (mg-y)/(kg-d) for eareinogens

4 200 mg/d for children aged 2-6 yr; 100 mg/d for children aged 7-16 yr

21. Does your state take into consideration oral bioavailability for soil arsenic in the risk assessment process?

Yes 10 No 15

Don't know 6

Yes- AZ, CA, CO, IL, KS, MI, NY, OK, TX, WY

No- AK, AR, FL, HI, IA, KY, ME, MD, MS, NH, NJ, OH, OR, SC,

WA

Don't know- AL, MO, MT, NM, TN, VA

### If yes:

a. What value is used?

b. How was this value derived?

State	Value	Derivation
AZ	Site specific	Site specific
CA	Varies	Site specific experiments on soils
СО	10-80%	Site specific in vivo bioavailability studies or extrapolation from geochemical speciation data
IL	Site specific	Must be derived as part of a site specific risk assessment
KS	100%	Risk Assessment Guidance for Superfund; OSWER Guidance
KY	100%	
MI	50%	By promulgated rule
NY	100%	Default
OK	Varies	Depends on testing of waste
TX	Site specific	Site specific
WY	Not available	Not available

<sup>&</sup>lt;sup>1</sup>NY will consider alternative value if supported by site specific data <sup>2</sup> OH only considers oral bioavailability when looking at oral absorption values

for estimating dermal exposures (i.e., for calculating absorbed doses); in those cases an oral absorption value of 98% is used based on ATSDR tox profile.

- 22a. In the risk assessment process, what measurement does your state use for surface depth in your exposure evaluations?
- 22b. How were these surface depths selected (e.g., professional judgment, state policy)?

The following 26 states replied: AK, AR, AZ, CA, CO, FL, HI, IL, IA, KS, KY, MD, ME, MI, MO, MS, MT, NH, NJ NY, OH, OK, OR, SC, TX, WA, WY

Please note: AL uses RAG and Region 4 CA Guidance, AZ uses 1-2 ft for Non-Residential sites, based on professional judgment; SC normally uses surface soils unless information exists that contamination may be deeper or in groundwater.

### INDUSTRIAL

State	<1 foot	1 – 2 feet	>2 feet	Other (please specify)	How depths selected	
AK				15 ft	Based upon conservative construction practices	
					Construction practices	
AR	X				Professional judgment	
AZ		X			Professional judgment	
CA		X			Professional judgment	
CO				0-2 in or 0-2 cm	Professional judgment	
FL				0-2 ft	Professional judgment, state policy	
HI	X				Professional judgment	
IL				Site specific up to 3 ft	Based on known or anticipated use	
IA				< 2 ft	Professional judgment	
KS	X	X			Professional judgment	
KY	X				Regional policy	
MD	X	X		Also site-by-site basis	Professional judgment	
ME				Site specific	If < 8-10 ft, excavation controls	
					required	
MI	X			_	Professional judgment	
MO				0-2 ft	Professional judgment	
MT				0-2 in	SOP (per Clark Fork Basin SAP)	
NH				Site specific	State policy	
NJ	X			0-6 in	State policy (technical	
					requirements for site remediation)	
NY	X				Professional judgment	
OH	X				State policy	
OK	X			Construction depth	Consultation with EPA	
OR				3 ft	Professional judgment	
SC	X	X			Professional judgment	
TX				< 2 ft	State rule	
WA				15 ft	Assumed depth of basement	
WY	X				Professional judgment	

# 22a and b continued:

- 22a. In the risk assessment process, what measurement does your state use for surface depth in your exposure evaluations?
- 22b. How were these surface depths selected (e.g., professional judgment, state policy)?

# RESIDENTIAL

State	<1 foot	1 – 2 feet	>2 feet	Other (please specify)	How depths selected	
AK				15 ft	Based upon conservative construction practices	
					construction practices	
AR	X				Professional judgment	
AZ		X			Professional judgment	
CA		X	X		Professional judgment	
CO				0-2 in or 0-2 cm	Professional judgment	
FL				0-2 ft	Professional judgment, state policy	
HI	X				Professional judgment	
IL				Site specific up to 3 ft	Based on known or anticipated use	
IA				< 2 ft	Professional judgment	
KS	X	X			Professional judgment	
KY	X				Regional policy	
MD	X	X		Also site-by-site basis	Professional judgment	
ME _				8-10 ft	8-10 ft excavation requirement for	
					new construction – due to frost	
MI _	X				Professional judgment	
MO				0-2 ft	Professional judgment	
MS				0-2 ft ingestion; 2-14 ft	State policy	
				ingestion or protection		
				of groundwater		
MT				0-2 in	SOP (per Clark Fork Basin SAP)	
NH				Site specific	State policy	
NJ	X			0-6 in	State policy (Technical	
					requirement for site remediation)	
NY	X				Professional judgment	
OH	X				State policy	
OK	X	X			Consultation with EPA	
OR				3 ft	Professional judgment	
SC	X	X			Professional judgment	
TX				< 2 ft	State rule	
WA				15 ft	Assumed depth of basement	
WY	X				Professional judgment	

# 22a and b continued:

- 22a. In the risk assessment process, what measurement does your state use for surface depth in your exposure evaluations?
- 22b. How were these surface depths selected (e.g., professional judgment, state policy)?

# AGRICULTURAL

State	<1 foot	1 – 2 feet	>2 feet	Other (please specify)	How depths selected	
AK				15 ft	Based upon conservative	
					construction practices	
AR		X			Professional judgment	
CA		X	X		Professional judgment	
CO				0-2 in or 0-2 cm	Professional judgment	
FL		_		0-2 ft	Professional judgment, state policy	
HI	X				Professional judgment	
IL				Site specific up to 3 ft	Based on known or anticipated use	
ME				8-10 ft Site specific	Considered a subset of residential	
MO				0-2 ft	Professional judgment	
NH				Site specific	State policy	
NJ	X			0-6 in	State policy (Technical	
					requirements for site remediation)	
NY	Х				Professional judgment	
OK	X	X	X		Consultation with EPA	
OR				3 ft	Professional judgment	
SC	X	X			Professional judgment	
WA				15 ft	Assumed depth of basement	
WY	X				Professional judgment	

# 22a and b continued:

- In the risk assessment process, what measurement does your state use for surface 22a. depth in your exposure evaluations?

  How were these surface depths selected (e.g., professional judgment, state
- 22b. policy)?

# RECREATIONAL

State	<1 foot	1 – 2 feet	>2 feet	Other (please specify)	How depths selected	
AK				15 ft	Based upon conservative	
					construction practices	
AR	X				Professional judgment	
CA		X			Professional judgment	
CO				0-2 in or 0-2 cm	Professional judgment	
FL				0-2 ft	Professional judgment, state policy	
HI	X				Professional judgment	
IL _				Site specific up to 3 ft	Based on known or anticipated use	
MD	X	X		Also site-by-site basis	Professional judgment	
ME	_			Site specific	If < 8-10 ft, excavation controls	
					required	
MO				0-2 ft	Professional judgment	
MT				0-2 in	SOP (per Clark Fork Basin SAP)	
NH				Site specific	State policy	
NJ	X			0-6 in	State policy (Technical	
				_	requirements for site remediation)	
NY	X				Professional judgment	
OH	X		•		State policy	
OK	X				Consultation with EPA	
OR				3 ft	Professional judgment	
SC	X	X			Professional judgment	
WA				15 ft	Assumed depth of basement	
WY	X				Professional judgment	

In the risk assessment process, what does your state consider to be the acceptable carcinogenic risk level for individual carcinogens? 23a.

The following 28 states responded: AK, AL, AR, AZ, CA, CO. FL, HI, IL, IA, KS, KY, MD, ME, MI, MO, MS, MT, NH, ND, NY, OH, OK, OR, SC, TX, WA, WY

Acceptable level	State
1 X 10 <sup>4</sup>	KS (if only carcinogen-of-concern)
1 X 10 <sup>-4</sup> to 1 X 10 <sup>-6</sup>	AL (tiered), AR <sup>2</sup> , CA, CO, HI
1 X 10 <sup>-5</sup>	AK¹, AZ (class B & C carcinogens), MD, ME (ILCR), MI, OH, WA (industrial)
1 X 10 <sup>-5</sup> to 1 X 10 <sup>-6</sup>	МО
1 X 10.6	AZ (class A carcinogens), FL, IL, IA <sup>3</sup> , MO, MS, MT, NH (ELCR) <sup>4</sup> , NJ, ND, OR, TX, WA
	(residential), WY
Other	KY (0.14 mg/kg), NY (case-by-case basis), SC (site specific background levels)

 $^1$  AK with screening at 1 X 10<sup>-6</sup>  $^2$  AR range varies if Class A or B carcinogens are present (i.e., 1 X 10<sup>-5</sup> to 1 X 10<sup>-6</sup>)

<sup>3</sup> IA per proposed rule only <sup>4</sup> NH: 1 X 10<sup>-5</sup> risk assessment, 1 X 10<sup>-6</sup> look-up tables

Does your state have an acceptable level for cumulative risk? If yes, please 23Ъ. define:

Don't know 5 Yes 22 No 4

AK, AR, AZ, CA, FL, HI, IL, KS, KY, MD, ME, MI, MS, NH, Yes-

OH, OK, OR, SC, TX, VA, WA, WY

IA, ND, NJ, NY No-

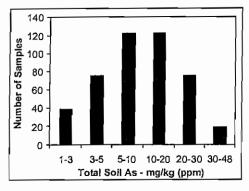
Don't know- CO, MO, MT, NM, TN

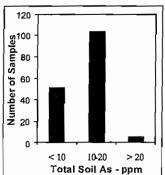
Acceptable level for carcinogens	State
1 X 10 <sup>-4</sup>	CA, HI <sup>1</sup> , KS, TX <sup>2</sup>
1 X 10 <sup>-4</sup> to 1 X 10 <sup>-6</sup>	AZ, IL, MD, MS, VA
1 X 10 <sup>-5</sup>	AK, AR, MI, NH (ELCR),
	OH, OR
$\leq 1 \times 10^{-5}$	ME
1 X 10 <sup>-6</sup>	FL, WY
< 1 X 10 <sup>-6</sup>	KY
Other	SC⁴

Acceptable level for non-carcinogens	State
$\mathbf{HI} = 1$	AR
HI ≤ 1	FL, KS, VA, NH
HI < 1	OK, WA

HI: site specific but no greater than 1 X 10<sup>4</sup>
 TX: for multiple contaminants
 MI: for chemicals known to result in toxicological interactions
 SC: see 40 CFR 503, Feb. 19, 1995, p. 9392

a better perspective on soil As levels, but it is clear that there is cause for concern from both agricultural sustainability and human health perspectives.





US-AID, 2002 study

Shah et al. 2004

Establishment of soil As limits based on the potential for leaching to groundwater is not very developed. Wenzel et al., (2002) derived upper limits of  $\sim$ 200 and 1000 ppm total soil As for protection of groundwater at the 10 and 50 ppb As levels, respectively, in Austria. The USA EPA uses a "toxicity characteristic leaching procedure" (TCLP) to determine the As leaching potential of potential hazardous wastes, including contaminated soils. This procedure uses a dilute acid extraction with a 1:20 soil to solution ratio and concentrations of As > 5 ppm in the extracting solution indicate that the soil requires remediation. A soil can only fail this test when its total As level greater than 100 ppm. These studies suggest that leaching of As from soils to groundwater is unlikely to be a problem in Bangladesh. However, leaching of As from flooded and reduced paddy soils has been little studied (A. Khan, this symposium).

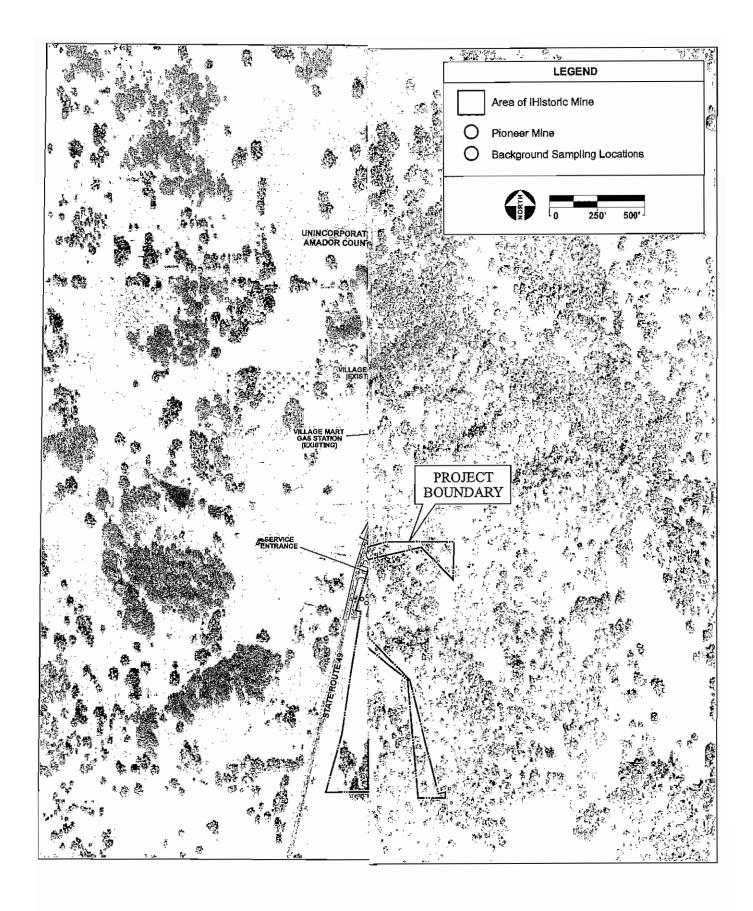
It is important to consider whether the safety standards used by developed countries are appropriate for the Bangladesh context where there are multiple severe health and environmental issues. Therefore there is a need for Bangladesh to establish it's own safety standards for arsenic in food and soils. These standards will depend on acceptable risk levels, tempered by what is achievable. In considering standard development, it is clear that potential impacts of As on food security and direct human exposure to arsenic are both important for human health outcomes.

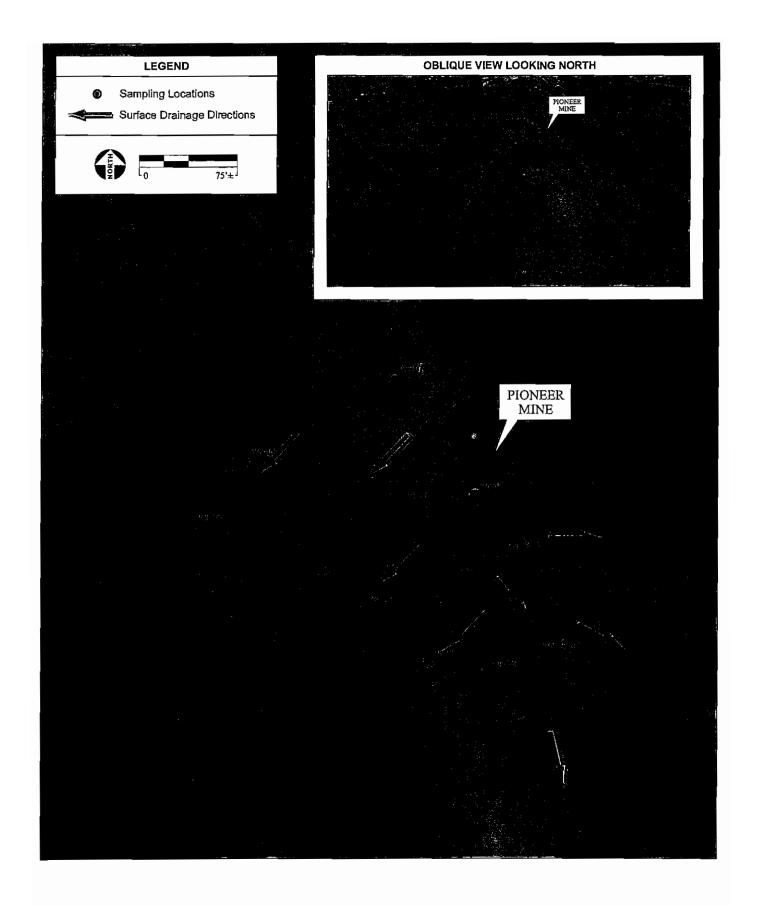
### References

Chen, M., L.Q. Ma and W.G. Harris. 2002. Arsenic concentrations in Florida surface soils; influence of soil type and properties. Soil Sci. Soc. Am. J. 66:632-640.

Huq, S.M.I., A. Rahman and N. Sultana. 2003. Extent and severity of arsenic contamination in soils of Bangladesh. *In* M.F. Ahmed et al. (ed) Fate of Arsenic in the Environment, Bangladesh University of Engineering Technology, Dhaka.

Jahiruddin, M., M.R. Islam, A.L. Shah, S. Islam and M.A. Ghani. 2004. Effects of arsenic contamination on yield and arsenic accumulation in crops. In M. A.L Shah et al. (ed.), Proc.







## EMSL Analytical, Inc

2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577

Phone: (510) 895-3675

Fax: (510) 895-3680 Email: milpitaslab@emsl.com

Attn: Pete Connelley

**AES- Analytical Environmental Services** 

1801 7th Street

Sacramento, CA 95814

Customer ID:

+00ANES01

Customer PO: Received:

203525

09/29/08 9:00 AM

EMSL Order:

090807778

Fax:

Project: 203525

Phone: (916) 447-3479

EMSL Proj:

Analysis Date:

9/30/2008

Report Date:

10/1/2008

# PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

					Non-Asbestos		
Sample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type	
WR-1		Brown			100.00% Non-fibrous (other)	None Detected	
090807778-0001		Non-Fibrous					
		Homogeneous					
WR-2		Brown.			100.00% Non-fibrous (other)	None Detected	
090807778-0002		Non-Fibrous					
		Homogeneous					
WR-3		Brown			100.00% Non-fibrous (other)	None Detected	
090807778-0003		Non-Fibrous					
		Homogeneous					
WR-4		Brown			100.00% Non-fibrous (other)	None Detected	
090807778-0004		Non-Fibrous					
		Homogeneous					
WR-5		Brown			100.00% Non-fibrous (other)	None Detected	
090807778-0005		Non-Fibrous					
		Homogeneous					
NR-6		Brown			100.00% Non-fibrous (other)	None Detected	
090 <i>8</i> 07778-0006		Non-Fibrous					
		Homogeneous					
WR-7		Brown			100.00% Non-fibrous (other)	None Detected	
90807778-0007		Non-Fibrous					
		Homogeneous					
NR-8		Brown			100.00% Non-fibrous (other)	None Detected	
090807778-0008		Non-Fibrous					
		Homogeneous					
WR-9		Brown			100.00% Non-fibrous (other)	None Detected	
90807778-0009		Non-Fibrous					
		Homogeneous	_			<u> </u>	
NR-10		Brown			100.00% Non-fibrous (other)	None Detected	
90807778-0010		Non-Fibrous					
		Homogeneous					

Analyst(s)

Adam C. Fink (13)

Baojia Ke, Laboratory Manager or other approved signatory

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. 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. EMSL is not responsible for sample collection activities or method limitations. Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less than the limit of detection undergo additional analysis via TEM. Samples received in good condition unless otherwise noted.

PLMPointCount-1



## EMSL Analytical, Inc.

2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577

Phone: (510) 895-3675

Fax: (510) 895-3680 Email: milpitaslab@emsl.com

Attn: Pete Connelley

**AES- Analytical Environmental Services** 

1801 7th Street

Sacramento, CA 95814

Customer ID:

+00ANES01

Customer PO: Received:

203525

09/29/08 9:00 AM

EMSL Order:

090807778

Fax:

Project: 203525

Phone: (916) 447-3479

EMSL Proj:

Analysis Date:

9/30/2008

Report Date:

10/1/2008

# PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

				Non	-Asbestos	<u>Asbestos</u>
<b>S</b> ample	Location	Appearance	%	Fibrous	% Non-Fibrous	% Type
BG-1		Brown			100.00% Non-fibrous (other)	None Detected
090807778-0011		Non-Fibrous Homogeneous				
BG-2		Brown			100.00% Non-fibrous (other)	None Detected
090807778-0012		Non-Fibrous Homogeneous				
BG-3		Brown			100.00% Non-fibrous (other)	None Detected
090807778-0013		Non-Fibrous Homogeneous				

Analyst(s)

Adam C. Fink (13)

Baojia Ke, Laboratory Manager or other approved signatory

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# CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

October 02, 2008

CLS Work Order #: CRI1019 COC #: 99710

Trent Wilson AES 1801 7th St., Suite100 Sacramento, CA 95811

**Project Name: Ione Soil Sampling** 

Enclosed are the results of analyses for samples received by the laboratory on 09/26/08 13:30. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D. Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

9 SPECIAL INSTRUCTIONS LOG NO. 99710 PRINT NAME / COMPANY ൠ ☐ YES ALT. QUOTE # ¥.0. GEOTRACKER: **EDF REPORT** ΥAQ **TURN AROUND TIME** GLOBAL ID: 01 FIELD CONDITIONS: 3 YAQ CONDITIONS / COMMENTS: CLS ID No.; CRI 1019 COMPOSITE: S YAQ RECEIVED BY (SIGN) 1 YAQ ANALYSIS REQUESTED PRESERVATIVES: DATE / TIME OTHER **PRESERVATIVES** CHAIN OF CUSTODY CLS (916) 638-7301 3249 FITZGERALD RD. RANCHO CORDOVA, CA. 95742 CONTAINER 6/25C ()0 DESTINATION LABORATORY CLIENT JOB NUMBER PRINT NAME / COMPANY OTHER MATRIX . |} IDENTIFICATION SAMPLE WR-7 11/11-1 WR-3 レストの W8-9 NR D WR-4 REPORT TO: FEDX 86-1 WRUS BG-3 RELINGUISHED BY (SIGN) O Δ CLS - Labs LONE SUSPECTED CONSTITUENTS 0/107 1140 TIME 1030 0307 0011 1230 1305 1130 SHIPPED BY: SITE LOCATION -REC'D AT LAB BY: JOB DESCHIPTION 12468 NAME AND AD DATE

10/02/08 09:38

AES

1801 7th St., Suite100 Sacramento CA, 95811 Project: Ione Soil Sampling

Project Number: [none] Project Manager: Trent Wilson

CLS Work Order #: CRI1019

COC #: 99710

# **CAM 17 Metals**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WR-1 (CRI1019-01) Soil	Sampled: 09/26/08 10:30	Received: 09/2	26/08 13:3	0 .					
Selenium	ND	2,5	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Thallium	ND	1.0	R	п	п	u	п	п	
Antimony	ND	2.5	IP	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	75	1.0	ii.	ħ	Ħ	tt	lı	Ħ	
Beryllium	ND	0.50	11	Ħ	II	Ħ	II .	11	
Cadmium	0.81	0.50	H	п	H	n '	Ħ	it	
Cobalt	11	1.0	ŧ1	Ħ	ĸ	**	п	h	
Chromium	9.3	1.0	it.		**	Ħ	It	п	
Copper	49	1.0	н	"	tt	Ħ	н	ų	
Lead	35	2.5	п	ti	tt	Ħ	II.	п	
Molybdenum	3.9	1.0	IP		ıı	11	It.	ıt	
Nickel	28	1.0	**	R	R	п	н	It	
Silver	2.0	0.50	н	**	**	**	п	н	
Vanadium	8.8	1.0	It	п	п	h	18	ш	
Zinc	110	1.0	ıt		п	It	Ħ	II	
Arsenic	220	10	н		It	п	н	n ·	
Mercury	0.19	0.10	н	tt	CR08123	09/29/08	09/30/08	EPA 7471A	
WR-2 (CRI1019-02) Soil	Sampled: 09/26/08 10:30	Received: 09/2	6/08 13:30	0					
Selenium	ND	2.5	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Thallium	ND	1.0	Ħ	п	ıı	II .	It	ĮI.	
Antimony	ND	2.5	II .	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	41	1.0	п	It	Ħ	Ħ	ш	II	
Beryllium	ND	0.50	IP	ч	**	tt	It	II	
Cadmium	0.65	0.50	ıt	н	II .	R	IP	ŧi	
Cobalt	12	1.0	п	IP.	tt	15	Ħ	IF	
Chromium	10	1.0	II .	h	н	Ħ	11	IÈ	
Copper	54	1.0	ıt	"	II .	н	п	н	
Lead	20	2.5	Ħ	**	Iŧ	II .	н	н	
Molybdenum	4.8	1.0	н	Ħ	tt	п	ıı	п	
Nickel	31	1.0	ıı	tt	н	tt	H	IF	
Silver	1.9	0,50	IP .	**	н	tt	н	IP	
Vanadium	8.2	1.0	4	п	п	11	ıı .	IF.	

10/02/08 09:38

AES

1801 7th St., Suite100 Sacramento CA, 95811 Project: Ione Soil Sampling

Project Number: [none] Project Manager: Trent Wilson

CLS Work Order #: CRI1019

COC#: 99710

### CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WR-2 (CRI1019-02) Soil	Sampled: 09/26/08 10:30	Received: 09/	26/08 13:3	0					
Zinc	75	1.0	mg/kg	1	CR08120	n .	09/29/08	EPA 6010B	
Arsenic	180	10	11	11	u	u	u	п	
Mercury	0.19	0.10	ш	lr	CR08123	09/29/08	09/30/08	EPA 7471A	
WR-3 (CRI1019-03) Soil	Sampled: 09/26/08 10:30	Received: 09/2	26/08 13:3	0					
Arsenic	73	1.0	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Selenium	ND	2.5	ш	n	H	tr .	"	п	
Thallium	ND	1.0	**	*1	ш	u	u	10	
Antimony	ND	2.5	U	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	79	1.0	ш	(r	ш		"	u	
Beryllium	ND	0.50	11	u	п	u	"	19	
Cadmium	0.51	0.50	tr.	u	ш	u	п	п	
Cobalt	12	1.0	u	u	u	u	ш	u .	
Chromium	16	1.0	"	**	n	"	**	**	
Copper	48	1.0	u	u	u	u	u	19	
Lead	13	2.5	ur .	ır	.0	m	ır	ч	
Molybdenum	. 3.2	1.0	**	rs	п	11	ш	u	
Nickel	35	1.0		"		"	11	п	
Silver	1.5	0.50	п	п	19	ıl	ш	n	
Vanadium	14	1.0	19	u	u	u	ш	ч	
Zinc	97	1.0	u	rr	u	ч	u	ш	
Mercury	0.11	0.10		,	CR08123	09/29/08	09/30/08	EPA 7471A	
WR-4 (CRI1019-04) Soil	Sampled: 09/26/08 10:40	Received: 09/2	26/08 13:30	)					
Selenium	ND	2.5	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Thallium	ND	1.0	"	ır	u	ш	u	u	
Antimony	ND	2.5	u	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	160	1.0	11	11	"	h	п	u	
Beryllium	ND	0.50	u	ш	**	11	*1	n	
Cadmium	0.86	0.50	u	"	ır	ır	u	u	
Cobalt	12	1.0	u	u	*	**	•	u	
Chromium	12	1.0	19	U		п	ш	u	
Copper	63	1.0	**	п	n	ur .	**	"	
Lead	14	2.5	u	ш	u	u	11	u	

CA DOHS ELAP Accreditation/Registration Number 1233

# CALIFORNIA LABORATORY SERVICES

10/02/08 09:38

AES

1801 7th St., Suite100 Sacramento CA, 95811

Project: Ione Soil Sampling

Project Number: [none]

Project Manager: Trent Wilson

CLS Work Order #: CRI1019

COC#: 99710

### CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	n Batch	Prepared	Analyzed	Method	Note
WR-4 (CRI1019-04) Soil	Sampled: 09/26/08 10:40	Received: 09/	26/08 13:3	0					
Molybdenum	3.1	1.0	mg/kg	1	CR08120	"	09/29/08	EPA 6010B	
Nickel	36	1.0	**	**	"	**	"	4	
Silver	I.7	0.50	"	tt	n .	ш	**	It.	
Vanadium	11	1.0	п	Iŧ	ш	• "		п	
Zinc	89	1.0	п	Ħ	10	**	*	*	
Arsenic	280	10	**	**	10	ıı	**	п	
Mercury	0.22	0.10	**	lŧ.	CR08123	09/29/08	09/30/08	EPA 7471A	
WR-5 (CRI1019-05) Soil	Sampled: 09/26/08 10:50	Received: 09/	26/08 13:30	)					
Selenium	ND	2.5	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Thallium	ND	1.0	**	ęı .	n.	*	"	10	
Antimony .	ND	2.5		1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	63	1.0	4		**	*	*	•	
Beryllium	ND	. 0.50	14	11	**	"	"	n .	
Cadmium	0.86	0.50	"	II .	IF.	*	ŧ	4	
Cobalt	11	1.0		10		"	*	ıı .	
Chromium	13	1.0	ш	**		*	**	*	
Copper	51	1.0	**	n	*	*	•	· ·	
Lead	19	2.5	ı+	11	*	10	ıı .	*	
Molybdenum	3.2	1.0	п	**	*	*	*		
Nickel	33	1.0	ıt	10	II .	II .	п	**	
Silver	1.4	0.50	"	11	**	*	••	ıı	
Vanadium	11	1.0	ę1	**	10	**	10	*	
Zinc	110	1.0	**	"	"	"	"	•	
Arsenic	190	10	II .	п	**	*	**	п	
Mercury	0.25	0.10	*	**	CR08123	09/29/08	09/30/08	EPA 7471A	
WR-6 (CRI1019-06) Soil	Sampled: 09/26/08 11:00	Received: 09/2	6/08 13:30						
Selenium	ND	2.5	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
[hallium	ND	1.0		10	*	"	*		
Antimony	ND	2.5	"	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	76	1.0	lŧ.	10	"	"	"		
Beryllium	ND	0.50	п	ıı	II .	**	**		
Cadmium	1.0	0.50	ır.	10	n		*		

CA DOHS ELAP Accreditation/Registration Number 1233

10/02/08 09:38

AES

1801 7th St., Suite100 Sacramento CA, 95811 Project: Ione Soil Sampling

Project Number: [none]

Project Manager: Trent Wilson

CLS Work Order #: CRI1019

COC #: 99710

### **CAM 17 Metals**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WR-6 (CRI1019-06) Soil									
Cobalt	13	1.0	mg/kg	1	CR08120	"	09/29/08	EPA 6010B	
Chromium	14	1.0	"	"	**	11	+1	H	
Copper	57	1.0	•	11	*1	*1	11	μ	
Lead	25	2.5	*	ıı	10	**	и	n .	
Molybdenum	3.4	1.0	11	11		10	**	•	
Nickel	36	1.0	и.	14	"	H	**	n	
Silver	1.8	0.50	*	**	u u	ıı	**	н	
Vanadium	13	1.0	"	. "	11	II .	н	II .	
Zinc	120	1.0	11	**	**	u	"	11	
Arsenic	270	10	**	10	*	*		h	
Mercury	0.22	0.10	**	u	CR08123	09/29/08	09/30/08	EPA 7471A	
WR-7 (CR11019-07) Soil	Sampled: 09/26/08 11:30	Received: 09/2	26/08 13:30	)					
Arsenic	32	1.0	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Selenium	ND	2.5	"		"	<del>i</del> i	11	n	
Γhallium	ND	1.0		"	"	14	п	u	
Antimony	3.3	2.5	II .	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	71	1.0	**	ıı	*	II	10	II .	
Beryllium	ND	0.50	ıı	Iŧ.	**	**	**	*1	
Cadmium	ND	0.50	II .	**.	1+	14	11	H	
Cobalt	9.2	1.0	. #	10	**	II	ħ	II .	
Chromium	16	1.0	*	"	**	Ħ	"	*	
Copper	50	1.0	**	(I	19	**	II .	10	
Lead	48	2.5	**	**	"	**	*1		
Molybdenum	3.5	1.0	II .	14	n	II .	11		
Nickel	34	1.0	11	"	11	II	u	**	
Silver	1.6	0.50	ı	II	**	п	"	I <del>e</del>	
Vanadium	15	1.0	*	h	•	*		el	
Zinc	110	1.0		11	h	ıı	"	п	
Mercury	0.14	0.10	*		CR08123	09/29/08	09/30/08	EPA 7471A	
WR-8 (CRI1019-08) Soil	Sampled: 09/26/08 11:40	Received: 09/2	6/08 13:30	1					
Arsenic	21	1.0	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	

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AES

1801 7th St., Suite100 Sacramento CA, 95811 Project: Ione Soil Sampling

Project Number: [none] Project Manager: Trent Wilson CLS Work Order #: CRI1019

COC #: 99710

## **CAM 17 Metals**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WR-8 (CRI1019-08) Soil	Sampled: 09/26/08 11:40	Received: 09/2	26/08 13:3	0					
Thallium	ND	1.0	mg/kg	10	CR08119	ıı	09/29/08	EPA 6020/7000	
Antimony	ND	2.5	u	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	54	1.0	ч	"	11	"	11	u	
Beryllium	ND	0.50	ts .	u	11	ıı	ıt	tı	
Cadmium	ND	0.50	11	11	ti	u	U	11	
Cobalt	8.6	1.0	*	11	11	u	п	n .	
Chromium	15	1.0	"	11	ш	u	ш	ıı .	
Copper	40	1.0	11	"	11	ıı	п	u	
Lead	14	2.5	u	. "	ц	11	ш	11	
Molybdenum	2.3	1.0	11	и	Ħ	11	11	"	
Nickel	26	1.0	u	11	п	п	п		
Silver	1.0	0.50	u	u	п	u	п	ıı .	
Vanadium	14	1.0	u	**	п	ч	*		
Zinc	100	1.0		и	II .	11	u	u	
Mercury	0.19	0.10	11	" (	CR08123	09/29/08	09/30/08	EPA 7471A	
WR-9 (CRI1019-09) Soil	Sampled: 09/26/08 11:55	Received: 09/2	6/08 13:30	0					
Arsenic	18	1.0	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Selenium	ND	2.5	u	u	11	*		11	
Thallium	ND	1.0	11	11	н	u	11	ш	
Antimony	ND	2.5	Ħ	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	91	1.0	ч	u	н	n .	ıı	u	
Beryllium	ND	0.50	u	11	ti	11	II	ı	
Cadmium	ND	0.50	11	"	u	u	11	11	
Cobalt	7.1	1.0	u	u	ц	11	11	· II	
Chromium	20	1.0	ш	H		ш	ıı .	8	
Copper	45	1.0	11	11	11	u	и	и	
Lead	26	2.5	u	"	ti .	11	U	,	
Molybdenum	3.3	1.0		н	ıı	u	п	н	
Nickel	31	1.0	ш	11	11	11	п	н	
Silver	1.5	0.50	u	и	u	u	u	u	
Vanadium	21	1.0	11	"	u	п	ц	п	
Zinc	96	1.0	u		u	**	11	н	
Mercury	0.16	0.10	•	" (	CR08123	09/29/08	09/30/08	EPA 7471A	

CA DOHS ELAP Accreditation/Registration Number 1233

# CALIFORNIA LABORATORY SERVICES

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1801 7th St., Suite100 Sacramento CA, 95811

Project: lone Soil Sampling

Project Number: [none]

Project Manager: Trent Wilson

CLS Work Order #: CRI1019

COC #: 99710

## CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
WR-10 (CRI1019-10) Soil	Sampled: 09/26/08 12:30	Received: 09	/26/08 13	3:30					
Selenium	ND	2,5	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Thallium	ND	1.0	n	и	n	ır	"	ır	
Antimony	2.8	2.5	ır	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	110	1.0	tr	"	O.	u .	"	ır	
Beryllium	ND	0.50	н	"	п	ır	II.	n	
Cadmium	ND	0.50	h	II .	п	11	u	ır	
Cobalt	12	1.0	"	"	II	ı	n	<b>"</b> .	
Chromium	16	1.0	ıı	ıı	п	11	u	ır	
Copper	51	1.0	"	h	ır	•	m	· ·	
Lead	17	2.5	h .	ır	н	ır	II.	n	
Molybdenum	2.8	1.0	"	ıı	п	ıı	ır	n .	
Nickel	35	1.0	n	II.	ıı.	n	п	ч	
Silver	1.7	0.50	11	ır	11	ш	p	u .	
Vanadium	15	1.0	n	u	H	a	rt .	и	
Zinc	110	1.0	"	"	н	ıı	"	ır	
Arsenic	110	10	11		ır	"	II	п	
Mercury	0.19	0.10	"		CR08123	09/29/08	09/30/08	EPA 747 IA	
3G-1 (CRI1019-11) Soil S			6/08 13:3						
Arsenic	9.3	1.0	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Selenium	ND	2.5	"	"	u	ır	n	rr .	
Thallium	ND	1.0	n	n	11	n	ır	u	
Antimony	ND	2.5	"	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	82	1.0	n		II .	"	п	u	
Beryllium	ND	0.50	n	n	ıı	"	п	H .	
Cadmium	ND	0.50	11	"	η.	11	II .	II .	
Cobalt	12	1.0	"	ır	и	н	ır	II .	
Chromium	35	1.0	"	п	ır	"	u	н	
Copper	35	1.0	h	"			ır	n	
∡ead	14	2.5	ч	n	ır	ч	п	и	
<b>Iolyb</b> denum	2.8	1.0	11	n	ıt		ıı	н	
lickel	42	1.0	4	ır	ш	ш		n	
ilver	1.8	0.50	"	"		u	n	п	
	29	1.0	11	ır	II		u	"	

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1801 7th St., Suite 100 Sacramento CA, 95811 Project: Ione Soil Sampling

Project Number: [none] Project Manager: Trent Wilson CLS Work Order #: CRI1019

COC #: 99710

### **CAM 17 Metals**

Analyte	Result	Reporting Limit	Units	Dilution	n Batch	Prepared	Analyzed	Method	Notes
BG-1 (CRI1019-11) Soil	Sampled: 09/26/08 12:55	Received: 09/2	6/08 13:30						
Zinc	100	1.0	mg/kg	1	CR08120	11	09/29/08	EPA 6010B	
Mercury	ND	0.10	n	11	CR08123	09/29/08	09/30/08	EPA 7471A	
BG-2 (CRI1019-12) Soil	Sampled: 09/26/08 13:05	Received: 09/2	6/08 13:30						
Arsenic	10	1.0	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Selenium	ND	2.5	II .	11	n	"	ıı	"	
Thallium	ND	1.0	u		II .	11	II	II .	
Antimony	ND	2.5	II .	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	100	1.0	11	11	**	II	11	11	
Beryllium	· ND	0.50	ır	n	п	n	n .	n	
Cadmium	ND	0.50	11	"	n	11	11	II .	
Cobalt	13	1.0	11	n	ıı .	n	11	n	
Chromium	32	1.0	n	"	11	li .	n	п	
Copper	37	1.0	п	"	n	n	"	n	
Lead	16	2.5	n	"		11	n	"	
Molybdenum	2.8	1.0	11		n	11	"	"	
Nickel	43	1.0			u .	11		n	
Silver	1.9	0.50	17	"	п	n	"	"	
Vanadium	27	1.0	n	,	11	"		"	
Zinc	100	1.0		11	11	,,	11		
Мегсигу	ND	0.10			CR08123	09/29/08	09/30/08	EPA 7471A	
•	Sampled: 09/26/08 13:10		6/08 13:30		01(00125	07/27/00	02/30/00	DITT 1471A	
Arsenic	8.0	1.0	mg/kg	10	CR08119	09/29/08	09/29/08	EPA 6020/7000	
Selenium	ND	2.5	"	11	11	11	11	п	
Thallium	ND	1.0	н	n	11	ıı.	n	n .	
Antimony	ND	2.5	lı .	1	CR08120	09/29/08	09/29/08	EPA 6010B	
Barium	120	1.0	п	n	n	11	11	п	
Beryllium	ND	0.50	11	u	ıı .	ш	п	II	
Cadmium	ND	0.50	n	n	n	11	II .	н	
Cobalt	10	1.0	11	ıı	"	11	"	n .	
Chromium	25	1.0	11	n	11	п	II.	п	
Copper	24	1.0	"	n	"		n	п	
Lead	10	2.5	11		lı .	n		u u	

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1801 7th St., Suite100 Sacramento CA, 95811

Project: Ione Soil Sampling

Project Number: [none]

Project Manager: Trent Wilson

CLS Work Order #: CRI1019

COC #: 99710

### CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BG-3 (CRI1019-13) Soil	Sampled: 09/26/08 13:10	Received: 09/2	6/08 13:3	30					
Molybdenum	1.9	I.0	mg/kg	1	CR08120	"	09/29/08	EPA 6010B	
Nickel	26	1.0	11	le .	"	**	•	11	
Silver	1.5	0.50	10	11	•	•	*1		
Vanadium	28	1.0	"	p	•	"	II .	**	
Zinc	76	1.0	"	10				п	
Mercury	ND	0.10	11	11	CR08123	09/29/08	09/30/08	EPA 7471A	

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1801 7th St., Suite100 Sacramento CA, 95811

Project: Ione Soil Sampling

Project Number: [none]

Project Manager: Trent Wilson

CLS Work Order #: CRII019

COC #: 99710

# **CAM 17 Metals - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	Result				Result	70,000	Lilling			INDIES
Batch CR08119 - EPA 3050B		•								
Blank (CR08119-BLK1)				Prepared a	& Analyze	ed: 09/29/0	08			
Arsenic	ND	0.10	mg/kg							
Selenium	ND	0.25	"							
Thallium	ND	0.10	ĮI.							
LCS (CR08119-BS1)				Prepared a	& Analyze	d: 09/29/0	08			
Arsenic	4.31	0.10	mg/kg	5.00		86	75-125			
Selenium	3.95	0.25	n	5.00		79	75-125			
Thallium	5.33	0.10	19	5.00		107	75-125			
LCS Dup (CR08119-BSD1)				Prepared of	& Analyze	d: 09/29/0	08			
Arsenic	4.31	0.10	mg/kg	5.00		86	75-125	0.05	25	
Selenium	3.83	0.25	10	5.00		77	75-125	3	25	
Thallium	5.33	0.10	ıı	5.00		107	75-125	0.04	25	
Matrix Spike (CR08119-MS1)	Source: CRI1019-01 Prepared & Analyzed: 09/29/08									
Arsenic	180	1.0	mg/kg	5.00	215	NR	75-125			QM-4
Selenium	4.12	2.5	II	5.00	ND	82	75-125			
Thallium	5,43	1.0	- "	5.00	ND	109	75-125			
Matrix Spike Dup (CR08119-MSD1)	Sour	ee: CRI10	19-01	Prepared &	& Analyze	d: 09/29/0	08			
Arsenic	186	1.0	mg/kg	5.00	215	NR	75-125	4	30	QM-4
Selenium	4.56	2.5	"	5.00	ND	91	75-125	10	30	
Thallium	5.61	1.0	**	5.00	ND	112	75-125	3	30	
Batch CR08120 - EPA 3050B										
Blank (CR08120-BLK1)				Prepared &	& Analyze	d: 09/29/0	 08			
Antimony	ND	2.5	mg/kg							
Barium	ND	1.0	"							
Beryllium	ND	0.50	10							
Cadmium	ND	0.50								
Cobalt	ND	1.0	п							
Chromium	ND	1.0	ıı							
Copper	ND	1.0	rr							
Lead	ND	2.5	*1							
			ır							
Molybdenum	ND	1.0								
-	ND ND	1.0								
Molybdenum Nickel Silver			<b>"</b>							

CA DOHS ELAP Accreditation/Registration Number 1233

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AES

1801 7th St., Suite100 Sacramento CA, 95811 Project: Ione Soil Sampling

Project Number: [none]

Project Manager: Trent Wilson

CLS Work Order #: CRI1019

COC #: 99710

# CAM 17 Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CR08120 - EPA 3050B						_				
Blank (CR08120-BLK1)				Prepared o	& Analyze	ed: 09/2 <b>9</b> /0	08			
Zinc	ND	1.0	mg/kg							
Arsenic	ND	10	11							
LCS (CR08120-BS1)				Prepared &	& Analyze	ed: 09/29/0	08			
Antimony	23.3	2.5	mg/kg	25.0		93	75-125			
Barium	89.8	1.0	10	100		90	75-125			
Beryllium	2.12	0.50	•	2,50		85	75-125			
Cadmium	2.60	0.50	11	2.50		104	75-125			
Cobalt	22.3	1.0	**	25.0		89	75-125			
Chromium	9.13	1.0	11	10.0		91	75-125			
Copper	11.2	1.0	"	12.5		90	75-125			
Lead	22.3	2.5	"	25.0		89	75-125			
Molybdenum	23.6	1.0	11	25.0		94	75-125			
Nickel	22.5	1.0		25.0		90	75-125			
Silver	2.41	0.50	11	2.50		96	75-125			
Vanadium	22.6	1.0	10	25.0		90	75-125			
Zinc	22.1	1.0	"	25.0		89	75-125			
Arsenic	87.5	10	•	100		88	75-125			
LCS Dup (CR08120-BSD1)				Prepared &	& Analyze	d: 09/29/0	8			
Antimony	23.6	2.5	mg/kg	25.0		94	75-125	1	25	
Barium	89.8	1.0	10	100		90	75-125	0.06	25	
3eryllium	2.13	0.50	11	2.50		85	75-125	0.09	25	
Cadmîum	2.43	0.50	"	2.50		97	75-125	7	25	
Cobalt	22.5	1.0	11	25.0		90	75-125	0.6	25	
Chromium	8.77	1.0	It	10.0		88	75-125	4	25	
Соррег	11.1	1.0	11	12.5		89	75-125	0.5	25	
Lead	22.0	2.5	41	25.0		88	75-125	2	25	
Molybdenum	23.7	1.0		25.0		95	75-125	0.6	25	
Nickel	22.3	1.0	**	25.0		89	75-125	1	25	
Silver	2.37	0.50	"	2.50		95	75-125	1	25	
Vanadium	22.5	1.0	II.	25.0		90	75-125	0.04	25	
Zinc	22.1	1.0		25.0		88	75-125	0.3	25	
Arsenic	89.5	10	*1	100		90	75-125	2	25	

# CALIFORNIA LABORATORY SERVICES

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1801 7th St., Suite100 Sacramento CA, 95811

Project: Ione Soil Sampling

Project Number: [none]

CLS Work Order#: CRI1019 COC#: 99710

Project Manager: Trent Wilson

# **CAM 17 Metals - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CR08120 - EPA 3050B										
Matrix Spike (CR08120-MS1)	So	urce: CRI10	19-01	Prepared	& Analyze	d: 09/29/	08			
Antimony	11.5	2.5	mg/kg	25.0	ND	46	75-125			QM-5
Barium	159	1.0	ш	100	75.2	84	75-125			
Beryllium	2.44	0.50	"	2.50	0.255	87	75-125			
Cadmium	3.44	0.50	ш	2.50	0.805	105	75-125			
Cobalt	33.4	1.0	IF.	25.0	10.5	92	75-125			
Chromium	20.0	1.0	ш	10.0	9.28	107	75-125			
Copper	64.9	1.0	10	12.5	48.5	131	75-125			QM-5
Lead	48.7	2.5	ш	25.0	34.9	55	75-125			QM-5
Molybdenum	25.5	1.0	**	25.0	3.87	87	75-125			
Nickel	55.7	1.0	u	25.0	28.1	110	75-125			
Silver	4.25	0.50	**	2.50	2.03	89	75-125			
Vanadium	31.7	1.0	10	25.0	8.82	92	75-125			
Zinc	146	1.0	*	25.0	108	151	75-125			QM-5
Arsenic	314	10	l#	100	215	98	75-125			
Matrix Spike Dup (CR08120-MSD1)	Sou	rce: CRI101	9-01	Prepared &	& Analyze	d: <b>0</b> 9/29/0	8			
Antimony	9.27	2.5	mg/kg	25.0	ND	37	75-125	22	30	QM-5
Barium	147	1.0	ч	100	75.2	72	75-125	8	30	QM-5
Beryllium	2.30	0.50	*1	2.50	0.255	82	75-125	6	30	
Cadmium	3.30	0.50	tr.	2.50	0.805	100	75-125	4	30	
Cobalt	30.7	1.0	*1	25.0	10.5	81	75-125	9	30	
Chromium .	18.0	1.0	ı+	10.0	9.28	87	75-125	10	30	
Copper	57.5	1.0	**	12.5	48.5	71	75-125	12	30	QM-5
Lead	45.5	2.5	"	25.0	34.9	42	75-125	7	30	QM-5
Molybdenum	24. I	1.0	10	25.0	3.87	81	75-125	6	30	-
Nickel	48.7	1.0	*1	25.0	28.1	82	75-125	13	30	
Silver	4.00	0.50	t+	2.50	2.03	79	75-125	6	30	
Vanadium	29.9	1.0		25.0	8.82	84	75-125	6	30	
Zinc	128	1.0	l+	25.0	108	82	75-125	13	30	
Arsenic	277	10	п	100	215	62	75-125	12	30	QM-5

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Project: Ione Soil Sampling

1801 7th St., Suite100 Sacramento CA, 95811

Project Number: [none] Project Manager: Trent Wilson CLS Work Order #: CRI1019

COC#: 99710

# CAM 17 Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CR08123 - EPA 7471A										
Blank (CR08123-BLK1)				Prepared:	09/29/08	Analyzed	: 09/30/08			
Mercury	ND	0.10	mg/kg					_	_	
LCS (CR08123-BS1)				Prepared:	09/29/08	Analyzed	: 09/30/08			
Mercury	0.528	0.10	mg/kg	0.625		84	75-125			
LCS Dup (CR08123-BSD1)				Prepared:	09/29/08	Analyzed	09/30/08			
Mercury	0.539	0.10	mg/kg	0.625	_	86	75-125	2	25	
Matrix Spike (CR08123-MS1)	Source: CRI0997-10			Prepared: 09/29/08 Analyzed: 09/30/08						
Mercury	0.560	0.10	mg/kg	0.625	ND	90	75-125			
Matrix Spike Dup (CR08123-MSD1)	Source: CRI0997-10			Prepared: 09/29/08 Analyzed: 09/30/08						
Mercury	0.563	0.10	mg/kg	0.625	ND	90	75-125	0.4	25	

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QM-4X

Project: Ione Soil Sampling

1801 7th St., Suite100 Sacramento CA, 95811 Project Number: [none]

CLS Work Order #: CRI1019

Project Manager: Trent Wilson

COC #: 99710

### Notes and Definitions

QM-5 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater

the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis dry

Relative Percent Difference RPD