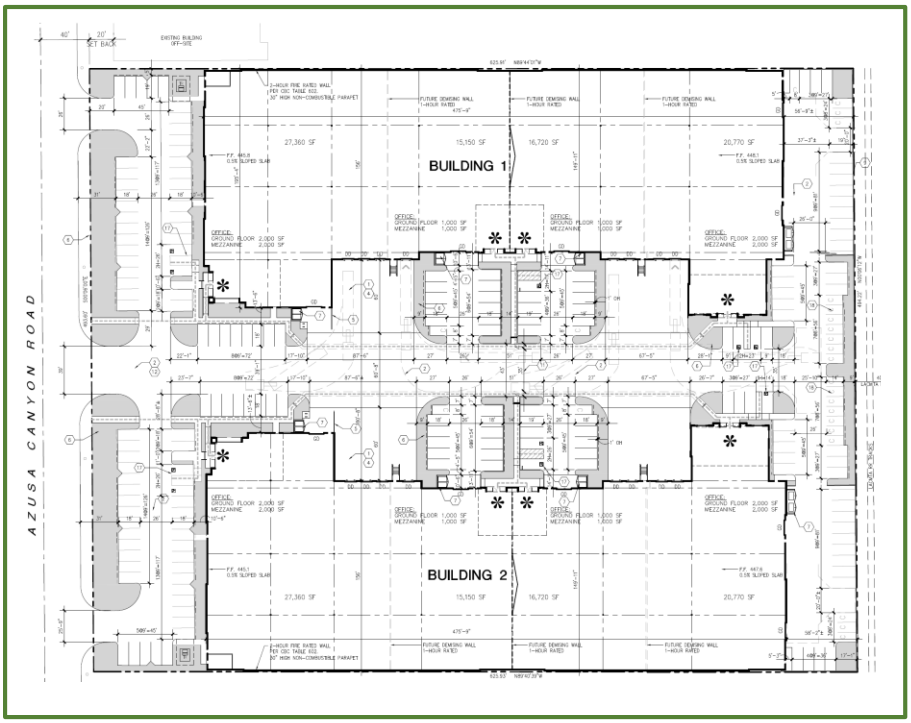
Mitigated Negative Declaration

AZUSA CANYON INDUSTRIAL PARK

4832-4910 Azusa Canyon Road, Irwindale, California

Tentative Tract Map No. 02-2014
Site Plan Design Review No. 02-2014



Prepared for:

City of Irwindale

Community Development Department

5050 North Irwindale

Irwindale, California 91706

Prepared by:

Environmental Impact Sciences

26051 Via Concha

Mission Viejo, California 92691-5614

August 2014

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Mitigated Negative Declaration

Azusa Canyon Industrial Park

4832-4910 Azusa Canyon Road, Irwindale, California

Tentative Tract Map No. 02-2014
Site Plan Design Review No. 02-2014

Applicant:
Shubin Nadal Realty Investors
901 Dove Street, Suite 225
Newport Beach, California 92660

Prepared for:
City of Irwindale
Community Development Department
5050 North Irwindale
Irwindale, California 91706

Prepared by:
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August 2014

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Environmental Checklist Form (Initial Study)

City of Irwindale, Community Development Department

Project title: ***Azusa Canyon Industrial Park***
Tentative Tract Map No. 02-2014
Site Plan Design Review No. 02-2014

The following additional actions are deemed to be ministerial and are not subject to CEQA: (1) grading permit; (2) building and safety permits; (3) certificates of occupancy; (4) water and sewer connection permits; and (5) industrial wastewater discharge permit.

CEQA Lead Agency: *City of Irwindale – Community Development Department*
5050 North Irwindale, Irwindale, California 91706

Contact person: *Paula Kelly (626/430-2209)*

Project sponsor: *Shubin Nadal Realty Investors (Applicant)*
901 Dove Street, Suite 225, Newport Beach, California 92660

Project location: *4832-4910 Azusa Canyon Road, Irwindale, California*
(4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906, and 4910 Azusa Canyon Road)

Assessor's parcels: *APNs 8417-026-005, -008, 015, -018, -019, -020, -021, -022, -023, -024, and -025*
(Figure 1)

USGS quadrangle: *USGS 7.5-Minute Baldwin Park*

Gross acreage: *7.10± acres (309,474± square feet)*

General Plan: *Industrial / Business Park*

Zoning designation: *Light Manufacturing (M-1)*

Description of project: *The subject property (4832-4910 Azusa Canyon Road) is located in the City of Irwindale (City), on the east side of Azusa Canyon Road and to the north of Olive Street. As depicted in Figure 2 (Conceptual Site Plan), proposed is the construction and operation of a 172,000 square foot (SF) non-residential use. Although the precise land use and site plan configuration may vary, for the purpose of California Environmental Quality Act (CEQA) compliance, it is presently assumed that the proposed project includes about 120,000 SF of warehouse, 28,000 SF of manufacturing, and 24,000 SF of office use. As proposed, the project's floor-area-ratio is 55.6 percent and the building's lot coverage is represented as 51.7 percent. A total of 33,088 SF of landscaping (10.7 percent of lot area) is proposed.*

The proposed project is identified as a "speculative industrial buildings." As proposed, the conceptual site plan would appear to accommodate between two and eight possible end users. Alternative uses may include: (1) a "high-cube" (highly automated) warehouse or distribution center; (2) a different mix of manufacturing, warehouse, and office uses; or (3) elimination of one or more of those uses.

In the absence of a specified end user(s), the City recognizes the Applicant's need to be responsive to uncertain market demands and to the specific design-related requirements of those undetermined users. Except where otherwise noted, nothing herein is intended to limit the Applicant's ability to reasonably modify the conceptual site plan and the

corresponding land uses to be created by the proposed subdivision, subject to the limitations of the specified total square footage delineated above.

As required under Section 16.12.180 (Required Improvements) in Title 16 (Subdivisions) of the "City of Irwindale Municipal Code" (Municipal Code), the minimum improvements that the Applicant will be required to make (or will be conditioned to make) in the subdivision prior to the acceptance and approval of the final map by the City Council shall include, but may not be limited to: (1) adequate distribution lines for domestic water supply to each lot; (2) sewage collecting system and necessary main lines; (3) adequate drainage of the subdivision streets, highways, ways and alleys; (4) adequate grading and surfacing of streets, highways, ways and alleys; (5) curbs and gutters, cross gutters, and sidewalks; (6) monuments; (7) fire hydrants at locations designated by the City Engineer; (8) any necessary barricades and safety devices; (9) street trees; and (10) ornamental street lighting in accordance with plans and specifications approved by the City Engineer. All such improvements shall conform to the standards and specifications established by resolution of the City Council or, in the absence thereof, by the City Engineer.

As specified in Section 17.70.020 (Purposes of Provisions) of the Municipal Code: "The purpose of site plan and design review is to ensure that proposed development in the city is in conformity with the intent and provisions of this title and to guide city departments in the issuance of permits. In addition, it is the purpose of this chapter to ensure that proposed development is compatible with surrounding development in terms of scale, style and construction materials; that on and off-site circulation is adequate to support the project; that city services are adequate and available; that projects are of the highest quality of land planning and design, and that projects reflect the design themes of the community and are consistent with the city's general plan and land use and planning, all in an effort to protect the health, safety and welfare of the community and to enhance the development, use, occupancy, health, safety and welfare of surrounding areas for residential, commercial or industrial uses or purposes. Further, adherence to the standards herein will benefit the occupancy of existing property, enhance the stability and value of both improved and unimproved real property, and encourage appropriate development." To the extent feasible, as determined through site plan review, the project will conform to the "City of Irwindale Commercial and Industrial Design Guidelines," as approved by the City Council on January 14, 2009.

Pursuant to the provisions of the Los Angeles County Wastewater Ordinance, as included in the "Los Angeles County Code of Ordinances" (County Code), the County Sanitation Districts of Los Angeles County may have ministerial permitting authority over certain aspects of the proposed project (e.g., permit for wastewater discharge).

The project is scheduled for completion in 2016. Once operational, the proposed project is assumed to operate on a 24-hour per day, seven days per week basis.

Surrounding land uses: *See Figure 3 (Aerial Photograph)*

North: Light Manufacturing (M-1) (City of Irwindale)
South: Light Manufacturing (M-1) (City of Irwindale)
East: Railroad Right-of-Way and Heavy Manufacturing (M-2) (City of Irwindale)
West: Azusa Canyon Road (Cities of Baldwin Park and Irwindale)
Single-Family Residential (R-1) (City of Baldwin Park)

Baseline conditions: *The project site contains four dwelling units (4832, 4838, 4850, and 4858 Azusa Canyon Road) and the balance of the site is presently developed with a variety of light industrial uses. As illustrated in Figure 4 (Site Map), the project site is occupied by residences, commercial buildings and warehouses, huts and sheds, and land used for storage of miscellaneous items including pallets, equipment, and refrigerant/ other chemicals in containers. As identified and categorized in the "Phase I Environmental Site Assessment Report, Industrial and Residential Properties, 4832, 4838, 4850, 4858, 4900, and 4910 Azusa Canyon Road, Irwindale, CA, (Orswell & Kasman, June 5, 2013), as of October 2013, the following on-site uses were identified on the subject property:*

(1) 4832 Azusa Canyon Road. Vacant residence;
(2) 4838 Azusa Canyon Road. Vacant residence;
(3) 4832-4838 Azusa Canyon Road. Montalvo Concrete (concrete paving contractor);
(4) 4848 Azusa Canyon Road. S&J Plastering (scaffolding equipment storage yard), Sierra Pallets (pallet manufacturer), Fraijo Brothers (contractor's storage yard), and Utility Partners of America (gas meter exchange);
(5) 4850 Azusa Canyon Road. Frank Smith residence (former property owner);
(6) 4858 Azusa Canyon Road. Hugo Commacho residence;
(7) 4900 Azusa Canyon Road. Refrigerant Exchange (refrigerant recycling);
(8) 4906 Azusa Canyon Road. Corky's Place & Coffee Shop (restaurant warehouse) and Winpak (packaging material warehouse);
(9) 4910 Azusa Canvon Road. Oscco Landscaping (landscaping contractor) and Refrigerant Exchange (refrigerant recycling);
(10) No Situs (APN 8417-026-005). MJ Roofing (roofing contractor) and Julio Machado (construction contractor); and
(11) No Situs (APN 8417-026-005). Driveway easement to 4910 Azusa Canyon Road).

As proposed, the project involves the cessation of those activities, the demolition and removal of existing improvements, and the construction and operation of a new business park containing manufacturing, warehouse, and office uses. With regards to short-term (construction) impacts, the environmental impacts associated with the proposed project are those attributable to demolition and construction activities. From a long-term (operational) perspective, the project's environmental effects constitute the net "physical change" (Section 21065, CEQA; Section 15060[c], State CEQA Guidelines) in the site's operational characteristics, such that, in the assessment of the proposed project's environmental effects, it is appropriate to subtract the impacts attributable to the site's current uses from the impacts attributable to the site's proposed use. For the purpose of presenting a worst-case environmental analysis, except where otherwise noted, this CEQA analysis has not sought to quantify the environmental effects associated with the site's current use and operation.

The environmental impacts presented herein and the City's preliminary determination with regards to those effects likely overstates the proposed project's actual impacts and represents a more conservative assessment of the project's potential environmental consequences than would otherwise be anticipated if the proposed project were to be analyzed from a "net physical change" (Section 21065, CEQA; Section 15060[c], State CEQA Guidelines) perspective.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION:

On the basis of this initial evaluation:

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

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

A draft MITIGATION REPORTING AND MONITORING PROGRAM has been included in Appendix A herein.

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

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

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

_____ _____
Signature (Prepared by) Date

_____ _____
Signature (Approved by) Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

(4) "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

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

   (a) Earlier Analysis Used. Identify and state where they are available for review.
   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

(7) The explanation of each issue should identify: the significance threshold, if any, used to evaluate each question, and; mitigation measures identified, if any, to reduce the impact to less than significance. Sources of thresholds include the “Guidelines for the Implementation of the California Environmental Quality Act” (State CEQA Guidelines), the “City of Irwindale General Plan Update 2020” (General Plan), and other City planning documents. Some thresholds are unique to geographical locations.

(8) Climate Change Impacts: When determining whether a project’s impacts are significant, the analysis should consider, when relevant, the effects of future climate change on: (1) worsening hazardous conditions that pose risks to the project’s inhabitants and structures (e.g., floods and wildfires), and (2) worsening the project’s impacts on the environment (e.g., impacts on special status species and public health).

LIST OF REFERENCED FIGURES (Appendix B)

Figure	
1	Assessor's Parcel Map
2	Conceptual Site Plan
3	Aerial Photograph
4	Site Map
5	Seismic Hazard Zones – Baldwin Park Quadrangle (1999)
6	Geologic Map of the Baldwin Park 7.5' Quadrangle, Los Angeles County, California (1997)
7	San Gabriel River Watershed
8	Historic Highest Groundwater Level
9	San Gabriel Valley Area 2 – Baldwin Park Superfund Site
10	FIRM No. 06037C1700F
11	Santa Fe Dam Emergency Plan Inundation Area
12	Dam Safety Classifications
13	Candidate Areas for Updated Designation in the Northern San Gabriel Production-Consumption Region, Los Angeles County, California

APPENDICIES

Appendix	
A	Draft Mitigation Reporting and Monitoring Program
B	Referenced Figures
C	Azusa Canyon Industrial Park - Air Quality and Greenhouse Gas Analysis (Environmental Impact Sciences, August 2014)
D	Phase I/II Environmental Site Assessments (AMEC Environmental & Infrastructure, October 9, 2013)
E	Azusa Canyon Industrial Park - Acoustical Analysis (Environmental Impact Sciences, August 2014)
F	Transportation Study for Azusa Canyon Industrial Parks (Gibson Transportation Consulting, September 2013)
G	Third-Party Review - Transportation Study for Azusa Canyon Industrial Parks (Sasaki Transportation Services, August 2014)

1.0 AESTHETICS

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
(a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
No designated scenic vistas have been identified in the project area.				
(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a State scenic highway?	☐	☐	☐	☒
The project site is not located in the vicinity of a State scenic highway.				
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
The project site is located within an existing industrial area and previously used for industrial purposes. The property's existing visual character is, therefore, reflective of the nature of the area's existing land uses.				
As indicated in Figure 2 (Conceptual Site Plan), the Applicant will construct a landscaped berm along the property's frontage to provide partial screening of the project site from off-site residential receptors located along the west side of Azusa Canyon Road.				
(d) Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
The project site currently contains existing industrial uses that generate sources of night-time illumination.				

2.0 AGRICULTURE / FOREST

Would the project:				
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
As indicated in the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), the project site does not include lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) (Source: Los Angeles County Important Farmland 2010).				
(b) Conflict with existing zoning for agricultural use or with a Williamson Act contract?	☐	☐	☐	☒
The project site is not zoned for agricultural use and no Williamson Act contract exists thereupon.				

2.0 AGRICULTURE / FOREST (Continued)

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

The project site does not include lands designated as forest land, timberland, or timberland zoned for Timberland Production or lands meeting those statutory and regulatory definitions.

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

The project site does not include lands designated as forest land, timberland, or timberland zoned for Timberland Production or lands meeting those statutory and regulatory definitions.

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

Because the project site does not include lands designated as either Farmlands or forest land, timberland, or timberland zoned for Timberland Production, implementation would neither directly nor indirectly impact those lands or the resources located thereupon.

3.0 AIR QUALITY

Would the project:

(a) Conflict with or obstruct implementation of applicable air quality plans of the South Coast Air Quality Management District (SCAQMD)?	☐	☒	☐	☐

Based on the relatively low threshold of significance criteria formulated by the South Coast Air Quality Management District (SCAQMD), the City conducted an air quality and assessment of the project's short-term (construction) and long-term (operational) criteria and greenhouse gas (GHG) emissions. That analysis, included as Appendix C (Azusa Canyon Industrial Park - Air Quality and Greenhouse Gas Analysis) herein, concluded that the proposed project, as mitigated, would not result in any significant air quality impacts. The following mitigation measure is identified therein:

- ***Mitigation Measure No. 1**. Option No. 1 - Painting and surface coating shall be limited to an aggregate area of no more than 6,435 square feet per day during any phase of construction; or Option No. 2 - Paints and surface coatings shall be limited to no more than 93.5 milligrams per liter of volatile organic compound (VOC) content.*

As mitigated, air quality impacts would be reduced to a less-than-significant level.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐

See Appendix C (Azusa Canyon Industrial Park - Air Quality and Greenhouse Gas Analysis).

(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐

See Appendix C (Azusa Canyon Industrial Park - Air Quality and Greenhouse Gas Analysis).

(d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

In 2000, the SCAQMD conducted a study on ambient concentrations of toxic air contaminants (TACs) and estimated the potential health risks from air toxics. Although concentrations and risk levels vary throughout the region, the results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,400 in one million (1,400 x 10^{-6}). The largest contributor (71 percent) was diesel exhausts.

Designated "truck traffic routes" are identified in Exhibit 4-1 (Designated Truck Routes in Irwindale) and Table 4-9 (Major Designated Truck Routes in Irwindale) in the "Circulation Element" of the General Plan. Arrow Highway, Live Oak Avenue, and Irwindale Avenue are identified in both the exhibit and in the table. Azusa Canyon Road is listed only in the table. The General Plan notes: "'Truck traffic routes' have been established within the City to accommodate vehicles that exceed 3 tons (6,000 pounds) maximum vehicle gross weight. The Municipal Code (Section 10.40.020) does not permit the movement or parking of such heavy vehicles on any streets other than the streets designated as 'truck traffic routes.'"

As indicated in the "Draft Environmental Impact Report for the Irwindale Materials Recovery Facility and Transfer Station, SCH No. 2013051029" (City of Irwindale, April 2014) (MRF-EIR), "[t]he greatest potential impact from TACs [toxic air contaminants] would be diesel particulate emissions from trucks during operations" (MRF-EIR, p. 3.3-40) and "[t]he maximum daily number of truck trips [associated with the materials recovery facility/transfer station (MRF/TS)] would be 2,456 truck round trips" (MRF-EIR, p. 3.3-31). Based on a health risk assessment (HRA) of that facility, the MRF-EIR concluded that "the maximum incremental cancer risks from all trucks using the MRF/TS and the service station would be 6.6 (residential adult receptor), 3.2 (residential child receptor), 1.0 (off-site worker), and 0.5 (school children receptor) cancers per million, which are less than the SCAQMD significance threshold of 10 in one million" (MRF-EIR, p. 3.3-41).

As indicated in the "Traffic Study for the Azusa Canyon Industrial Park" (Gibson Transportation Consulting, September 2013) (Traffic Study), since the project is expected to utilize trucks in daily operations, an estimate 33 percent of the average daily traffic volumes (1,199 ADT) was assumed to be trucks (Traffic Study, p. 33). The proposed project will generate a total of only 396 truck trips per day (Traffic Study, Table 6, p. 37), representing only about 16.1 percent of the truck traffic identified in the MRF-EIR. It, therefore, can be reasonably concluded that the proposed project's potential health risks attributable to TACs would be substantially less than those attributable to the MRF/TS (i.e., less than significant).

3.0 AIR QUALITY (Continued)

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
(e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

See Appendix C (Azusa Canyon Industrial Park - Air Quality and Greenhouse Gas Analysis).

4.0 BIOLOGICAL RESOURCES

Would the project:

(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☐	☐	☒

The project site had previously been highly disturbed and presently contains both residential and industrial land uses. As evident in Figure 3 (Aerial Photograph), only limited introduced vegetation presently exists thereupon. With the possible exception of invasive species, the project site is absent of native vegetation.

(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☐	☒

As evident in Figure 3 (Aerial Photograph), no sensitive natural communities exist on the project site.

(c) Have a substantial adverse effect on federally or State protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by Section 404 of the federal Clean Water Act or Section 1600 et seq. of the California Fish & Game Code through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

As evident in Figure 3 (Aerial Photograph), no federally or State-protected wetlands exist on the project site.

(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

Since the project site does not possess significant habitat value, implementation would not substantially interfere with the movement of any native species.

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

4.0 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Since the project site does not possess significant habitat value, implementation would not conflict with any local policies or ordinances designed to protect biological resources.				
(f) Conflict with the provisions of an adopted State, regional, or local Habitat Conservation Plan, Natural Resource Conservation Plan, or other approved State, regional, or local habitat conservation plan?	☐	☐	☐	☒
There are no known State, regional, or local habitat conservation plans that include or affect the project site.				

5.0 CULTURAL RESOURCES

Would the project:

(a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines?	☐	☐	☐	☒
There are no known historic resources on the project site.				
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines?	☐	☐	☐	☒
The project site has been previously disturbed and no evidence exists to suggest the presence of any archaeological resources thereupon.				
(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature indicating potential paleontological resources?	☐	☐	☐	☒
The project site has been previously disturbed and no evidence exists to suggest the presence of any unique paleontological resources or unique geologic features thereupon.				
(d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
There is no information suggesting that human remains may be interred on the project site. In the event that human remains are encountered during the course of any future development, Section 7050.5 of the Health and Safety Code and Section 5079.98 of the Public Resources Code state that no further earth disturbance shall occur at the location of the find until the Los Angeles County Coroner (Coroner) has been notified. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC). The NAHC will determine and notify a "most likely descendant" (MLD).				

6.0 ENERGY

Would the project:

(a) Conflict with any local ordinance or policies relating to energy use or conservation?	☐	☐	☐	☒

6.0 ENERGY

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

The proposed project is subject to compliance with all applicable State and local building codes and conservation requirements, including those relating to energy and water conservation. Compliance with those existing obligations will ensure that energy resources are not utilized inefficiently.

(b) Involve the inefficient use of energy resources?	☐	☐	☐	☒

The proposed project is subject to compliance with all applicable State and local building codes and conservation requirements, including those relating to energy and water conservation. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

7.0 GEOLOGY AND SOILS

Would the project:

(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known active fault trace? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

Effective on April 1, 1991, the State Legislature passed the Seismic Hazards Mapping Act (SHMA), codified in Division 2, Chapter 7.8 of the Public Resources Code. The SHMA was adopted for the purpose of protecting the public from the effects of strong ground shaking, liquefaction, landslides or other ground failure, and other hazards caused by earthquakes. As required therein, the California Department of Conservation's Division of Mines and Geology, now the California Geological Survey, was directed to delineate the various "seismic hazard zones" located throughout the State.

The project site is located in the United States Geological Survey's (USGS) 7.5-Minute Baldwin Park Topographic Quadrangle. As illustrated in Figure 5 (Seismic Hazard Zones – Baldwin Park Quadrangle [1999]), the site is not located within or in close proximity to designed "liquefaction" or "earthquake-induced landslides" zones (Source: California Department of Conservation, Seismic Hazard Zones – Baldwin Park Quadrangle, March 25, 1999).

The Alquist-Priolo Earthquake Fault Zoning Act (APEFZA), formally called the Alquist-Priolo Special Studies Zone Act, codified in Section 2621 et seq. in Chapter 7.5 of Division 2 of the Public Resources Code, was adopted to "provide policies and criteria to assist cities, counties, and State agencies in the exercise of their responsibilities to prohibit the location of developments and structures for human occupancy across the trace of active faults" (Section 2621.5[a], Public Resources Code). An "active fault" is defined as one along which surface displacement has occurred within Holocene time (during the past 11,000 years).

(Continued)

The purpose of the APEFZA is to regulate land development near active faults in an effort to mitigate the hazard of surface fault rupture. The law requires the State Geologist to establish regulatory zones, known as "earthquake fault zones," around the surface traces of active faults and to issue maps identifying those zones. No corresponding APEFZA map has been prepared by the State Geologist for the Baldwin Park quadrangle. As a result, it can be concluded that no known active faults exist on or proximal to the project site.

(ii) Strong seismic ground shaking?	☐	☐	☒	☐

The project site is located within seismically-active southern California. As a result, the project site may be subject to strong seismic ground shaking during the life of the project. As indicated in "Seismic Hazard Zone Report for the Baldwin Park 7.5-Minute Quadrangle, Los Angeles, County, California" (California Department of Conservation, 1998), "the potential for strong earthquake ground shaking is high because of the many nearby active faults." All buildings will conform to applicable "Earthquake Design Regulations" specified in Section 1613 in Chapter 16 (Structural Design) of the California Building Code. Implementation of those requirements will ensure that seismic hazards are minimized to the maximum extent feasible. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

(iii) Seismic-related ground failure, including liquefaction and lateral spreading?	☐	☐	☒	☐

See Response No. 7(a)(i) above.

(iv) Landslides?	☐	☐	☒	☐

See Response No. 7(a)(i) above.

(b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

At the time grading plans and/or building permit applications are filed with the City, detailed engineering studies, consistent with the Los Angeles County Department of Public Works' (LACDPW) "Hydrology Manual," shall be submitted for review and approval by the City Engineer. In addition, as required under the "Construction General Permit," the Applicant shall prepare a storm water pollution prevention plan (SWPPP) prior to the commencement of grading operations and implement that plan during construction. The City is required to conduct monitoring and reporting to ensure that Best Management Practices (BMPs) are correctly implemented and effective in controlling the discharge of pollutants. Implementation of those requirements will ensure that soil erosion is minimized to the maximum extent feasible. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

(c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐

As illustrated in Figure 6 (Geologic Map of the Baldwin Park 7.5' Quadrangle, Los Angeles County, California [1997]) (Tan, Siang S., Open File Report 98-30, California Department of Conservation, Division of Mines and Geology, 1997), the project site comprised of younger (Holocene-age) alluvium, gravel. No earthquake faults or landslides are depicted on or near the project site.

7.0 GEOLOGY AND SOILS (Continued)

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

(Continued)

As reported in the "Seismic Hazard Zone Report for the Baldwin Park 7.5-Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 022" (California Department of Conservation, Division of Mines and Geology, 1998), "many of the Holocene alluvial deposits in the study area contain a significant amount of gravel. In the past, gravelly soils were considered not to be susceptible to liquefaction because the high permeability of these soils presumably would allow the dissipation of pore pressures before liquefaction could occur. However, liquefaction in gravelly soils has been observed during earthquakes, and recent laboratory studies have shown that gravelly soils are susceptible to liquefaction" (Section 1, pp. 11-12).

As indicated in Section 15.04 in Title 15 (Building and Construction) of the Municipal Code, except as otherwise provided, the City has adopted the Los Angeles County Building Code, 2011 Edition (Title 26 of the County Code). In accordance therewith, prior to the issuance of building permits, unless otherwise waived, the City will require that the Applicant submit a preliminary soils report, prepared by a State-licensed engineer, based on adequate test borings and excavations. To the extent required, the report will contain recommendations ensuring that the resulting development provides for the public safety, with a reasonable margin of safety. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

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

See Response No. 7(c) above.

(e) Have soils incapable of adequately supporting the use of on-site wastewater treatment systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐

The project will be connected to an existing sanitary sewer.

8.0 GREENHOUSE GAS EMISSIONS

Would the project:

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

Based on the relatively low threshold of significance criteria formulated by the SCAQMD, the City conducted a detailed air quality assessment of the project's short-term (construction) and long-term (operational) criteria and greenhouse gas (GHG) emissions. That analysis, included as Appendix C (Azusa Canyon Industrial Park - Air Quality and Greenhouse Gas Analysis) herein, concluded that the proposed project would not result in any significant GHG emission impacts and, with regards to GHG emissions, no mitigation measures or other air quality-related conditions of approval are required or recommended.

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

See Appendix C (Azusa Canyon Industrial Park - Air Quality and Greenhouse Gas Analysis).

9.0 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
(a) Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?	☐	☐	☒	☐

The proposed project does not involve the routine transport, storage, production, use, or disposal of hazardous materials. Limited quantities of those materials may, however, be present and consumed on the project site.

Under Superfund Amendments and Reauthorization Act (42 USC 9601 et seq., 11000 et seq.) (SARA) Title III, local fire departments and other parties receive annual notice regarding the nature of materials that are present on a project site. So notified, emergency service providers can safely respond to any unset conditions that may occur. In addition, under Proposition 65, additional community notification is provided. The project will comply with all reporting and notification requirements associated therewith.

Transportation of both hazardous materials and hazardous wastes are regulated by the United States Department of Transportation (USDOT), under the authority of the Hazardous Materials Transportation Act. Federal Resource Conservation and Recovery Act (RCRA) rules also include provisions regarding the transportation of hazardous wastes. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment?	☐	☐	☒	☐

No "reasonably foreseeable upset and accident conditions" have been identified. The project will neither generate any substantial quantity of hazardous emissions nor result in the "on-site" storage, use, and consumption of any substantial quantity of hazardous materials and/or wastes.

A limited quantity of TACs, primarily diesel exhaust emissions, will likely be generated both during the project's construction and operation. Diesel particulates (diesel PM) are emitted from diesel-fueled mobile sources (on-road vehicles and off-road mobile sources) and would be generated by diesel-fueled construction equipment and by any diesel-fueled vehicles associated with the project's operation and maintenance. Any diesel PM construction emission would be short-term in duration and of limited quantity, typical of any construction project.

Buildings constructed or remodeled prior to 1981 have the potential of containing friable and non-friable asbestos-containing materials (ACMs) and asbestos-containing construction materials (ACCMs). Friable asbestos-containing building material (ACBM) is defined by the United States Environmental Protection Agency (USEPA) and the SCAQMD as a material that, when dry, can be easily pulverized, crushed, or reduced to a powder by hand pressure. Non-friable ACBM is a material that can be broken, crumbled, pulverized, or reduced to powder during demolition or renovation activities. All asbestos-related work must be completed in accordance with the following regulations: (1) SCAQMD Rule 1403; (2) National Emissions Standards for Hazardous Air Pollutants (40 CFR 61, M); (3) Occupational Safety and Health Administration, Asbestos in the Workplace (29 CFR 1910.1001); (4) Occupational Safety and Health Administration, Asbestos Construction Standard (29 CFR 1926.1101); and (5) Section 1529, Title 8, California Code of Regulations, Cal-OSHA Construction Standard).

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

(Continued)

In 1978, paints containing more than 0.06 percent (by weight of dried product) lead were banned for use in the United States (16 CFR 1303). "Lead-based paints" are defined as any "paint, surface coating that contains lead equal to or exceeding one milligram per square centimeter (1.0 mg/cm2) or 0.5% by weight." Buildings constructed or remodeled prior to 1978 may, therefore, contain lead-based paint (LBP).

As mitigated by the recommended measures outlined below, potential hazards relating to possible exposure by workers and others to ACMs, ACCMs, and LBP, if present, would be reduced to a less-than-significant level.

- ***Mitigation Measure No. 2**. Prior to the demolition of any pre-1981 buildings or structures located on the project site, a pre-demolition survey will be conducted to the satisfaction of the Community Development Director to determine the potential presence of asbestos-containing materials (ACMs) and/or asbestos-containing construction materials (ACCMs) in those existing buildings and structures to be demolished. If ACMs and/or ACCMs are determined to be present in those buildings and structures to be demolished, all such materials shall be removed in accordance with acceptable engineering methods and work practices by a licensed asbestos abatement contractor prior to demolition. The process shall be designed and monitored by a California Certified Asbestos Consultant and an abatement and monitoring plan shall be developed and submitted for review and approval by the appropriate regulatory agencies.*

- ***Mitigation Measure No. 3**. Prior to the demolition of any pre-1978 buildings or structures located on the project site, a pre-demolition survey will be conducted to the satisfaction of the Community Development Director to determine the potential presence of lead-based paint (LBP) in those existing buildings and structures to be demolished. Should LBP be identified, standard handling and disposal practices shall be implemented pursuant to applicable Occupational Safety and Health Administration (OSHA) standards.*

The project site is zoned and has been utilized for industrial uses. The seller of real property who has actual knowledge that the property is affected by or zoned to allow commercial or industrial use described in Section 731(a) of the Code of Civil Procedure shall give written notice of that knowledge to purchasers as soon as practicable before transfer of title (Section 1102.17, California Civil Code). Section 731(a) of the Code of Civil Procedure defines "industrial use" as areas in which a city and/or county have established zones or districts under authority of law wherein certain manufacturing or commercial or airport uses are expressly permitted.

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

The nearest school site, North Park High School (4600 N. Bogart Avenue, Baldwin Park 91706), is located approximately 0.35 miles to the west of the project site. Because the nearest school is located more than 0.25 miles from the project site, the resulting impact is less than significant.

(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Section 65962.5 of the California Government Code and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐

As stipulated under Section 65962.5 of the California Government Code (CGC): "(a) The Department of Toxic Substances Control [DTSC] shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all of the following: (1) All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code. (2) All land designated as hazardous waste property or border zone property pursuant to former Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code. (3) All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land. (4) All sites listed pursuant to Section 25356 of the Health and Safety Code." As specified in Section 25356(a)(1) of the Health and Safety Code (H&SC), the DTSC "shall adopt, by regulation, criteria for the selection of hazardous substance release sites for a response action under this chapter."

In June 2013, in order to determine if any "recognized environmental conditions" (RECs) or "historical recognized environmental conditions" (HRECs) then existed on or near the subject property, a "Phase I Environmental Site Assessment Report, Industrial and Residential Properties, 4832, 4838, 4850, 4858, 4900, and 4910 Azusa Canyon Road, Irwindale, CA, (Orswell & Kasman, June 5, 2013) (June 2013 Phase I ESA) was prepared for the subject property but did not include 4854 Azusa Canyon Road. The report was prepared in conformance with the ASTM International's (ASTM) "Standard Practice E 1527-05: Standard Practice of Environmental Site Assessments: Phase I Environmental Site Assessment Process" (2005).

As defined by ASTM Standard Practice E 1527-05, a REC is the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release 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 applicable 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. A HREC is defined as a condition which in the past would have been considered a REC but which may or may not be considered a REC currently. If a past release of any hazardous substance or petroleum products has occurred in connection with the property and has been remediated, with such remediation accepted by the responsible regulatory agency, this condition is considered a HREC.

As indicated, in part, therein, based on a review of regulatory records, historical site information, and a visual inspection of the subject property and surrounding area, the June 2013 Phase I ESA revealed no RECs or HRECs in connection with the subject property (excluding 4854 Azusa Canyon Road), except as follows:

(1) 4846-4848 Azusa Canyon Road. Four underground storage tanks (USTs) were installed on the 4846 Azusa Canyon Road property (now 4848 Azusa Canyon Road). In 1949, a 500-gallon gasoline tank was installed on the property. In 1960, a 6,000-gallon underground tank was installed on the site. In 1972, a 10,000-gallon tank and a 5,000-gallon tank were installed on the site. There are no building permits on file indicating that the tanks have been removed and that soil tests were performed to determine if the tanks had leaked.
(2) 4900-4910 Azusa Canyon Road. The 4900 Azusa Canyon Road property and a portion of the 4910 Azusa Canyon Road property are occupied by Refrigerant Exchange, a refrigerant recycling business. The business operates a nearby recycling facility and the subject property is used to temporarily store containers of spent refrigerant.

(Continued)

It was observed that hundreds of drums and compressed gas cylinders were stored on the site and the labels indicated that the containers were used to store refrigerant oil, lithium bromide solution, and chlorofluoromethane. Some of the containers were observed to be damaged and bulging and the asphalt ground surface was stained. Containers of propane, Freon and compressed gas cylinders were described as being "carelessly stockpiled on the ground" west of the Quonset hut building. Some of the drums containing lithium bromide solution were observed to be leaking onto the ground surface.

In response, the June 2013 Phase I ESA recommended, in part, that: (1) additional studies be performed to determine if there are currently any USTs on the 4846-4848 Azusa Canyon Road property and to determine if those tanks have leaked and impacted the subject property, including (a) a geophysical survey to determine if there are currently any USTs on the site and (b) a soil gas survey to determine if there is any evidence of hydrocarbon impact from the underground storage tanks; and (2) the drums and containers of hazardous materials that were observed should be properly stored and managed, repackaged, and/or removed from the site and the soil impacted by the spilled material should be tested.

In October 2013, a subsequent "Phase I Environmental Site Assessment Update, 4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906, and 4910 Azusa Canyon Road, and Adjoining Alleys/Yards, Irwindale, California" (AMEC Environment & Infrastructure, October 9, 2013) (October 2013 Phase I ESA) was prepared as an update to the June 2013 Phase I ESA in order to include the additional project areas not previously addressed and to further investigate the RECs identified therein. The October 2013 Phase I ESA was also conducted in compliance with ASTM E1527-05 and included the October 2013 Phase I as an attachment therein. As reported, in part, in the October 2013 Phase I ESA:

(1) Groundwater in the near vicinity of the subject property is impacted by VOCs (PCE, TCE and other VOCs), perchlorate and 1,4-dioxane. Trace concentrations of VOCs, perchlorate and 1,4-dioxane may be present in the groundwater beneath the subject property. Regional groundwater is being monitored and treated with respect to VOCs.
(2) Portions of the subject property (primarily 4900 and 4910 Azusa Canyon Road) contain drums, totes, cylinders, and other types of containers of hazardous materials being stored by Refrigerant Exchange, a refrigerant recycling company. Labels indicate the containers are used to store refrigerant oil, lithium bromide, chlorofluoromethane mixture and propane. Some of the containers are unlabeled. Numerous containers are stored haphazardly, leaks and staining were observed, and containers are bulging and damaged.
(3) Permits indicate the existence, or previous existence, of four USTs at 4846 Azusa Canyon Road (Note: the address listing of 4846 Azusa Canyon Road is believed to be incorrect, with the correct address being 4848 Azusa Canyon Road). The available permit drawings are not to scale and tank removal reports are not available. Based on this information, actual UST locations cannot be determined.
(4) Residential structures appear to have been built in the 1940s or 1950s. Based on the age of these structures or other structures at the subject property, ACMs and LBPs may be present.
(5) Septic tanks were reported at the subject property; however the actual locations of the septic tanks have not been documented. Observations of two metal covers housing two metal vaults just east of the presumed office were indicative of possible septic tanks. An additional metal cover, north of the previous kiln building, housed a metal vault-like feature, possibly indicating a septic tank.

(Continued)

(6) *Rodriguez Trucking (J.G. Rodriguez Trucking), located at 4938 Azusa Canyon Road, approximately 225 feet north of the subject property (presumably upgradient) is listed on the Leaking Underground Storage Tanks (LUST), Historic UST Registered Database (Hist UST), Well Investigation Program (WIP), and Los Angeles County Hazardous Materials System (HMS) databases.*

(7) *Minor oil residue was observed on soil/gravel in the yard near the wood pallet storage area. The residue appeared to have resulted from parked vehicles. The extent of oil residue did not appear to be widespread; however the extent of environmental impacts is unknown. Based on the observations, the oil residue appears to be de minimis.*

The October 2013 Phase I ESA (inclusive of the June 2013 Phase I ESA) is included as Appendix D (Azusa Canyon Industrial Park – Phase I/II Environmental Site Assessment) herein. As indicated therein, the project site is not on a list of hazardous materials sites compiled pursuant to Section 65962.5 of the CGC and/or Section 25242 of the H&SC.

On November 1, 2013, ASTM's "Standard Practice E1527-13: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" became effective. On December 30, 2013, the United States Environmental Protection Agency (USEPA) published a final rule (78 Fed. Reg. 79319) adopting ASTM's Standard Practice E1527-13 as a standard satisfying the "all appropriate inquiries" (AAI) requirement for landowner liability defenses under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). AAI is an element in establishing certain landowner liability defenses available under CERCLA. While CERCLA imposes strict liability for current owners of contaminated property, the Act also establishes statutory defenses for current owners who acquire contaminated property but are not responsible for the contamination and do not impede the remediation process. One element common to each such defense is AAI, a showing that, prior to acquiring the property, the landowner made reasonable inquiries to determine whether the property had existing contamination. The requirements for AAI have been set forth as part of the All-Appropriate Inquiries Rule (AAI Rule) promulgated by USEPA (40 C.F.R. Part 312). Once the USEPA adopts a standard developed by ASTM as AAI-compliant, prospective landowners may satisfy the AAI element of the CERCLA landowner liability defenses by obtaining an assessment that meets the ASTM standard.

In response to the findings of the June 2013 Phase I ESA, the Applicant undertook an additional assessment of the "recognized environmental conditions" (RECs) and "potential environmental concerns" (PECs) identified therein. The results of a "screening-level Phase II investigation" were presented in "Screening-Level Phase II Investigation Results, Azusa Canyon Road, Irwindale, California" (AMEC Environmental & Infrastructure, October 9, 2013) (October 2013 Phase II Investigation), included as Appendix D (Azusa Canyon Industrial Park – Phase I/II Environmental Site Assessment) herein.

A Phase II environmental site assessment is typically performed when the Phase I ESA identifies RECs, PECs, and/or recommends further investigation. The standard practice for Phase II ESAs is "ASTM E1903-11: Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process" (ASTM International, July 2011). As indicated therein: "This practice covers a process for conducting a Phase II environmental site assessment (ESA) of a parcel of property with respect to the presence or likely presence of substances including but not limited to those within the scope of the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (e.g., hazardous substances), pollutants, contaminants, petroleum and petroleum products, and controlled substances and constituents thereof" (ASTN E1903-11, Section 1.1).

(Continued)

Unlike the Phase I ESA's AAI rule, the Phase II is not a rule but a standard of practice for performing the assessment. AAI is a USEPA-derived federal standard (40 CFR Part 312) that defines the amount and type of inquiry required to determine the previous ownership and uses of a property for the purposes of meeting the AAI provisions necessary to qualify for certain landowner liability protections under CERCLA. The standard of the Phase II ESA is typically defined by the scope proposed by the "environmental professional" and accepted by the client, thus allowing the scope of work to be tailored to each individual site and situation.

The October 2013 Phase II Investigation included a geophysical survey of the subject property using a combination of electromagnetic induction (EM), magnetometry, and ground penetrating radar (GPR) for the purpose of locating and identifying, if possible, buried features or utilities that may be present at the sampling locations and to assess suspect locations that may have contained former USTs. The geophysical survey was constrained in certain areas by the close proximity to reinforced concrete, above ground debris, or other above ground metallic objects. Local conditions at the site were unfavorable for radar penetration due to the nature of the soil and materials covering the survey areas. As a result, the geophysical survey was inconclusive with regards to the suspect UST locations. At the locations surveyed, metallic objects indicative of a buried UST(s) were not identified. One area exhibited disturbed soil that may be indicative of a backfilled excavation near the Quonset hut at 4910 Azusa Canyon Road. The soil vapor data suggest that some volatile chemicals occur in shallow soil at a number of locations. For the most part, the soil vapor data do not suggest a significant release has occurred at the subject property. The detection of carbon tetrachloride in soil vapor above the screening levels at one sampling site, however, would warrant further consideration as part of the site development and appropriate measures should be taken to remove and dispose of the drums, cylinders, and other miscellaneous chemicals storage containers from the subject property. Once removed, surface soils should be evaluated for staining and soil sampling should be conducted to confirm that residual impacts are not present. If impacted soil is identified during confirmation sampling, soil removal may be warranted.

The presence of surface staining at locations on the subject property may warrant further consideration or removal. Lithium and bromide were detected in soil samples at concentrations above the screening levels. The October 2013 Phase II Investigation recommended that all chemical storage containers be appropriately removed from the subject property and surface soils further tested for staining and stained soils and/or removed. Additionally, soil impacted with lithium and bromide should be removed and additional soil confirmation samples collected to verify removal. The following mitigation measures are recommended in response to the June 2013 Phase I ESA, the October 2013 Phase I ESA, and October 2013 Phase II Investigation and, when implemented, will reduce potential impacts relating to the potential presence of hazardous materials and petroleum products to a less-than significant level:

- ***Mitigation Measure No. 4**. The Applicant shall demonstrate to the satisfaction of the City Engineer that all on-site "recognized environmental conditions" (RECs) and "potential environmental concerns" (PECs) identified in the "Screening-Level Phase II Investigation Results, Azusa Canyon Road, Irwindale, California" (AMEC Environmental & Infrastructure, October 9, 2013) have been eliminated or reduced below actionable levels or that such remedial actions will occur in accordance with applicable local, State, and federal requirements as a component of the proposed grading operations.*

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

(Continued)

- ***Mitigation Measure No. 5****. Any and all hazardous materials and petroleum products removed from the project site either during or proceeding the commencement of grading operations shall be collected, transported, and disposed of in accordance with all applicable local, State, and federal requirements with regards thereto. All required documentation with regards to the collection, transport, and disposal of those materials and products shall be provided to and accepted by the City Engineer prior to the issuance of any use and occupancy permits.*

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

The project site is not located within an airport land-use plan area.

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

The project is not located in the vicinity of a private airstrip.

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

The project site has not been identified in an adopted "emergency response" or" emergency evacuation" plan.

(h) Expose people or structures to a significant risk of loss, injury or death involving fires, because the project is located:

(i) Within a Very High Fire Hazard Severity Zones?	☐	☐	☐	☒

As depicted in Map. 2-11 (Very High Fire Hazard Severity Zone – Irwindale) in the "City of Irwindale 2012 Hazard Mitigation Plan" (Emergency Planning Consultants, February 11, 2013, as adopted February 27, 2013,), the project site is not located within a "Very High Fire Hazard Severity Zone" (VHFHSZ), as designated by the California Department of Forestry and Fire Protection.

(ii) Within a high fire hazard area with inadequate access?	☐	☐	☒	☐

Fire protection services in the City are provided by the Los Angeles County Fire Department (LACFD). The LACFD operates from Station No. 48 (15546 Arrow Highway), located near the intersection of Arrow Highway and Azusa Canyon Road. Neither the project site nor the general project area has been designated by the LACFD nor by any other agency as a "high fire hazard area." All development within the jurisdiction of the Los Angeles County Fire Department shall comply with all applicable provisions of Title 32 (Fire Code) of the County Code. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
(iii) Within an area with inadequate water and pressure to meet fire flow standards?	☐	☒	☐	☐

Fire flow requirements are determined by occupancy classification, type of construction, and the square footage of the construction proposed. Although "Industrial Group F" (i.e., "Factory Industrial Group F occupancy includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H hazardous or Group S storage occupancy" [Section 306.1 in Title 24, Part 2, Chapter 3 of California Code of Regulations]) is assumed, a different use and occupancy classification (or multiple uses and classifications) could apply. Absent consultation with the LACFD, precise fire flow requirements cannot be determined at this time. In order to ensure that sufficient fire flow, including pressure rating and duration, is available to adequately serve the proposed project and in order to ensure that the project design fully conforms to all applicable fire safety requirements, the following mitigation measure has been identified:

- ***Mitigation Measure No. 6**. Prior to the issuance of any building permits, in accordance with Los Angeles County Fire Department (LACFD) procedures and requirements, the Applicant shall submit development and related plans to the LACFD's Fire Prevention Bureau for review and, when deemed acceptable, the LACFD shall approve or conditionally approve those plans as submitted or as subsequently modified. Any design recommendations formulated by the LACFD for the purpose of enhancing fire protection and/or public safety shall be incorporated into the project's final design and development plans and shall constitute compliance obligations with regards to the proposed project.*

Implementation of this mitigation measure will ensure that the proposed project is constructed in accordance with all applicable public safety standards.

(iv) Within proximity to land uses that have the potential to produce for dangerous fire hazards?	☐	☐	☒	☐

The project site is located within an existing industrial area. Industrial uses have the potential to contain hazardous, flammable, and explosive materials. Fires emanating from those sites can, therefore, release TACs and expose near-site receptors to thermal radiation (fire) and blast overpressure (explosion).

As depicted in Figure 6-4 (Regulated Sites) in the "City of Irwindale General Plan Update 2020" (City of Irwindale, June 2008) (General Plan), a number of "hazardous waste" sites are located along Azusa Canyon Road, in proximity to the proposed project. As indicated in the "City of Irwindale 2012 Hazard Mitigation Plan" (Emergency Planning Consultants, February 11, 2013, as adopted February 27, 2013), proximal generators or users of hazardous materials include, but may not be limited to: (1) CMZ Trucking Company (4926 N. Azusa Canyon Road, Irwindale) and Decorative Specialties (4414 Azusa Canyon Road, Irwindale) (Table 2-14, p. 117). It is assumed that all proximal land uses are operated and maintained in a safe manner and in strict accordance with all applicable local, State, and federal regulations relative to the precise nature and operational characteristics of those uses.

The project site presently contains four residential units which will be demolished as part of the proposed project. Similarly, the proposed project results in the elimination of mostly outdoor on-site industrial activities with potentially less hazardous manufacturing, warehouse-related, and office uses conducted primarily within indoor areas. Operating in the relative safety of newly constructed structures, exposure of site occupants to exogenous hazards will, therefore, be reduced.

10.0 HYDROLOGY AND WATER QUALITY

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

As illustrated in Figure 7 (San Gabriel River Watershed), the project site is located within the San Gabriel River Watershed, north of Big Dalton Wash and west of Little Dalton Wash. The site is within the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB) and the project is subject to the water quality standards and waste discharge requirements contained in the "Water Quality Control Plan, Los Angeles Region" (LARWQCB, 1994) (Basin Plan). Administrative updates to the Basin Plan have occurred in phases. The administrative update of Chapter 2 (Beneficial Uses) was completed in November 2011 (Resolution No. R11-011), the administrative update of Chapter 7 (TMDLs) was completed in December 2011 (Resolution No. R11-013), and the administrative update of Chapter 3 (Water Quality Objectives) was completed in May 2013 (Resolution No. R13-003).

On or around September 14, 2014, the LARWQCB will consider adoption of non-regulatory, administrative updates to Chapter 1 (Introduction), Chapter 5 (Plans and Policies), and Chapter 6 (Monitoring and Assessment) of the Basin Plan. These amendments do not involve changes to water quality standards or their implementation provisions and are intended solely to provide more current information and improve the clarity of the Basin Plan.

On November 8, 2012, the LARWQCB adopted Order No. R4-2012-0175 (Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges within the Coastal Watersheds of Los Angeles County), issuing to the Los Angeles County Flood Control District (LACFCD), to the County, and to 84 incorporated cities, excluding the City of Long Beach (Permittee) a National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and establishing waste discharge requirements for storm water and non-storm water discharges by the from MS4 within the County's coastal watersheds, including the San Gabriel River.

Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project, include, but are not limited to: (1) all development projects equal to one acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area; (2) industrial parks 10,000 square feet or more of surface area; and (3) parking lots 5,000 square feet or more of impervious surface area or with 25 or more parking spaces. The proposed project is subject to compliance with the performance criteria specified therein.

In addition, the Applicant will be required to prepare a standard urban storm water mitigation plan (SUSMP) and identify applicable BMP to control storm water pollution from sediments, erosion, and construction materials leaving the construction site. Compliance with those requirements and standards will ensure that the project will not violate any water quality standards or waste discharge requirements.

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

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

The project site is located in the San Gabriel Valley Groundwater Basin. The proposed project does not involve the direct withdrawal of groundwater resources

As illustrated in Figure 8 (Historical Highest Groundwater Level), as depicted in Figure 1.2 (Historic Highest Ground Water Contours and Borehole Log Data Locations, Baldwin Park Quadrangle) in "Seismic Hazard Zone Report for the Baldwin Park 7.5-Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 022" (California Department of Conservation, Division of Mines and Geology, 1998), the historic highest groundwater level beneath the site is about 150 feet. Based on that depth, excavation and other construction activities associated with the proposed project will not intercept or otherwise impede groundwater flows.

As indicated in the June 2013 Phase I ESA, LACDPW's records and maps revealed that "the site is located at an elevation of approximately 430 feet above sea level. According to well data, the groundwater level in the area is approximately 275 feet above sea level, or about 155 feet below the ground surface. The groundwater contour lines in the area of the subject property indicate the groundwater flows in a southerly direction."

As illustrated in Figure 9 (San Gabriel Valley Area 2 – Baldwin Park Superfund Site), the project site is located above or in close proximity to a USEPA-designated "San Gabriel Valley Area 2 – Baldwin Park Operating Unit" (BPOU) National Priority List (NPL or Superfund) site. Groundwater in the general project area has been impacted by volatile organic compounds (VOCs). Carbon tetrachloride, PCE, TCE, perchlorate, N-nitrosodimethylamine, and 1,4-dioxane are the primary groundwater contaminants in that operating unit. The project site has not been identified as a responsible party.

No evidence exists to indicate that either existing or previous activities conducted on the project site materially contributed to the causation of the extensive groundwater contamination in the San Gabriel Valley. Absent the presence of VOCs, semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH), and/or polyclorinated biphenyls (PCBs) above actionable levels, no substantive adverse public health impacts have been identified to those land uses located above in close proximity to those contaminants.

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

No streams, rivers, or flood control channels are located on the project site. Since the project site has been previously developed for residential and industrial uses, the quantity, quality, and pattern of on-site drainage will not be substantially altered.

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

See Response No. 10(c) above.

10.0 HYDROLOGY AND WATER QUALITY (Continued)

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
(e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
See Response No. 10(c) above.				
(f) Generate construction or post-construction runoff that would violate applicable storm water NPDES permits or otherwise significantly affect surface water or groundwater quality?	☐	☐	☒	☐
See Response No. 10(a) above.				
(g) Place housing within a 100-year flood-hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
The proposed project does not include residential development.				
(h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
As illustrated in Figure 10 (FIRM No. 06037C1700F), the project site is included on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) 06037C1700F. As depicted therein, the project site is located in "Zone X" (Areas determined to be outside the 0.2% annual chance flood).				
(i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐

The Alquist Dam Safety Act (Section 8589.5, California Government Code [CGC]) requires dam owners to submit inundation maps for those dams whose total failure would cause loss of life or personal injury and requires local jurisdictions to adopt emergency procedures for the evacuation and control of populated areas below such dams.

Santa Fe Dam is not included within the dams within the State's jurisdiction (California Department of Water Resources, Bulletin 17-93, Dams within Jurisdiction of the State of California, 1993). The State, as well as the City, lacks any authority to regulate activities associated therewith.

The Santa Fe Dam (National Identification No. CA10024 and California State Dam No. 9000-024) is a "flood risk management dam" located on the San Gabriel River and is owned and operated by the United States Army Corps of Engineers (ACOE). Flood risk management seeks to reduce flood risks by *managing the floodwaters to reduce the probability of flooding and by managing the floodplains to reduce the consequences of flooding. Flood risk management requires integrating and synchronizing programs at various levels of government designed to reduce flood risk (USACE, Institute of Water Resources). Accordingly, the Santa Fe Dam reservoir is operated as a dry dam serving to manage flood flows after major storm generated within its 236 square mile drainage basin.*

(Continued)

As illustrated in Figure 11 (Santa Fe Dam Emergency Plan Inundation Area), the project site is located within the inundation hazard area for the Santa Fe Dam, as depicted in Map. 2-13 (Dam Inundation Area – City of Irwindale) in the "City of Irwindale 2012 Hazard Mitigation Plan" (Emergency Planning Consultants, February 11, 2013, adopted February 27, 2013). As reported therein, areawide impacts resulting from dam failure include, but are not limited to, injury and loss of life and commercial and residential damage.

As reported by the USACE, Santa Fe Dam has received a "Dam Safety Action Class II" (DSAC II) rating based on a "Screen Portfolio Risk Analysis" (SPRA) conducted in March 2009. A DSAC II rating is given to "dams where failure could begin during normal operations or be initiated as the consequence of an event. The likelihood of failure from one of these occurrences, prior to remediation, is too high to assure public safety; or the combination of life or economic consequences with probability of failure is very high." The USACE's dam safety action classifications, as in effect in 2009, are described in Figure 12 (Dam Safety Action Classifications) (Source: McClenathan, Jeffrey T., Update for Screening Portfolio Risk Analysis for U.S. Army Corps of Engineers Dams, Table 3.1 [USACE Dam Safety Classification Table, February 2009]).

Santa Fe Dam received a DSAC II rating because of the potential for: (1) failure from embankment seepage and piping at outlet conduit; (2) seepage and piping along the conduit and access gallery; (3) transverse cracking that allows a subsequent high pool event to begin internal erosion leading to head cutting and overtopping resulting from a significant seismic event; (4) internal erosion into open gravel foundation soils under the conduit (suffusion); (5) saturation of one or more liquefiable layers in the foundation causing liquefaction leading to settlement or deformation and overtopping resulting from a significant seismic event occurring while the pool is of long enough duration; and (6) channel jumping and/or overtopping of the levees upstream resulting from the hydraulic capacity of the inlet structure and upstream channel restricting flow into the dam. In response to those conditions, the USACE has implemented the following "Interim Risk Reduction Measures" (IRRMs): (1) inspection and monitoring; (2) flood mapping; (3) updating the emergency action plan; (4) coordination with local interests; and (5) installing piezometers adjacent to the outlet conduit.

Because the potential inundation area includes much of the Cities of Baldwin Park, El Monte, Industry, Irwindale, Montebello, and Pico Rivera, it is impractical to either preclude all development therein or await actions by the USACE to eliminate or reduce potential hazards posed by the Santa Fe Dam. CEQA relates to a physical change to the existing environmental setting (baseline). Because the proposed project results in the removal of four residential units and involves the development of the project site for a non-residential use, implementation would result in a small incremental reduction to potential dam-related hazards.

(j) Place structures in areas subject to inundation by seiche, tsunami, or mudflow? ☐ ☐ ☒ ☐

Because the Santa Fe Dam reservoir is operated by the USACE as a dry dam, the potential for seiche would be minimal. As indicated in Figure 5 (Seismic Hazard Zones – Baldwin Park Quadrangle [1999]), the project site is not located within or in close proximity to a designed "earthquake-induced landslide" zone. Additionally, the California Department of Conservation has prepared "tsunami inundation maps" covering those portions of Los Angeles County subject to tsunami hazards. Recognizing the distance between the project site and the Pacific Ocean, no corresponding inundation hazard map has been prepared for the Baldwin Park 7.5-minute quadrangle, thus indicating the absence of tsunami hazards within the City (Source: California Department of Conservation, Los Angeles County Tsunami Inundation with USGS 24K Quads).

11.0 LAND USE AND PLANNING

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
(a) Physically divide an established community?	☐	☐	☒	☐

As indicated in Exhibit 2-1 (Residential Neighborhoods in Irwindale) in the General Plan, the project site is not located within a "residential neighborhood." As proposed, the project seeks to replace an existing mixed residential and industrial use with a manufacturing, warehouse-related, and office use. Although residential uses exist to the west of the project site across Azusa Canyon Road in the City of Baldwin Park), non-residential uses presently exist to the north), south, and east of the subject property.

(b) Be inconsistent with the applicable City plans for the subject property including, but not limited to, the General Plan, specific plans, local coastal plans, area plans, and community/ neighborhood plans?	☐	☐	☒	☐

The General Plan designation for the project site is "Industrial/Business Park." As described therein, the "Industrial designation corresponds to the CM (Commercial Manufacturing), M-1 (Light Manufacturing), and M-2 (Heavy Manufacturing) zones. The maximum FAR [floor-area-ratio] for this category is 1.0 to 1.0."

Based on a site area of 7.1± acres (309,276± square feet) and a 172,000 square foot development plan, the resulting FAR is only 0.56 to 1.0, well within the maximum allowable density authorized under the General Plan. With regards to use and allowable density, the proposed project appears consistent with the General Plan. To the maximum extent feasible, as determined through site plan review, the project will conform to the "City of Irwindale Commercial and Industrial Design Guidelines," as approved by the City Council on January 14, 2009.

(c) Be inconsistent with the City zoning ordinance as applicable to the subject property?	☐	☐	☒	☐

Permitted uses in the "M-1 Light Manufacturing Zone" include those uses allowable by right in the "C-M Commercial Manufacturing Zone," "C-2 Heavy Commercial Zone," "C-1 Commercial Zone," and "C-P Commercial Professional Zone" and are identified in Sections 17.52.010, 17.48.010, 17.40.010, 17.36.010, and 17.32.010 in the Municipal Code, respectively. Conditionally permitted uses are listed in Section 17.52.080 therein. Although the number and precise nature of the site's end users have not been identified, it is assumed that those users are either permitted by right or conditionally permitted in the "M-1 Light Manufacturing Zone." The proposed project appears consistent with the Municipal Code.

(d) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

There are no known habitat conservation or natural community conservation plans that include the project site.

12.0 MINERAL RESOURCES

Would the project:				
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

(Continued)

In 2010, as an update to "Special Report 143, Part IV (SR 143, Part IV) – Mineral Land Classification of the Greater Los Angeles Area, Part 1V, Classification of Sand and Gravel Resource Areas, San Gabriel Valley Production-Consumption Region" (Kohler, 1982), the California Department of Conservation, Division of Mines and Geology (DMG) released "Special Report 209: Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Gabriel Valley Production-Consumption Region, Los Angeles County, California" (Kohler, 2010 (SR 209). Information from SR143-Part IV was used to assist the State Mining and Geology Board (SMGB) in a subsequent process called "designation." Designation is the formal recognition by the SMGB, of lands containing mineral resources having regional or Statewide significance that are needed to meet future demands.

To address mineral resource conservation, the Surface Mining and Reclamation Act of 1975 (SMARA) mandated a two-phase process called "classification-designation" resulting in the classification of specified areas into "mineral resource zones" (MRZs). In accordance therewith, lands within the San Gabriel Valley P-C Region were classified in SR 143, Part IV as "MRZ-1" (little likelihood exists for the presence of significant mineral resources), "MRZ-2" (lands known to contain significant aggregate resources), "MRZ-3" (areas containing known or inferred mineral occurrences of undetermined mineral resource significance), or "MRZ-4" (Areas where available information is inadequate to assign any other classification).

In 1984, the SMGB formally designated construction aggregate resource areas of regional significance in the San Gabriel P-C Region. Since 1984, about 1,234 acres of the 4,642 acres of lands originally designated by the SMGB have been lost to land uses incompatible with mining. Conversely, SR 209 identified an additional 281 acres of land containing Portland cement concrete (PCC) grade aggregate in areas previously classified MRZ-3. *Figure 13 (Candidate Areas for Updated Designation in the Northern San Gabriel Production-Consumption Region, Los Angeles County, California) is a byproduct of SR 209.*

The project site is located within the San Gabriel Valley Production-Consumption (P-C) Region. In 2013, the State Geologist recommended designation of newly classified mineral resource lands and termination of designation of select mineral resource lands previously designated in the San Gabriel Production-Consumption (P-C) Region. On December 13, 2013, the SMGB adopted regulations amending Section 3550.5 of the California Code of Regulations (CCR) with regards to the designations and termination of designation of mineral resources areas therein. "Sector E" is located closest to the project site and contains six separate areas totaling 422 acres. The SMGB concluded that the resources located therein "have been lost to urbanization" and took action to terminate the designation of those areas. As a result, the proposed project will have a less-than-significant impact on known mineral resources.

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

See Response No. 12(a) above.

13.0 NOISE

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
(a) Exposure of persons to, or generation of, noise levels in excess of standards established in the General Plan or noise ordinance or applicable standards of other agencies?	☐	☐	☒	☐
Based on the proximity of residential uses within the City of Baldwin Park, the City conducted an acoustical analysis for the purpose of assessing the project's short-term (construction) and long-term (operational) noise impacts. That analysis, included as Appendix E (Azusa Canyon Industrial Park – Acoustical Analysis) herein, concluded that the proposed project would not result in any significant noise-related impacts.				
(b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
See Appendix E (Azusa Canyon Industrial Park – Acoustical Analysis).				
(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
See Appendix E (Azusa Canyon Industrial Park – Acoustical Analysis).				
(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
See Appendix E (Azusa Canyon Industrial Park – Acoustical Analysis).				
(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
The project site is neither located within an airport land-use plan area nor within two miles of a public airport or public use airport.				
(f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
The proposed project is not located within the vicinity of a private airstrip.				

14.0 POPULATION AND HOUSING

Would the project:				
(a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

The proposed project includes the demolition of four residential dwellings.

As reflected below, the Southern California Association of Governments (SCAG) has formulated projections relating to the number of jobs created by various land uses in Los Angeles County (Source: SCAG [The Natelson Company]), Employment Density Study Summary Report, October 31, 2001, Table B-1).

SIC Code	Description	Employment Densities (employees per acre)
1211	Low to Medium Rise Major Office Use	55.28
1311	Manufacturing, Assembly, and Industrial Services	18.23
1321	Manufacturing	48.18
1340	Wholesaling and Warehousing	12.96

Source: Southern California Association of Governments

Assuming a 7.1-acre project site, based on those generation rates, the proposed project would generate between 92 and 392 permanent jobs. The land-use category that most characteristic of the proposed project is "manufacturing, assembly, and industrial service" (18.23 jobs/acre). Based on that rate, an estimated 129 jobs could be created by the proposed project. Sufficient labor force presently exists in the general project area to fill project-related employment opportunities, such that no substantial population growth would be anticipated.

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

As indicated in the General Plan, in 2011, there were a total of 372 dwelling units within the City (Source: Housing Element, Planning Period October 2013-October 2021, Table 3-13 [Housing Tenure], p. 21). The proposed demolition of four dwelling units, therefore, represents a 1.1 percent decrease in the City's existing housing inventory. Because the project site is zoned "Light Manufacturing (M-1)," the existing on-site dwellings constitute legal, non-conforming uses. It is not known whether the affected units are presently occupied; however, physical evidence suggests that not all the units are presently used for residential purposes. As a result, project implementation would not appear to result in the displacement of any substantial number of existing residents.

The General Plan does not contain policies precluding the demolition of existing housing.

The Housing Element notes that emergency shelters are permitted in the "M-1" zone. With regards to the potential expansion of emergency shelters and homeless services in the City, the General Plan identifies two possible sites where "existing buildings [presently] used as offices and warehouses. . .could be converted to emergency shelters." Included therein is: "4832-4954 Azusa Canyon Road – This area contains 14 separate parcels, consisting of a few nonconforming single-family residences and an assortment of outdoor storage and outdoor yard uses. The total area is approximately 10.8 acres. This area fronts on Azusa Canyon Road south of Arrow Highway" (Source: Housing Element, pp. 82-83). The General Plan's reference to the project site as a potential candidate for the development of an "emergency shelter" thereupon does not constitute either a mandate or an obligate for the development of that use. No mitigation is, therefore, required.

15.0 PUBLIC SERVICES

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
(a) Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

See Response No. 14(b) above.

Fire protection?	☐	☒	☐	☐

Fire protection services in the City are provided by the Los Angeles County Fire Department (LACFD), which maintains one fire station in the City. Fire Station No. 48 (15546 Arrow Highway) is staffed with a 4-person engine company (1-Captain, 1-Fire Fighter Specialist, and 2-Fire Fighters) 24-hours a day. The anticipated emergency response time from this station to the project site would be anticipated to be less than four minutes.

As indicated in Response No. 9(h)(iii) above, in order to ensure that sufficient fire flow is available to adequately serve the proposed project and in order to ensure that the project design fully conforms to all applicable fire safety requirements, the following mitigation measure has been identified:

- ***Mitigation Measure No. 6**. Prior to the issuance of any building permits, in accordance with Los Angeles County Fire Department (LACFD) procedures and requirements, the Applicant shall submit development and related plans to the LACFD's Fire Prevention Bureau for review and, when deemed acceptable, the LACFD shall approve or conditionally approve those plans as submitted or as subsequently modified. Any design recommendations formulated by the LACFD for the purpose of enhancing fire protection and/or public safety shall be incorporated into the project's final design and development plans and shall constitute compliance obligations with regards to the proposed project.*

Implementation of this recommended mitigation measure will ensure that the proposed project is constructed in accordance with all applicable public safety standards and that no significant impacts will result therefrom.

Police protection?	☐	☐	☒	☐

Law enforcement services in the City are provided by the City of Irwindale Police Department. The City of Irwindale Police Department has jurisdiction over the City's 9.5 square miles and presently consists of 23 full-time police officers, 3 reserve officers, and 11 civilian employees. Although the precise nature of the existing land use will change, the proposed project is not anticipated to impose greater demands on Police Department personnel and services that associated with the existing uses.

Schools?	☐	☐	☒	☐

The project site is located within the boundaries of the Covina-Valley Unified School District. Within the general project area, the district's northwestern boundaries are framed by Arrow Highway and Azusa Canyon Road.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

(Continued)

In 1986, Assembly Bill (AB) 2926 was enacted by the State and authorized entities to levy statutory fees on new residential and commercial/industrial development in order to pay for school facilities. AB 2926 was expanded and revised in 1987 through the passage of AB 1600 which created Section 66000 et seq. of the CGC. Under this statute, payment of such statutory fees by developers would serve as total mitigation in accordance with CEQA to satisfy the impact of development on school facilities. When noticed of a school facility exaction, a city or county may not issue a building permit to an affected development project until the district has certified that the project has complied with the school board's resolution or is not subject to the exaction.

Since the project does not include a residential component, no new Covina-Valley Unified School District students will directly result from the project's implementation. Additional students could, however, be indirectly generated through the creation of new employment opportunities within the Covina-Valley Unified School District boundaries. The Applicant is obligated to pay impact fees to the Covina-Valley Unified School District. Payment of school impact fees constitutes full mitigation for any associated impacts upon the affected school district. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

Parks?	☐	☐	☒	☐

The nearest public parks to the project site include the City's Jardin De Roca Park and Irwindale Park and the County's Santa Fe Dam Recreational Area. Based on the project's size and proposed use, implementation would not be expected to either directly or indirectly impact those or other proximal recreational facilities. Non-residential uses typically do not impose substantial demands on recreational services and park facilities.

Libraries?	☐	☐	☒	☐

The nearest library to the project site is the Irwindale Public Library (5050 North Irwindale Avenue, Irwindale). Based on the project's size and proposed use, implementation would not be expected to either directly or indirectly impact that or other available library facilities. Non-residential uses typically do not impose substantial demands on library services and facilities.

Other public facilities?	☐	☐	☐	☒

No additional public facilities which may be substantively impacted by the proposed project have been identified.

16.0 RECREATION

(a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐

See Response No. 15(a) (Parks) above.

(b) Does the project include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

The proposed project does not include neighborhood, regional, and/or other recreational facilities.

17.0 TRANSPORTATION / TRAFFIC

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

The proposed project is expected to generate a total of approximately 1,333 net new daily trips, including 178 net new morning (AM) peak hour trips and 186 net new afternoon (PM) peak-hour trips on a typical weekday. In accordance with the City's "Policy Guidelines for Traffic Impact Reports" (August 20, 2004), a "full traffic impact analysis" was prepared for the proposed project. That analysis, included as Appendix F (Transportation Study for Azusa Canyon Industrial Parks) herein, concluded that the project, prior to mitigation, would result in a significant impact to the Arrow Highway/Azusa Canyon Road intersection. An independent third-party review of the Traffic Study is presented in Appendix G (Third-Party Review – Transportation Study for Azusa Canyon Industrial Park).

As indicated in the Traffic Study, the Arrow Highway/Azusa Canyon Road intersection presently operates at LOS "F" for both A) and PM peak hours. Under the City's criteria, if a signalized intersection is operating at LOS "F" under existing or future baseline conditions and the addition of more than 50 peak-hour project-related trips contributes to the continuing operational failure at the intersection, project-specific mitigation should bring the facility back to pre-project conditions.

The proposed project contributes more than 50 peak hour trips to this intersection; therefore, under both existing-plus-project and future-plus-project conditions, the proposed project is considered to be part of a significant impact to the Arrow Highway/Azusa Canyon Road intersection. In recognition of this impact, the following mitigation measure is identified therein:

- ***Mitigation Measure No. 7**. Azusa Canyon Road/Arrow Highway Intersection: Mitigation shall consist of providing an exclusive eastbound right-turn lane, as approved by the City Engineer. The resulting eastbound approach would consist of one left-turn lane, two through lanes, and one right-turn lane. The Applicant's fair-share obligation for those improvements shall represent three (3) percent of the cost for implementation, as determined by the City Engineer, which shall be paid to the City prior to the issuance of building permits.*

The provision of an eastbound right-turn lane at the Arrow Highway/Azusa Canyon Road intersection will improve intersection operations to better than pre-Project conditions, thereby mitigating the identified impacts.

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

See Response No. 17(a) above.

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

The proposed project does not include any aviation-related aspects and is not of sufficient size and scale to predicate any substantive change in air traffic patterns.

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

As indicated in the Traffic Study, site access is currently provided via a single driveway on the east side of Azusa Canyon Road, north of Olive Street. The existing driveway will be maintained as part of the proposed project. The westbound driveway approach will continue to be stop-controlled. Southbound left-turns can be accommodated within the existing two-way left-turn lane on Azusa Canyon Road. Northbound right turning traffic will utilize the curbside through lane without requiring a deceleration or dedicated right-turn lane. The proposed project's driveway will be maintained to City standards, including appropriate width and turning radii. The driveway will operate at LOS "C" for both AM and PM peak hours.

Vehicles with different wheelbases (WB) demonstrate different turning radii. As indicated by the American Society of State Highway Transportation Officials (AASHTO), the minimum turning radii for a number of design vehicles is presented below:

Design Vehicle Type	*Passenger*	*Singe-Unit Truck*	*Intermediate Semi-Trailer*	*Intermediate Semi-Trailer*
Symbol	*P*	*SU*	*WB-40*	*WB-50*
Minimum Design Turning Radius (ft)	*24*	*42*	*40*	*45*
Center-Line Turning Radius (ft)	*21*	*38*	*36*	*41*
Minimum Inside Radius (ft)	*14.4*	*28.3*	*19.3*	*17.0*

Source: AASHTO, Geometric Design of Highways and Streets

The conceptual site plan demonstrates that adequate on-site turning radii are provided to accommodate WB-40 semi-trailer trucks or smaller into proposed loading docks. If any larger trucks are anticipated to access the site, a site plan modification and further review by the City Engineer should be conducted. Because the conceptual site plan is subject to further modification, the following mitigation measures are recommended:

- ***Mitigation Measure No. 8**. Once operational, unless otherwise authorized by the City Engineer based on a detailed review of the final site plan, trucks accessing the project site shall be limited to trucks with a wheelbase of 40 feet or less.*

- ***Mitigation Measure No. 9**. During site plan review, the City Engineer shall conduct a review of the proposed development plan to address any engineering and operational issues which, in the judgment of the City Engineer, require further considerations, including, but not limited to, those relating to ingress and egress, on-site turning movements, the operation of loading docks, adequacy of off-street parking, and accessibility by emergency vehicles and other service providers (e.g., trash trucks). Subject to appeal to the City Council, the City Engineer shall retain the ability to direct such design and development modifications as the City Engineer may deem necessary to adequately maintain public health and safety.*

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

(Continued)

Implementation of this recommended mitigation measures provide an effective response to any changes in the proposed site plan that may be made by the Applicant to address the design requirements of the site's end users.

(e) Result in inadequate emergency access?	☐	☐	☒	☐

See Response No. 17(d)) above.

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

The proposed project is subject to compliance with Section 17.66.030 (Transportation Demand and Transportation Measures) in Title 17 (Zoning) of the Municipal Code. As specified, in part, therein, non-residential development projects consisting of 100,000 square feet or more shall comply with Sections 17.66.030(B)(1)-(2) and shall provide all of the following measures: (a) a safe and convenient zone in which vanpool and carpool vehicles may delivery or board their passengers; (b) sidewalks or other designated pathways following direct and safe routes from the external pedestrian circulation system to each building in the development; (c) bus stop improvements (if deemed necessary); and (d) safe and convenient access from the external circulation system to bicycle parking facilities to be located on the project site. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

Foothill Transit presently provides bus services along both Arrow Highway and Irwindale Avenue. Because improvements are confined to the project site, implementation will neither conflict with nor impede available public transportation. Proposed improvements to the Arrow Highway/Azusa Canyon Road intersection (including the Applicant's payment of a fair-share contribution to those improvements) will enhance traffic through and public safety at that intersection.

18.0 UTILITIES AND SERVICE SYSTEMS

Would the project:

(a) Exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board?	☐	☐	☒	☐

The Sanitation Districts of Los Angeles County (Districts) provides wastewater collection and treatment in the general project area. The project site is located within the District 22 service area. The existing on-site uses presently discharge to the public sewer system. The proposed project will continue to discharge to that system either via the existing connection or through a modification thereto.

As stipulated in Section 301 of the County's Wastewater Ordinance, no party "shall construct or cause to be constructed, or alter or cause to be altered, any public sewer, lateral sewer, house connection or industrial connection sewer over six (6) inches in diameter, wastewater pumping plant, wastewater treatment plant, or other sewerage facility within the Districts where existing or proposed wastewater flows will discharge directly or indirectly to facilities of the Districts without first obtaining approval of sewerage construction plans from the Chief Engineer. . .The applicant shall submit to the Chief Engineer for approval, construction plans and such specifications and other details as required to describe fully a proposed sewerage facility."

(Continued)

Under Section 302 therein: "Any person desiring to connect a sewer six (6) inches or smaller in diameter directly to a trunk sewer of the Districts shall make written application to the Chief Engineer on a Districts' Trunk Sewer Connection Permit application form. The applicant shall complete the form and furnish such additional information as required by the Chief Engineer to substantiate that the proposed work or use will comply with the provisions of this Ordinance. A Trunk Sewer Connection Permit will not be issued unless the applicant has first obtained approval from the local sewer agency in the area in which the property is located. A Trunk Sewer Connection Permit will not be issued for any sewer which will convey industrial wastewater unless the discharger has first obtained a Districts' Permit for Industrial Wastewater Discharge." Under Section 305 of the County's Wastewater Ordinance: "No person shall discharge or cause to be discharged any contaminated or uncontaminated rainwater, water used in fighting fires, stormwater, groundwater, artesian well water, street drainage, yard drainage, water from yard fountains, ponds or lawn sprays into any sewerage facility which directly or indirectly discharges to facilities owned by the Districts, except where prior approval for such discharge of water is given by the Chief Engineer. Approved discharges shall be considered industrial wastewater discharges under this Ordinance." In accordance with Section 401 therein: "Except as hereafter provided, no person shall discharge or cause to be discharged any industrial wastewaters directly or indirectly to the sewerage facilities owned by the Districts without first obtaining a Districts' Permit for Industrial Wastewater Discharge (Permit). A Districts' Permit shall be obtained prior to commencement of any construction of new or modified facilities which will discharge industrial wastewater to the sewer. A separate Permit shall be required for each industrial wastewater connection to a public sewer discharging directly or indirectly to the Districts' sewerage system." No industrial wastewater discharge permit will be issued by the Districts unless the proposed project fully complies with all applicable water quality standards and permit requirements. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

Ministerial projects involve the use of set standards or objective measurements to evaluate the feasibility of granting an approval. Such projects do not require discretionary or subjective judgment on the part of the decision-making body concerning whether or how a project should be carried out (e.g., approval is subject to a set standards). Ministerial project are not be subject to CEQA. Ministerial projects include, but are not limited to, issuance of building, plumbing, electrical, and other miscellaneous permits under the provisions of the uniform codes; issuance of a demolition permit for a structure that is not a designated historic building or designated a contributing building within the historic district; grading permits; approval of individual utility service connections and disconnections; and issuance of industrial wastewater discharge permits.

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

The design capacities of the Districts' wastewater treatment plants are based on population forecasts contained in Southern California Association of Government's (SCAG) "Regional Comprehensive Plan and Guide" (RCPG). The RCPG is part of the "Air Quality Management Plan" (AQMP). The AQMP and RCPG are jointly prepared by the SCAQMD and SCAG as a requirement of the federal Clean Air Act (CAA). In order to conform to the AQMP, all expansions of Districts' facilities must be sized and service phased in a manner that ensures consistency with the "Growth Management Element" (GME) of the RCPG. As prepared by SCAG, the GME contains a regional forecast for the Counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. Specific policies in the RCPG that deal with the management of growth are incorporated into the AQMP's strategies to improve air quality in the South Coast Air Basin.

(Continued)

The available capacity of the Districts' treatment facilities is assumed to be limited to those levels associated with approved growth identified in the RCPG.

Projects that are consistent with local general plans are, therefore, adequately accommodated by the Districts' wastewater treatment facilities. Conversely, projects that are not consistent with existing general plan and which would generate wastewater quantities in excess of those levels that could otherwise be generated based on allowable land uses may not be adequately accommodated by Districts' facilities. If deemed consistent, the Districts' facilities would be deemed adequate to accommodate project-related demands.

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

Los Angeles County Flood Control District (LACFCD) Storm Drain BI 0445 Line A exists within the Azusa Canyon Road right-of-way. In accordance with the LACFCD's "Guidelines for Connection Permits" (Construction Division, Permits and Subdivisions Section, revised January 2007), storm drain connections to and/or construction activities encroaching into a LACFCD easement requires a County permit. Issuance of a storm drain connection permit, including a water quality agreement, from the LACFCD constitutes a ministerial action and is not subject to CEQA.

As stipulated in LARWQCB Order No. R4-2012-0175 (Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges within the Coastal Watersheds of Los Angeles County), each Permittee shall require all new qualifying development projects to control pollutants, pollutant loads, and runoff volume emanating from the project site by: (1) minimizing the impervious surface area; and (2) controlling runoff from impervious surfaces through infiltration, bioretention, and/or rainfall harvest and use. Each Permittee shall require the project to retain on-site the Stormwater Quality Design Volume (SWQDv), defined as the runoff from: (a) the 0.75-inch, 24-hour rain event or (b) the 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, whichever is greater. Compliance with the provisions of Order No. R4-2012-0175 will ensure that impacts to existing storm drain facilities are less than significant.

See Response Nos. 10(a)-(b) above.

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

The project site is presently served by the Valley County Water District (VCWD). As indicated in the VCWD's "2010 Urban Water Management Plan, Volume I – Report" (June 2011) (2010 UWMP), the VCWD's service area includes a total of 5,935 acres. The City accounts for 49 percent of the service area but only five percent of the VCWD service connections. As indicated therein: "VCWD is capable of meeting all demand scenarios it is projected to face during the planning horizon of this UWMP with its current supply portfolio including normal year, single dry year and multiple dry year supply and demand conditions" (2010 UWMP, p. 8).

18.0 UTILITIES AND SERVICE SYSTEMS (Continued)

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
(e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

See Response Nos. 10(a)-(b) above.

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

A number of landfills and transfer stations exist within the County. Excluding inert-only landfills (e.g., Nu-Way Arrow Land Reclamation), the nearest mixed waste landfills to the project site include, but may not be limited to: (1) Waste Management Inc.'s Azusa Land Reclamation Co. Landfill (1211 West Gladstone, Azusa 91702); and (2) the County Sanitation Districts of Los Angeles County's Scholl Canyon Landfill (3001 Scholl Canyon, Glendale 91342). The Scholl Canyon Landfill has an estimated closing date of 2030. The County has determined that existing landfills are sufficient to maintain a minimum 15 years' identified disposal capacity in conformance with AB 939 (Integrated Solid Waste Management Act of 1989) (Source: County of Los Angeles, Draft Environmental Impact Report – Los Angeles County General Plan Update, SCH No. 2011081042, June 2014).

(g) Comply with federal, State, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

The City has no information to suggest and no aspect of the project would support the inference that the proposed development will be constructed and operated in a manner which was not in strict compliance with all applicable federal, State, and local statute and regulations relating to solid waste.

(h) Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

Electrical and natural gas service to the project site is presently provided by the Southern California Edison and Southern California Gas Company, respectively. Both regulated utilities have the ability to increase services and expand existing supplies in accordance to the service needs of their customers.

19.0 MANDATORY FINDINGS OF SIGNIFICANCE

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

As indicated in this analysis, the proposed project' does not have the potential to degrade the quality of the environment, substantially reduce the habit of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number of restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California's history or prehistory.

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

As indicated in this analysis, the proposed project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

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

As indicated in this analysis, the proposed project does not have the potential to produce impacts that are individually limited but cumulative considerable.

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

As indicated in this analysis, the proposed project's does not have the potential to produce environmental effects causing substantial adverse effects on human beings, either directly or indirectly.

SOURCES CITED:

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- Valley County Water District, 2010 Urban Water Management Plan, Volume I – Report, June 2011.

Appendix A

Azusa Canyon Industrial Park Draft Mitigation Reporting and Monitoring Program

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Appendix A

AZUSA CANYON INDUSTRIAL PARK

MITIGATION REPORTING AND MONITORING PROGRAM

No.	Mitigation Measure	Compliance Verification	Mitigation Milestone
	Air Quality		
1	Option No. 1 - Painting and surface coating shall be limited to an aggregate area of no more than 6,435 square feet per day during any phase of construction; or Option No. 2 - Paints and surface coatings shall be limited to no more than 93.5 milligrams per liter of volatile organic compound (VOC) content.	City Engineer	Building Permit
	Hazards and Hazardous Materials		
2	Prior to the demolition of any pre-1981 buildings or structures located on the project site, a pre-demolition survey will be conducted to the satisfaction of the Community Development Director to determine the potential presence of asbestos-containing materials (ACMs) and/or asbestos-containing construction materials (ACCMs) in those existing buildings and structures to be demolished. If ACMs and/or ACCMs are determined to be present in those buildings and structures to be demolished, all such materials shall be removed in accordance with acceptable engineering methods and work practices by a licensed asbestos abatement contractor prior to demolition. The process shall be designed and monitored by a California Certified Asbestos Consultant and an abatement and monitoring plan shall be developed and submitted for review and approval by the appropriate regulatory agencies.	Community Development Director	Demolition Permit
3	Prior to the demolition of any pre-1978 buildings or structures located on the project site, a pre-demolition survey will be conducted to the satisfaction of the Community Development Director to determine the potential presence of lead-based paint (LBP) in those existing buildings and structures to be demolished. Should LBP be identified, standard handling and disposal practices shall be implemented pursuant to applicable Occupational Safety and Health Administration (OSHA) standards.	Community Development Director	Demolition Permit
	Public Services		
4	The Applicant shall demonstrate to the satisfaction of the City Engineer that all on-site “recognized environmental conditions” (RECs) and “potential environmental concerns” (PECs) identified in the “Screening-Level Phase II Investigation Results, Azusa Canyon Road, Irwindale, California” (AMEC Environmental & Infrastructure, October 9, 2013) have been eliminated or reduced below actionable levels or that such remedial actions will occur in accordance with applicable local, State, and federal requirements as a component of the proposed grading operations.	City Engineer	Grading Permit
5	Any and all hazardous materials and petroleum products removed from the project site either during or proceeding the commencement of grading operations shall be collected, transported, and disposed of in accordance with all applicable local, State, and federal requirements with regards thereto. All required documentation with regards to the collection, transport, and disposal of those materials and products shall be provided to and accepted by the City Engineer prior to the issuance of any use and occupancy permits.	City Engineer	Occupancy Permit
6	Prior to the issuance of any building permits, in accordance with Los Angeles County Fire Department (LACFD) procedures and requirements, the Applicant shall submit development and related plans to the LACFD’s Fire Prevention Bureau for review and, when deemed acceptable, the LACFD shall approve or conditionally approve those plans as submitted or as subsequently modified. Any design recommendations formulated by the LACFD for the purpose of enhancing fire protection and/or public safety shall be incorporated into the project’s final design and development plans and shall constitute compliance obligations with regards to the proposed project.	City Engineer	Building Permit

Appendix A (Continued)

AZUSA CANYON INDUSTRIAL PARK

MITIGATION REPORTING AND MONITORING PROGRAM

No.	Mitigation Measure	Compliance Verification	Mitigation Milestone
	Transportation / Traffic		
7	Azusa Canyon Road/Arrow Highway Intersection: Mitigation shall consist of providing an exclusive eastbound right-turn lane, as approved by the City Engineer. The resulting eastbound approach would consist of one left-turn lane, two through lanes, and one right-turn lane. The Applicant's fair-share obligation for those improvements shall represent three (3) percent of the cost for implementation, as determined by the City Engineer, which shall be paid to the City prior to the issuance of building permits.	City Engineer	Building Permit
8	Once operational, unless otherwise authorized by the City Engineer based on a detailed review of the final site plan, trucks accessing the project site shall be limited to semi-trailer trucks with a wheelbase of 40 feet or less.	City Engineer	Site Plan
9	During site plan review, the City Engineer shall conduct a review of the proposed development plan to address any engineering and operational issues which, in the judgment of the City Engineer, require further considerations, including, but not necessarily limited to, those relating to ingress and egress, on-site turning movements, the operation of loading docks, adequacy of off-street parking, and accessibility by emergency vehicles and other service providers (e.g., trash trucks). Subject to appeal to the City Council, the City Engineer shall retain the ability to direct such design and development modifications as the City Engineer may deem necessary to adequately maintain public health and safety.	City Engineer	Site Plan

Appendix B

Azusa Canyon Industrial Park Referenced Figures

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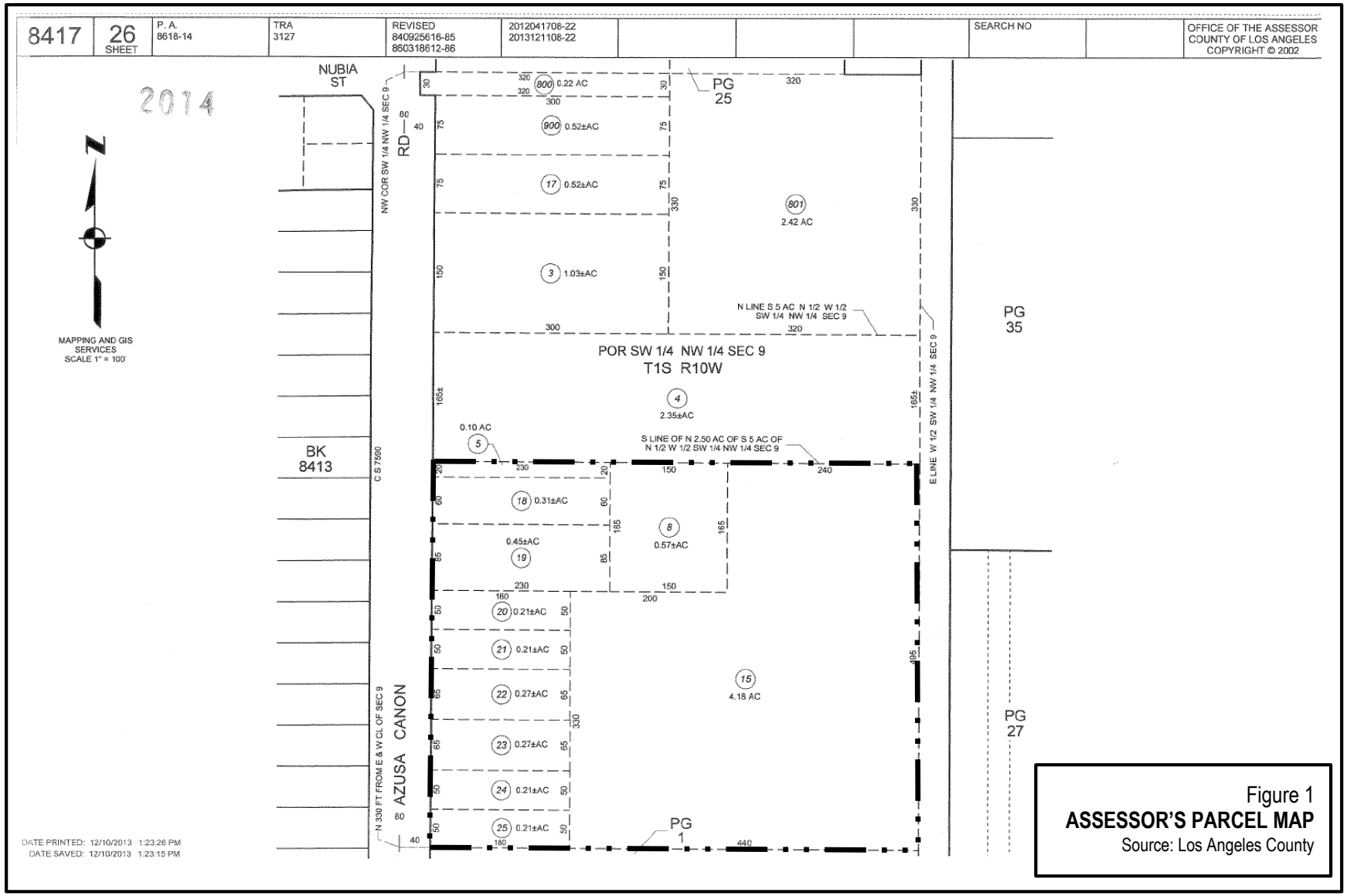


Figure 1
ASSESSOR'S PARCEL MAP
Source: Los Angeles County

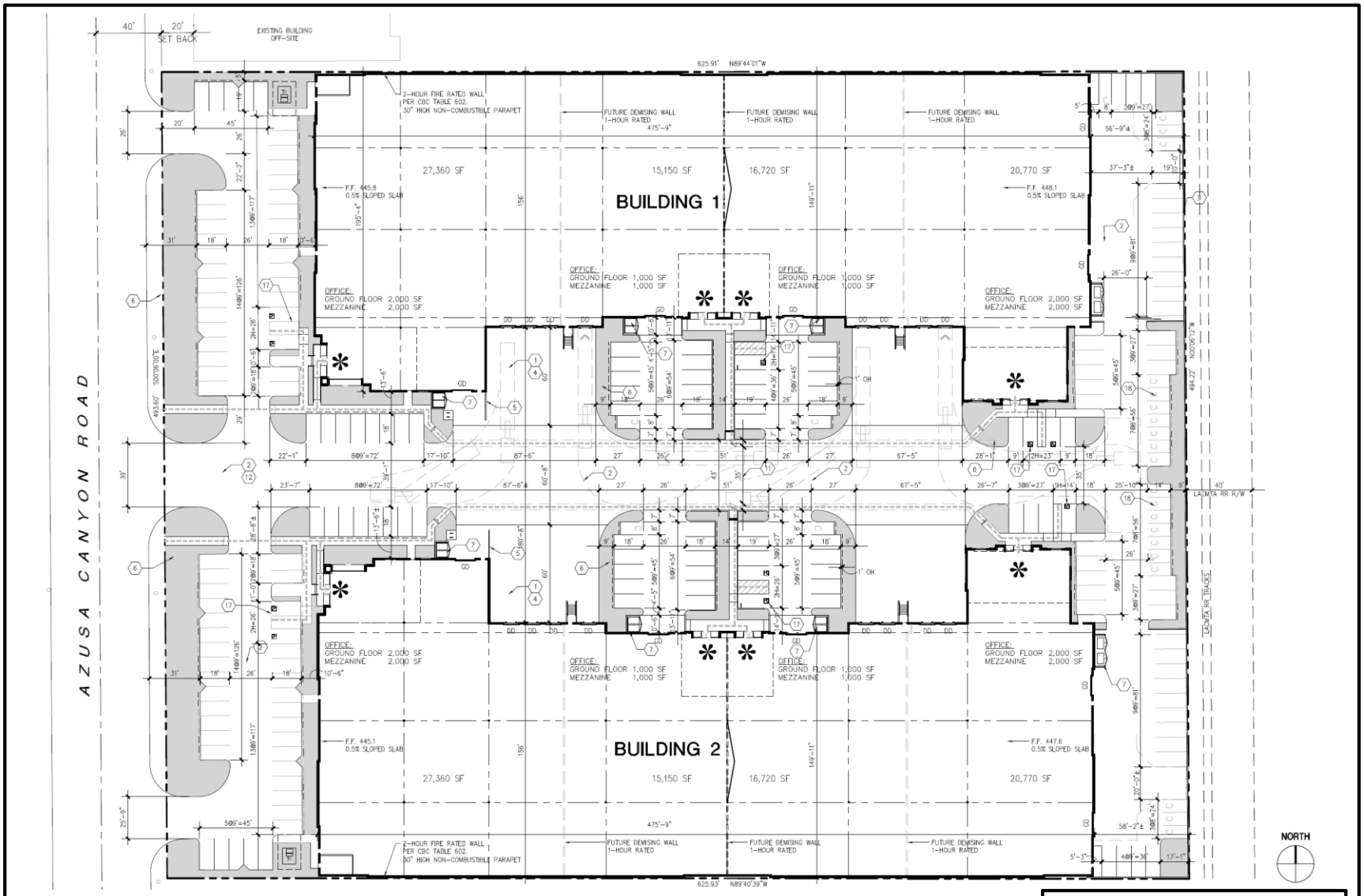


Figure 2 (1 of 2)
CONCEPTUAL SITE PLAN
Source: Shubin Nadal Realty Investors

Site Area			
S.F.	309,474		
Acres	7.10		
Building Area	**1**	**2**	**Total**
Ground Floor Office Area	6,000	6,000	12,000
Manufacturing	14,000	14,000	28,000
Warehouse	60,000	60,000	120,000
Sub-Total Ground Floor SF	80,000	80,000	160,000
Mezzanine (Office)	6,000	6,000	12,000
Total Building Area	86,000	86,000	172,000
Coverage	51.7%		
FAR	55.6%		
Landscape Area			
Required	30,947	10.0%	
Provided	33,088	10.7%	
Parking Requirements	Parking Ratio	Building 1	Building 2
Office	1/250	48	48
Manufactiring			
0 to 10,000 sf	1/350	10	10
10,000 to 40,000 sf	1/500	8	8
50,000 sf +	1/1000	0	0
Sub-Total		18	18
Warehouse Use			
0 to 20,000 sf	1/1000	20	20
20,000 to 40,000 sf	1/2000	10	10
40,000 sf +	1/4000	5	5
Sub-Total		35	35
Total Parking Required		101	101
Total Parking Provided			
Accessible Stalls		5	5
Standard		85	85
Compact (25% Allowed)	11.8%	12	12
Total		102	102
Parking Ratio		1.2/1000	1.2/1000
Truck Doors		Building 1	Building 2
Dock Doors		8	8
Grade Doors		5	5

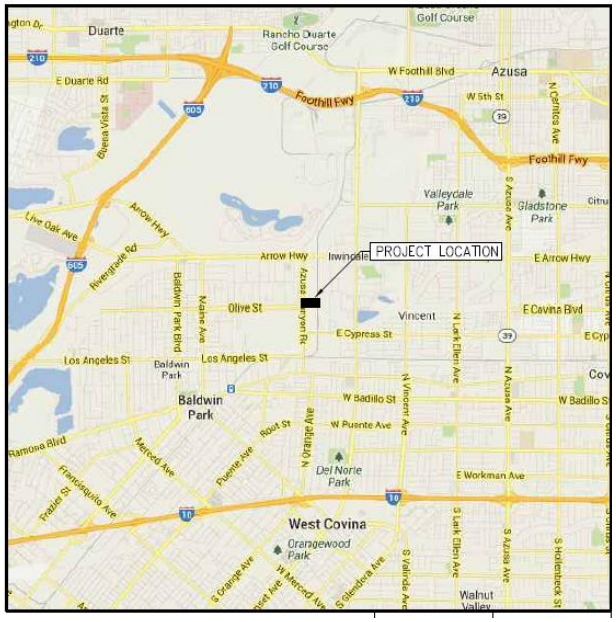
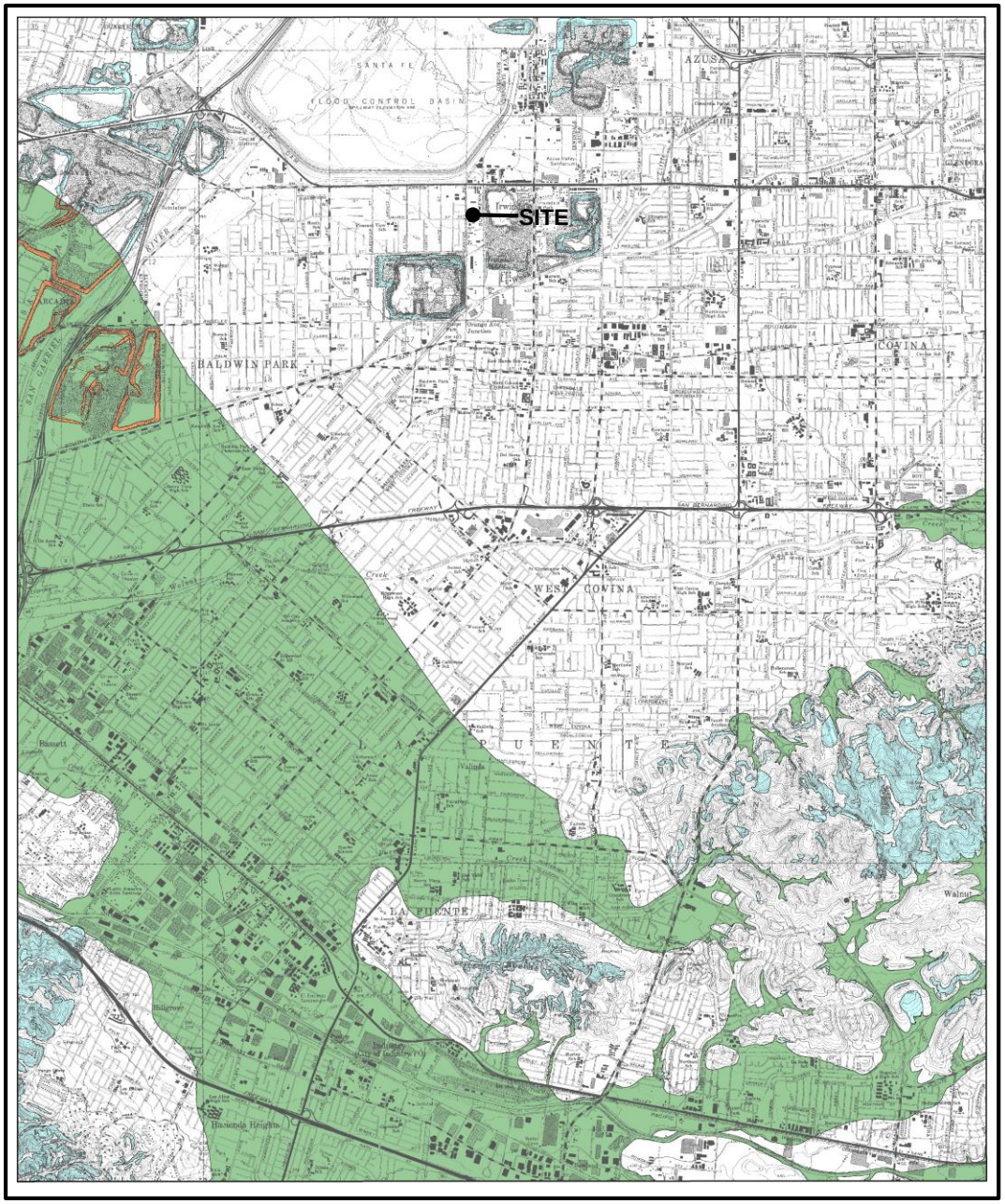


Figure 2 (2 of 2)
CONCEPTUAL SITE PLAN
LAND USE SUMMARY
Source: Shubin Nadal Realty Investors

Figure 3
AERIAL PHOTOGRAPH
Source: Soils Conservation Service

Figure 4
SITE MAP
Source: AMEC Environmental and Infrastructure, Inc.



MAP EXPLANATION

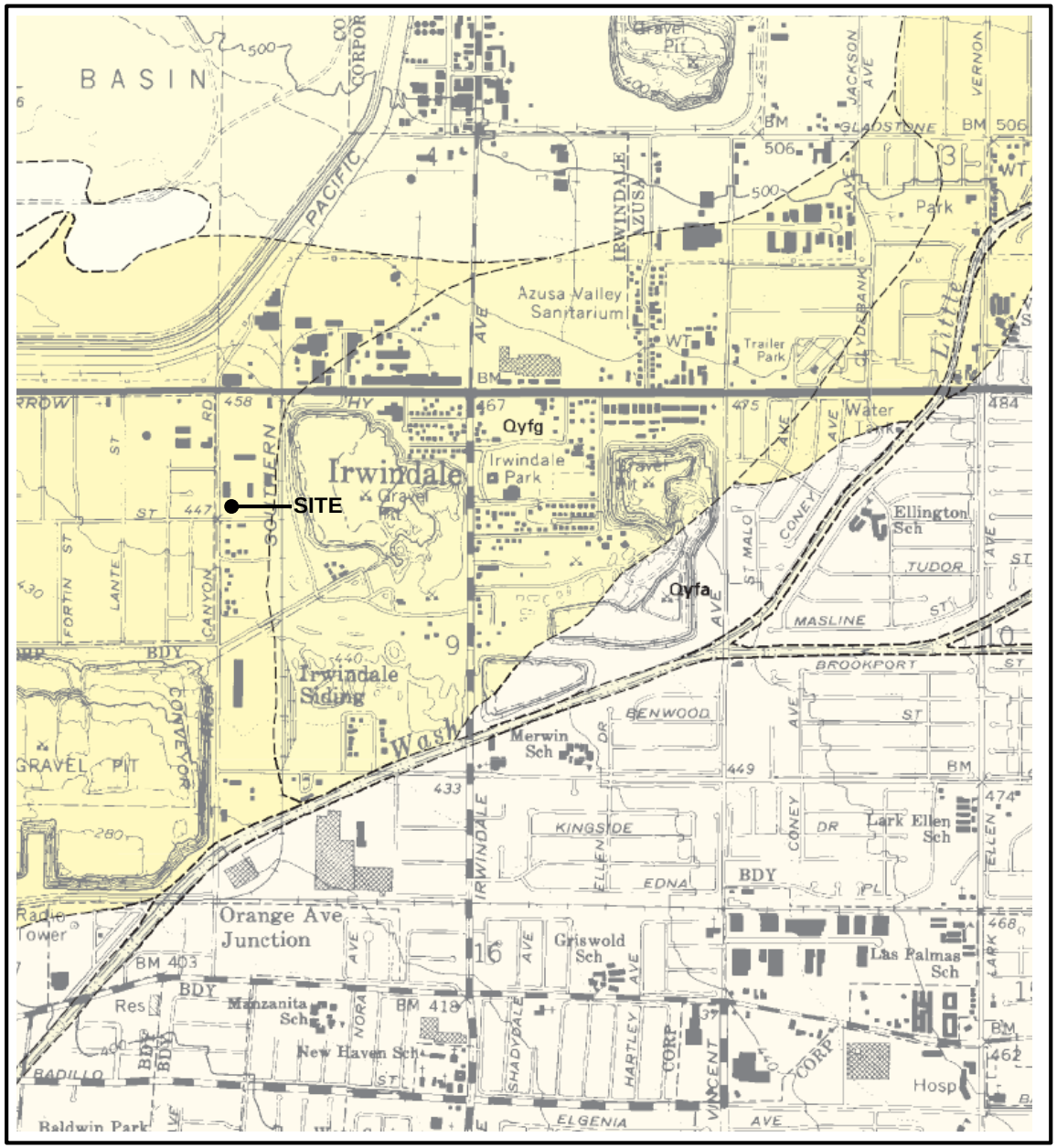
Zones of Required Investigation:

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

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

Overlapping Liquefaction and Earthquake-Induced Landslides
Areas that lie within zones of required investigation for both liquefaction and earthquake-induced landslides. (See above for explanation of each zone.)

Figure 5
SEISMIC HAZARD ZONES
BALDWIN PARK 7.5' QUADRANGLE (1999)
Source: California Department of Conservation



EXPLANATION OF MAP UNITS

Qw	Active channel and wash deposits, unconsolidated silt and coarser material, mostly artificially channelized; a = sand, g = gravel.
Ql	Active lacustrine deposits, unconsolidated, submerged; c = clay, s = silt, g = gravel.
Qw1	Modern river sediments prior to the artificial channelization of river, unconsolidated; a = sand, g = gravel.
Qyf	Younger (Holocene) undivided alluvial fan and valley deposits, unconsolidated; c = clay, s = silt, a = sand, g = gravel.
Qls	Landslide deposits; landslide, broken-up and weathered material; queried where existence is uncertain. It is subject to renewed slope failure.
Qof	Older (Pleistocene) undivided alluvial fan and valley deposits, moderately to well-consolidated; s = silt, a = sand, g = gravel; numbers 1 to 4 indicate relative levels of terraces with 1 being the highest and oldest.

Fernando Formation (Pliocene)

Tfu	Upper Member; massive, friable silty and pebbly sandstone, with interbedded thin beds of siltstone.
Tfuc	Upper Member; conglomerate and pebbly sandstone, interbedded with Tfu.
Tfl	Lower Member; massive silty sandstone, with interbedded pebbly sandstone and conglomerate.
Tflc	Lower Member; conglomerate and pebbly sandstone, interbedded with Tfl.

Puente Formation (late Miocene)

Tpsc	Sycamore Canyon Member; sandstone, with interbedded pebble-cobble conglomerate and sandy siltstone.
Tpscc	Sycamore Canyon Member; pebble-cobble conglomerate and pebbly sandstone, interbedded with Tpsc.
Tpy	Yorba Member; platy diatomaceous siltstone with interbeds of sandstone, limestone and marl.
Tpsq	Soquel Member; sandstone with concretions, siltstone and conglomerate.
Tpscq	Soquel Member; conglomerate and pebbly sandstone, interbedded with Tpsq.
Tpl	La Vida Member; platy siltstone contains foraminifera and fish scales, with interbeds of sandstone, conglomerate, limestone and tuff.

Figure 6
GEOLOGIC MAP OF THE BALDWIN PARK 7.5' QUADRANGLE (1997)
Source: California Department of Conservation

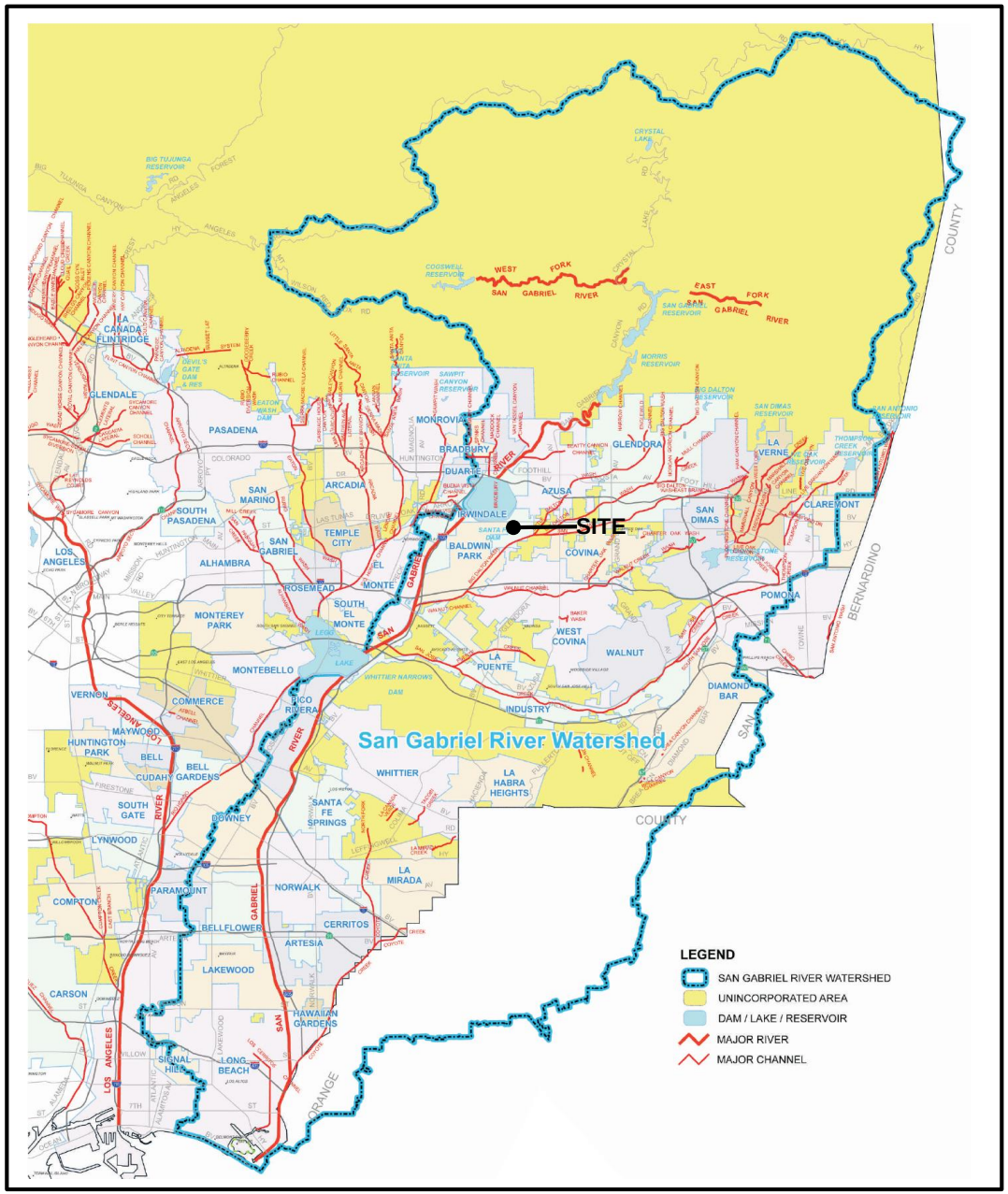


Figure 7
SAN GABRIEL RIVER WATERSHED
Source: Los Angeles County Department of Public Works

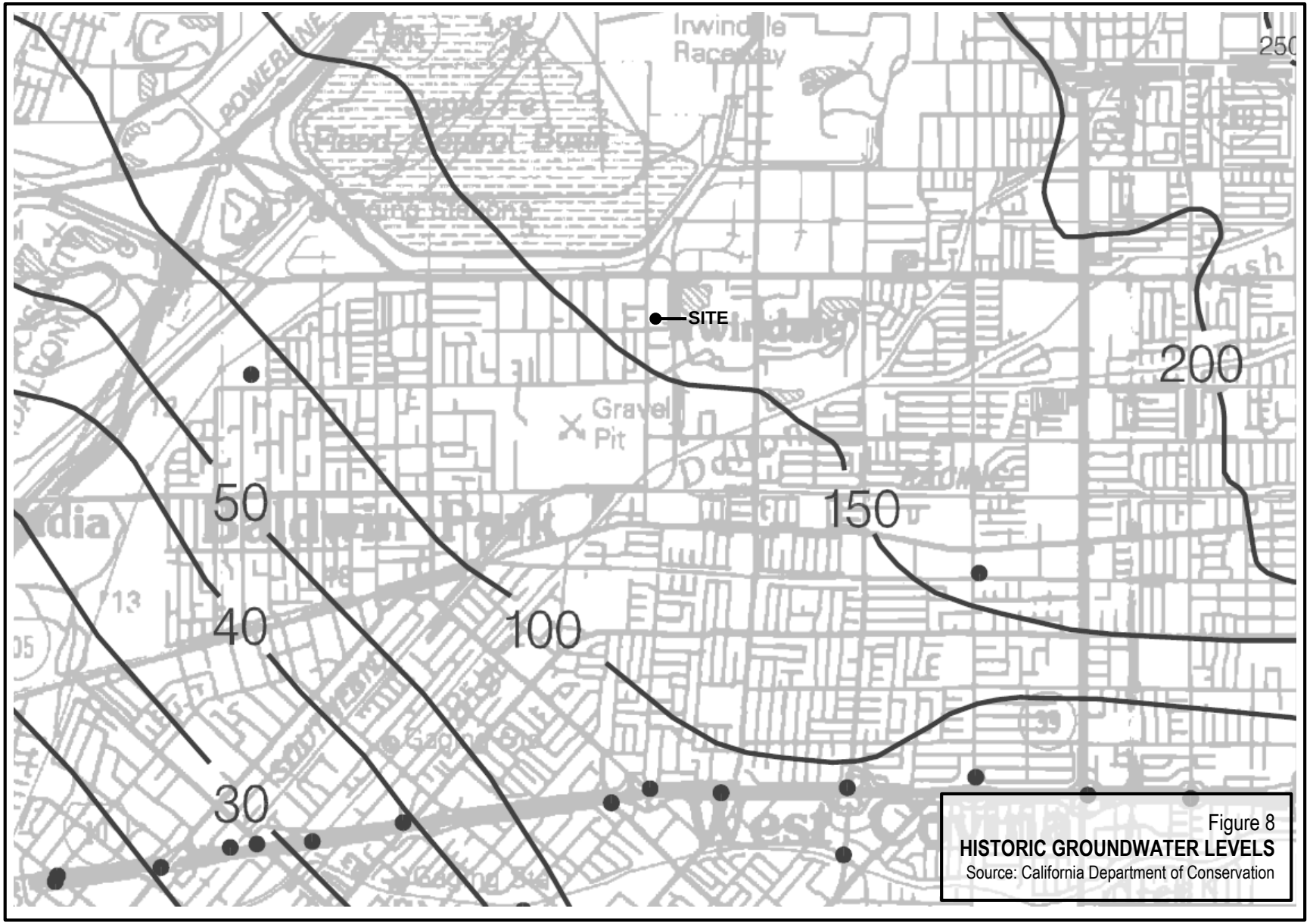


Figure 8
HISTORIC GROUNDWATER LEVELS
Source: California Department of Conservation

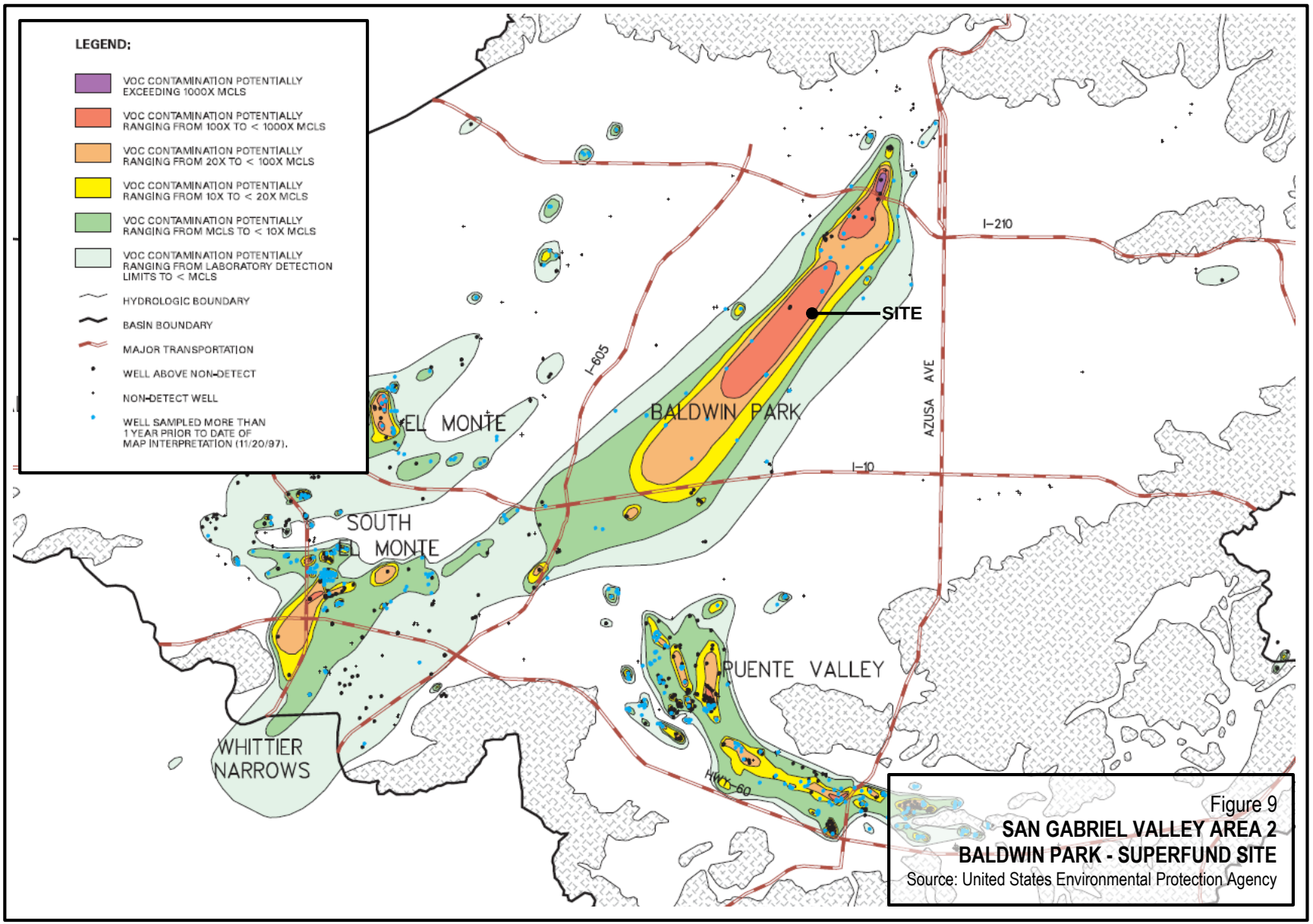


Figure 9
SAN GABRIEL VALLEY AREA 2
BALDWIN PARK - SUPERFUND SITE
Source: United States Environmental Protection Agency

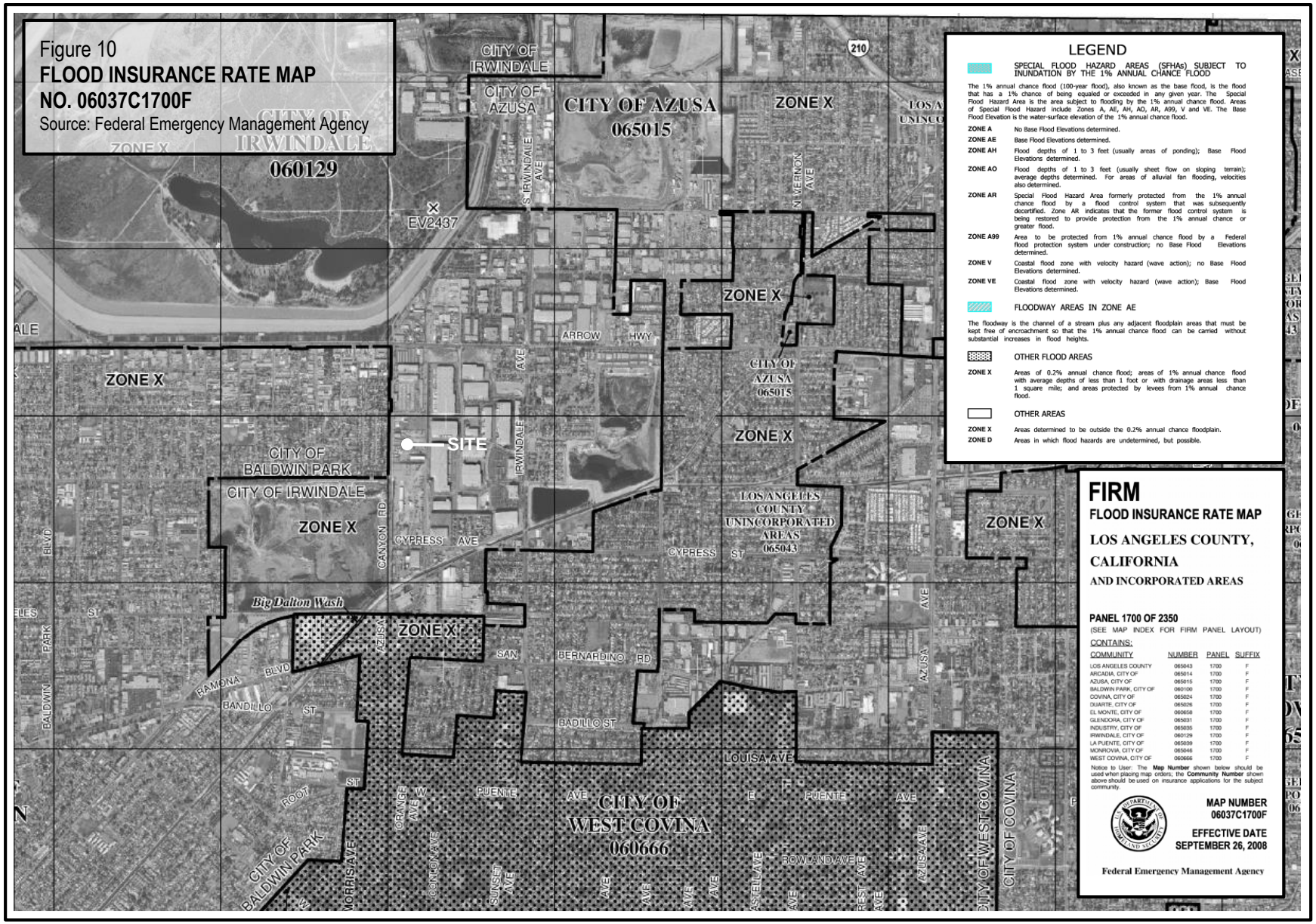


Figure 10
FLOOD INSURANCE RATE MAP
NO. 06037C1700F
Source: Federal Emergency Management Agency
CITY OF IRWINDALE
060129
ZONE X
EV2437
CITY OF IRWINDALE
CITY OF AZUSA
CITY OF AZUSA
065015
ZONE X
210
ZONE X
ZONE X
ARROW HWY
CITY OF AZUSA
065015
ZONE X
SITE
CITY OF BALDWIN PARK
CITY OF IRWINDALE
ZONE X
CANYON RD
CYPRESS AVE
LOS ANGELES COUNTY UNINCORPORATED AREAS
065043
ZONE X
Big Dalton Wash
ZONE X
SAN BERNARDINO RD
BADILLO ST
LOUISA AVE
PUENTE AVE
CITY OF WEST COVINA
060666
CITY OF BALDWIN PARK
CITY OF WEST COVINA
LEGEND
SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
ZONE A No Base Flood Elevations determined.
ZONE AE Base Flood Elevations determined.
ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
FLOODWAY AREAS IN ZONE AE
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
OTHER FLOOD AREAS
ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
OTHER AREAS
ZONE X Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D Areas in which flood hazards are undetermined, but possible.
FIRM
FLOOD INSURANCE RATE MAP
LOS ANGELES COUNTY, CALIFORNIA
AND INCORPORATED AREAS
PANEL 1700 OF 2350
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
LOS ANGELES COUNTY 065043 1700 F
ARCADIA, CITY OF 065014 1700 F
AZUSA, CITY OF 065015 1700 F
BALDWIN PARK, CITY OF 060100 1700 F
COVINA, CITY OF 065024 1700 F
DUARTE, CITY OF 065026 1700 F
EL MONTE, CITY OF 060658 1700 F
GLENDORA, CITY OF 065031 1700 F
INDUSTRY, CITY OF 065035 1700 F
IRWINDALE, CITY OF 060129 1700 F
LA PUENTE, CITY OF 065039 1700 F
MONROVIA, CITY OF 065046 1700 F
WEST COVINA, CITY OF 060666 1700 F
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.
MAP NUMBER
06037C1700F
EFFECTIVE DATE
SEPTEMBER 26, 2008
Federal Emergency Management Agency

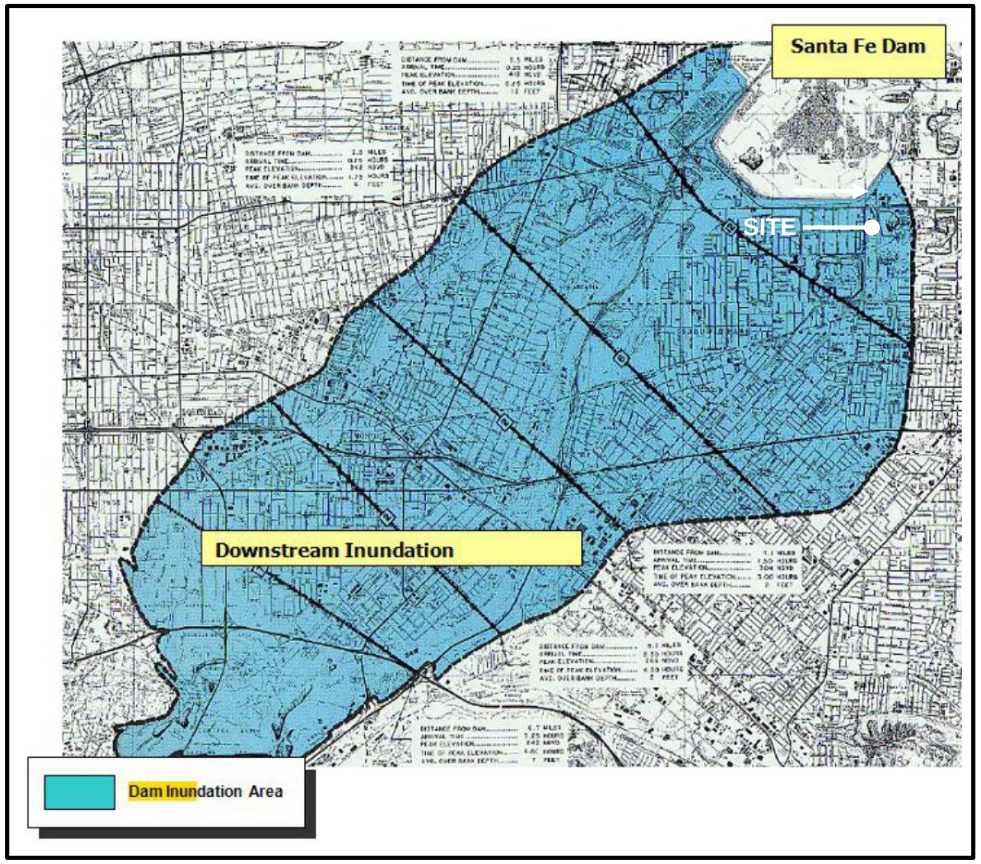


Figure 11
SANTA FE DAM EMERGENCY PLAN INUNDATION AREA (1985)
Source: United States Army Corps of Engineers

Table 3.1 USACE Dam Safety Action Classification Table* 3 February 2009 version

Dam Safety Action Class		Characteristics of this class	Actions for dams in this class
I URGENT AND COMPELLING (Unsafe)		**CRITICALLY NEAR FAILURE** Progression toward failure is confirmed to be taking place under normal operations. Almost certain to fail under normal operations from immediately to within a few years without intervention. **OR EXTREMELY HIGH RISK** Combination of life or economic consequences with probability of failure is extremely high.	Take immediate action to avoid failure. Validate classification through an external peer review for dams with life loss concerns. Implement interim risk reduction measures, including operational restrictions, ensure that emergency action plan is current, and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Expedite investigations to support justification for remediation using all resources and funding necessary. Initiate intensive management and situation reports.
II URGENT (Unsafe or Potentially Unsafe)		**FAILURE INITIATION FORESEEN** For confirmed (unsafe) and unconfirmed (potentially unsafe) dam safety issues, failure could begin during normal operations or be initiated as the consequence of an event. The likelihood of failure from one of these occurrences, prior to remediation, is too high to assure public safety. **OR VERY HIGH RISK** The combination of life or economic consequences with probability of failure is very high.	Implement interim risk reduction measures, including operational restrictions as justified, and ensure that emergency action plan is current, and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Expedite confirmation of classification. Give very high priority for investigations to support justification for remediation.
III HIGH PRIORITY (Conditionally Unsafe)		**SIGNIFICANTLY INADEQUATE OR MODERATE TO HIGH RISK** For confirmed and unconfirmed dam safety issues, the combination of life, economic, or environmental consequences with probability of failure is moderate to high.	Implement interim risk reduction measures, including operational restrictions as justified, ensure that emergency action plan is current, and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Prioritize for investigations to support justification for remediation considering consequences and other factors.
IV PRIORITY (Marginally Safe)		**INADEQUATE WITH LOW RISK** For confirmed and unconfirmed dam safety issues, the combination of life, economic, or environmental consequences with probability of failure is low and may not meet all essential USACE guidelines.	Conduct elevated monitoring and evaluation. Give normal priority to investigations to validate classification, but no plan for risk reduction measures at this time.
V NORMAL (Adequately Safe)		**ADEQUATELY SAFE** Dam is considered adequately safe, meeting all essential USACE guidelines with no unconfirmed dam safety issues, **AND RESIDUAL RISK IS CONSIDERED TOLERABLE**	Continue routine dam safety activities, normal operation, and maintenance.

- At any time for specific events a dam, from any action class, can become an emergency requiring activation of the emergency plan

Figure 12
DAM SAFETY ACTION CLASSIFICATION
Source: United States Army Corps of Engineers

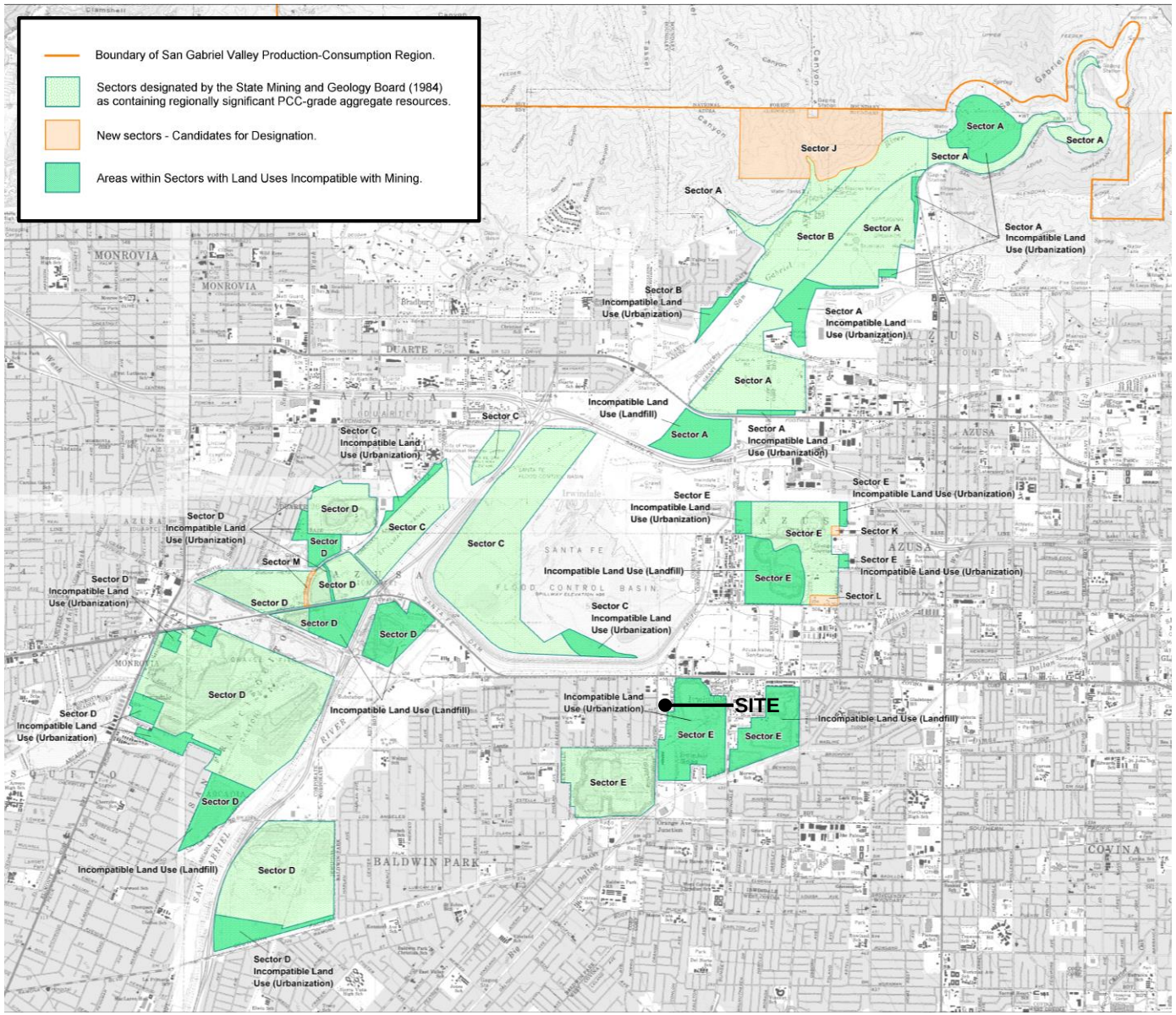


Figure 13
CANDIDATE AREAS FOR UPDATED DESIGNATION IN THE NORTHERN SAN GABRIEL PRODUCTION-CONSUMPTION REGION, LOS ANGELES COUNTY CALIFORNIA
Source: California Department of Conservation

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Appendix C

Azusa Canyon Industrial Park
Air Quality and Greenhouse Gas Analysis

(Environmental Impact Sciences, August 2014)

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Azusa Canyon Industrial Park
Air Quality and Greenhouse Gas Analysis

4832-4910 Azusa Canyon Road
Irwindale, California

Prepared for:
City of Irwindale
Community Development Department
Gus Romo, Planning Director
5050 North Irwindale
Irwindale, California 91706

Prepared by:
Environmental Impact Sciences
26051 Via Concha
Mission Viejo, California 92691-5614

August 2014

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1.0 METHODOLOGY

This air quality evaluation was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) and the Guidelines for the Implementation of the California Environmental Quality Act (State CEQA Guidelines) for the purpose of determining whether any "significant" air quality and greenhouse gas (GHG) impacts would be anticipated to occur with the approval, construction, and use of a proposed non-residential development project to be located at 4832-4910 Azusa Canyon Road in the City of Irwindale, California (City).

The impact analysis contained in this report was prepared in accordance with the methodologies provided by the South Coast Air Quality Management District (SCAQMD), as included in the SCAQMD's "CEQA Air Quality Handbook" (April 1993) (Handbook) as well as updates included on the SCAQMD Internet web site. The analysis makes use of the California Emissions Estimator Model (CalEEMod) urban emissions model, screening tables included in the SCAQMD's "Final Localized Significance Threshold Methodology" (June 2003) and "Sample Construction Scenarios for Projects Less than Five Acres in Size" (February 2005).

The Azusa Canyon Industrial Park project would remove 32,012 square feet of existing general light industrial use as well as four residential dwellings, estimated at about 6,000 square feet, and replace these with approximately 172,000 square feet of light industrial land uses. Projected air emissions are calculated using the CalEEMod (Version 2013.2.2) distributed by the SCAQMD. The CalEEMod model uses EMFAC2011 emissions factors for vehicle traffic and the OFFROAD2011 emissions factors for construction equipment. For the purposes of this analysis, the facility would become operational in 2016 following the CalEEMod Default construction schedule for construction.

The subsequent occupation of the project site is also based on the CalEEMod model using traffic-projections presented in Gibson Transportation Consulting's "Draft Transportation Study for the Azusa Canyon Industrial Park, Irwindale California" (September 2013), as used in the transportation analysis.

In accordance with the transportation analysis, the project is estimated to generate approximately 1,594 passenger car equivalent (PCE) average daily trips (ADT), with 211 produced in the morning (AM) peak hour and 222 produced in the evening (PM) peak hour on a "typical" weekday. The existing facility and four residential units are estimated to generate 261 PCE ADT with 33 trips produced in the AM peak hour and 36 trips produced in the PM peak hour on a "typical" weekday. As such, the project would result in a net increase of 1,333 PCE ADT with 178 trips added in the AM peak hour and 186 trips added in the PM peak hour on a weekday. These weekday trips are used in the calculation of the daily emissions.

The calculated emissions of the project are compared to thresholds of significance for individual projects using the SCAQMD's Handbook as well as the SCAQMD's Internet updates. The analysis finds that all air quality and GHG emissions and localized concentrations would remain below their respective threshold values. The project is found to be consistent with the goals of the "Air Quality and Climate Change Plan" (AQMP). With the application of the noted mitigation for the application of paints and coatings, no significant air quality impacts are projected to occur either during the project's construction or operation.

2.0 EXISTING CONDITIONS

2.1 Climate/Meteorology

The project area lies in the South Coast Air Basin (SCAB or Basin). The SCAB includes all of Orange County as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The Basin is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild climatological pattern is infrequently interrupted by periods of extremely hot weather, winter storms, and Santa Ana winds.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees (º) Fahrenheit (F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The SCAQMD reports that the weather station located in San Gabriel shows an annual average of 64ºF. The average low is reported at 42ºF in January while the average high is 89ºF in July and August. All areas in the Basin have recorded temperatures above 100ºF in recent years and temperatures as high as 111ºF have been recorded at the SCAQMD's San Gabriel monitoring station, located to the west of the project site.

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast with slightly heavier shower activity in the east and over the mountains. Rainfall averages around 17.37 inches per year in the project area as measured in the City of Covina, located to the east of the project site.

Although the Basin has a semi-arid climate, the air near the surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods of heavy fog, especially along the coast, are frequent. Low stratus clouds are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the east portions of the Basin.

Wind patterns across the region are characterized by easterly winds during the winter and westerly winds in the summer. Wind speed is somewhat greater during the spring months. Annually, typical winds in the project area average about 4.0 miles per hour (mph), as measured in the City of Azusa, located to the north of the project site.

Between the periods of dominant air flow, periods of air stagnation may occur, both in the morning and evening hours. Whether such a period of stagnation occurs is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high pressure systems over the Basin, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally have a duration of a few days before predominant meteorological conditions are reestablished.

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed: marine/subsidence inversion and

the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." This mixing height can change under conditions when the top of the inversion does not change. In the project area, the combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter.

2.2 Ambient Air Quality

The following characterization of the baseline atmospheric environment includes an evaluation of the ambient air quality and applicable rules, regulations, and standards for the area. Because the project has the ability to release gaseous emissions of criteria pollutants and dust into the ambient air, it falls under the ambient air quality standards promulgated on the local, State, and federal levels.

2.2.1 Affected Environment

Topographical features that affect the transport and diffusion of pollutants in the project area include the mountain ranges to the northeast that prevent the transport of pollutants. Air quality in the SCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

The quality of the ambient air is affected by pollutants emitted into the air from stationary and mobile sources. Stationary sources can be divided into two major subcategories: point sources and area sources. Point sources consist of one or more emission sources at a facility with an identified location and are usually associated with manufacturing and industrial processing plants. Area sources are widely distributed and produce many small emissions.

Mobile sources refer to emissions from motor vehicles (including tailpipe and evaporative emissions) and are classified as either on-road or off-road. On-road sources are a combination of emissions from automobiles, trucks, and indirect sources. Indirect sources are sources that, by themselves, may not emit air contaminants; however, they indirectly cause the generation of air pollutants by attracting vehicle trips or consuming energy. Examples of indirect sources include a commercial center that generates vehicle trips and consumes energy resources through the use of natural gas for space and water heating. Indirect sources also include actions proposed by local governments, such as public and private development projects. In addition, indirect sources include those emissions created by the distance vehicles travel. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

2.2.2 Criteria Air Pollutants

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by State and federal law. These regulated air pollutants are known as "criteria air pollutants" and are categorized as primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NOx, sulfur dioxide (SO_2), and most fine particulate matter (PM_{10} and $PM_{2.5}$) including lead (Pb) and fugitive dust are primary air pollutants. Of these CO, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. ROG and NOx are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reaction in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants.

Presented below is a description of each of these primary and secondary criteria air pollutants and their known health effects. Other pollutants, such as carbon dioxide (CO_2), a natural by-product of animal respiration that is also produced in the combustion process, have been linked to such phenomena as global warming. These emissions are now starting to be regulated and there are preliminary thresholds for their release. However, these pollutants do not jeopardize the attainment status of the SCAB.

- **Carbon monoxide** (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances (e.g., gasoline or diesel fuel). The primary adverse health effect associated with CO is the interference of normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.

- **Reactive organic gases** (ROGs) are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion, associated with motor vehicle usage, is the major source of hydrocarbons. Other sources of ROG include the evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. Adverse effects on human health are not caused directly by ROG but rather by reactions of ROG to form secondary pollutants. Note that for the purposes of this analysis, ROG and volatile organic compounds (VOC) are synonymous.

- **Nitrogen oxides** (NOx) serve as integral participants in the process of photochemical smog production. The two major forms of NOx are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown irritating gas formed by the combination of NO and oxygen (O). NOx acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens.

- **Nitrogen dioxide** (NO_2) is a byproduct of fuel combustion. The principal form of NO_2 produced by combustion is nitric oxide (NO). NO reacts to form NO_2, creating the mixture of NO and NO_2 commonly called NOx. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 ppm. NO_2 absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10} (particulates having an aerodynamic diameter of 10 microns or 0.0004 inch or less in diameter).

- **Sulfur dioxide** (SO_2) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. Fuel combustion is the primary source of SO_2. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations, when combined with particulates, SO_2 may injure lung tissue.

- **Particulate matter** (PM) consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulate are now recognized. Course particles (PM_{10}) include that portion of the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 one-millionths of a meter or 0.0004 inch) or less. Fine particles ($PM_{2.5}$) have an aerodynamic diameter of 2.5 microns (i.e., 2.5 one-millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from

industrial, agricultural, construction, and transportation activities. Wind action on the arid landscape also contributes substantially to the local particulate loading. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in those people who are naturally sensitive or susceptible to breathing problems.

- **Fugitive dust** poses primarily two public health and safety concerns. The first concern is that of respiratory problems attributable to the suspended particulates in the air. The second concern is that of motor vehicle accidents caused by reduced visibility during severe wind conditions. Fugitive dust may also cause significant property damage during strong windstorms by acting as an abrasive material agent. Fugitive dust can also result in a nuisance factor due to the soiling of proximate structures and vehicles.

- **Ozone** (O_3) is one of a number of substances called photochemical oxidants that are formed when reactive organic compounds (ROC) and NOx (both byproducts of the internal combustion engine) react with sunlight. O_3 is present in relatively high concentrations in the SCAB and the damaging effects of photochemical smog are generally related to the concentrations of O_3. O_3 may pose a health threat to those who already suffer from respiratory diseases as well as healthy people. O_3 has been tied to crop damage (typically in the form of stunted growth and pre-mature death) and acts as a corrosive (resulting in property damage such as the embitterment of rubber products).

2.2.3 Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is an environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety (H&SC) defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” A substance that is listed as a hazardous air pollutant (HAP), pursuant to Section 112(b) (42 USC 7412[b]) of the federal Clean Air Act of 1970 (CAA) (42 USC Section 7401 et seq.) is a TAC.

Under State law, the California Environmental Protection Agency (CalEPA), acting through the California Air Resources Board (CARB), is authorized to identify a substance as a TAC if it determines the substance is an air pollutant which may cause or contribute to an increase in mortality or serious illness or which may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics “Hot Spot” Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an “airborne toxics control measure” for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions.

Air toxics from stationary sources are regulated in California under the Air Toxics “Hot Spot” Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality control board (AQMD) or air pollution control district (APCD). High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. To date, the CARB has designated nearly 200 compounds

as TACs. Additionally, the CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds, the most important being particulate matter from diesel-fueled engines (diesel PM).

In 2000, the SCAQMD conducted a study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,400 in a million. The largest contributor to this risk was diesel exhaust, accounting for 71 percent of the air toxics risk.

2.2.4 Other Effects of Air Pollution

Just as humans are affected by air pollution, so too are plants and animals. Animals must breathe the same air and are subject to the same types of negative health effects. Certain plants and trees may absorb air pollutants that can stunt their development or cause premature death, as well as interfere with their ability to convert CO_2 to oxygen. There are also numerous impacts to our economy including lost workdays due to illness, a desire on the part of business to locate in areas with a healthy environment, and increased expenses from medical costs. Pollutants may also lower visibility and cause damage to property. Certain air pollutants are responsible for discoloring painted surfaces, eating away at stones used in buildings, dissolving the mortar that holds bricks together, and cracking tires and other items made from rubber.

2.2.5 Greenhouse Gas Emissions

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of greenhouse gas would be progressively reduced, as follows:

- By 2010, reduce greenhouse gas emissions to 2000 levels;
- By 2020, reduce greenhouse gas emissions to 1990 levels; and
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32; Sections 38500 et seq., Division 25.5, H&SC), which requires CARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide greenhouse gas emissions are reduced to 1990 levels by 2020 (representing an approximate 25 percent reduction in emissions).

In June 2007, CARB directed staff to pursue 37 early actions for reducing greenhouse gas emissions under AB 32. The broad spectrum of strategies to be developed – including a Low Carbon Fuel Standard, regulations for refrigerants with high global warming potentials, guidance and protocols for local governments to facilitate greenhouse gas reductions, and green ports – reflects that the serious threat of climate change requires action as soon as possible.

In addition to approving the greenhouse gas reduction strategies, CARB directed staff to further evaluate early action recommendations made at the June 2007 meeting, and to report back to CARB within 6 months. The general sentiment of CARB suggested a desire to try to pursue greater greenhouse gas emissions reductions in California in the near-term. Since the June 2007 CARB hearing, CARB staff has evaluated all 48 recommendations submitted by several stakeholder and several internally-generated staff ideas and published the Expanded List of Early

Action Measures To Reduce Greenhouse Gas Emissions In California, recommended for board consideration in October 2007. Based on its additional analysis, CARB staff is recommending the expansion of the early action list to a total of 44 measures. Nine of the strategies meet the AB 32 definition of discrete early action measures. Discrete early action measures are measures that will be in place and enforceable by January 1, 2010. The discrete early action items included: (1) a low-carbon fuel standards for ethanol, biodiesel, hydrogen, electricity, compressed natural gas, liquefied petroleum gas, and biogas; (2) restrictions on high global warming potential refrigerants; (3) landfill methane capture; (4) Smartway truck efficiencr; (5) port electrification; (6) reduction of perfluorocarbons from the semiconductor industry; (7) Reduction of propellants in consumer products; (8) tire inflation; and (9) sulfurhHexafluoride (SF_6) reductions from non-electricity sector.

The 2020 target reductions are currently estimated to be 174 million metric tons of carbon dioxide (CO_2) equivalent ($MMTCO_2e$). In total, the recommended early actions have the potential to reduce greenhouse gas emissions by at least 42 $MMTCO_2e$ emissions by 2020, representing about 25 percent of the estimated reductions needed by 2020. The CARB Board adopted Resolution 07-55 in December 2007, approving 427 $MMTCO_2e$ as the statewide greenhouse gas emissions limit for 2020, which is equivalent to the 1990 emissions level. The measures are in the sectors of fuels, transportation, forestry, agriculture, education, energy efficiency, commercial, solid waste, cement, oil and gas, electricity, and fire suppression.

2.3 Ambient Air Quality Standards (AAQS)

The federal Clean Air Act Amendment of 1971 established national Ambient Air Quality Standards (AAQS) with states retaining the option to adopt more stringent standards or to include other pollution species. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both the State and the federal government have established health-based Ambient Air Quality Standards for six air pollutants. As shown in Table AQ-1 (Ambient Air Quality Standards for Criteria Pollutants), these pollutants include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter (PM_{10}, $PM_{2.5}$), and lead. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. In addition to primary and secondary Ambient Air Quality Standards, the State has established a set of episode criteria for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and particulate matter. These criteria refer to episode levels representing periods of short-term exposure to air pollutants, which actually threaten public health.

2.4 Air Quality Management Planning

2.4.1 Local Planning Requirements

The SCAQMD and the Southern California Association of Governments (SCAG) are the agencies responsible for preparing the "Air Quality Management Plan" (AQMP) for the SCAB. Since 1979,

a number of AQMPs have been prepared. The AQMP was designed to comply with State and federal requirements, reduce the high level of pollutant emissions in the SCAB, and ensure clean air for the region through various control measures. To accomplish its task, the AQMP relies on a multi-level partnership of governmental agencies at the federal, State, regional, and local level. These agencies (i.e., the United States Environmental Protection Agency, CARB, local governments, SCAG, and SCAQMD) are the cornerstones that implement the AQMP programs.

Table AQ-1
AMBIENT AIR QUALITY STANDARDS FOR CRITERIA POLLUTANTS

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070	0.075 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Average	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	*	
Sulfur Dioxide (SO_2)	Annual Average	*	0.03 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	*	
	24 hours	0.04 ppm	0.14 ppm	
Suspended Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 $\mu g/m^3$	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	24 hours	50 $\mu g/m^3$	150 $\mu g/m^3$	
Suspended Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 $\mu g/m^3$	15 $\mu g/m^3$	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	24 hours	*	35 $\mu g/m^3$	
Lead (Pb)	Monthly	1.5 $\mu g/m^3$	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	*	1.5 $\mu g/m^3$	
Sulfates (SO_4)	24 hours	25 $\mu g/m^3$	*	Industrial processes.

Notes:
ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter
* = standard is not applicable for this pollutant/duration by this entity.

Source: California Air Resources Board

On December 7, 2012, the SCAQMD adopted the "2012 Air Quality Management Plan" (2012 AQMP). The purposes of the 2012 AQMP for the Basin are to set forth a comprehensive and integrated program that will lead the Basin into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, to satisfy the planning requirements of the federal Clean Air Act, and to provide an update to the Basin's commitments towards meeting the federal 8- hour ozone standards. It will also serve to satisfy the recent United States Environmental Protection Agency (USEPA) proposed requirement for a new attainment demonstration of the revoked 1-hour ozone standard, as well as a vehicle miles travelled (VMT) emissions offset demonstration. Specifically, the Plan will serve as the official SIP submittal for the federal 2006 24-hour $PM_{2.5}$ standard, for which

USEPA has established a due date of December 14, 2012. In addition, the 2012 AQMP will update specific new control measures and commitments for emissions reductions to implement the attainment strategy for the 8-hour ozone SIP, and thus help to reduce reliance on CAA Section 182(e)(5) long-term measures. Once approved by the SCAQMD's Governing Board and CARB, the 2012 AQMP will be submitted to USEPA as the 24-hour $PM_{2.5}$ SIP addressing the 2006 $PM_{2.5}$ NAAQS and as a limited update to the approved 8-hour ozone SIP. The 1-hour ozone attainment demonstration and VMT emissions offset demonstration will also be submitted through CARB to the USEPA.

The 2012 AQMP incorporates the most recent planning assumptions and the best available information including: revised stationary point and area source emissions inventories; on-road and off-road mobile source emissions inventories based on CARB's latest EMFAC2011 and Off-Road Models; the use of new meteorological episodes for ozone and expanded air quality modeling analysis; and the latest demographic growth forecasts based on the approved "2012 Regional Transportation Plan" (2012 RTP) developed by SCAG.

2.4.2 Air Quality Attainment Status

Areas that meet the ambient air quality standards are classified as "attainment" areas while areas that do not meet these standards are classified as "non-attainment" areas. The severity of the classifications for ozone non-attainment include and range in magnitude from: marginal, moderate, serious, severe, and extreme. The attainment status for the SCAB is included in Table AQ-2 (Attainment Status for the South Coast Air Basin).

Table AQ-2
ATTAINMENT STATUS FOR THE SOUTH COAST AIR BASIN

Pollutant	State Status	Federal Status
Ozone (1-hour)	Extreme Non-attainment	Extreme Non-attainment (under the prior standard)
Ozone (8-hour)	Extreme Non-Attainment	Severe-17 (may petition for Extreme)
PM_{10}	Serious Non-attainment	Serious Non-attainment
$PM_{2.5}$	Non-attainment	Non-attainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance

Source: California Air Resources Board

The Basin is also designated as attainment of the California Ambient Air Quality Standards (CAAQS) for SO_2, lead, and sulfates. Areas that are designated as Severe-17 for the ozone standard must meet attainment of the 8-hour standard by 2021 (2024 if reclassified to Extreme). Areas considered as serious non-attainment of the PM_{10} standards must have reached attainment by the end of 2006, or as expeditiously as possible. To date, the Basin still does not meet this standard. The $PM_{2.5}$ attainment date is to be met in the year 2015.

2.4.3 State Planning Requirements

Executive Order S-3-05

Under Executive Order S-3-05, as signed by Governor Arnold Schwarzenegger on June 1, 2005, the following greenhouse gas (GHG) emission reduction targets were established for California: (1) by 2010, reduce GHG emissions to 2000 levels; (2) by 2020, reduce GHG emissions to 1990

levels; and (3) by 2050, reduce GHG emissions to 80 percent below 1990 levels. In response, in March 2006, the CalEPA published a Climate Action Team (CAT) report detailing how State agencies could implement a series of policies to meet the 2010 and 2020 goals. As indicated therein, among the policy actions that are cited are "smart land use and intelligent transportation." The CAT states that smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land-use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. Intelligent transportation systems (ITS) is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods, and service.[1]

California Health and Safety Code

Section 41700 of the H&SC requires that "no person shall discharge from any source whatsoever such quantities of air contaminants or other material which causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, response, health, or safety of any such person or the public, or which causes, or have a natural tendency to cause, injury or damage to business or property." Section 39606(b) of the H&SC authorizes the California Air Resources Board (CARB) to adopt standards for ambient air quality "in consideration of public health and safety, and welfare, including but not limited to health, illness, irritation to the senses, aesthetic value, interference with visibility, and the effects of air pollution on the economy." The objective of ambient air quality standards (AAQS) is to provide a basis for preventing or abating adverse health or welfare effects of air pollution (17 CCR 70101).

Section 39607(e) requires that the CARB establish and periodically review area designation criteria. The CARB makes area designations for the following nine criteria pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns (PM_{10}), sulfates (SO_4), lead (Pb), hydrogen sulfide (H_2S), and visibility-reducing particles. Assembly Bill 2595, known as the California Clean Air Act (CCAA), divided non-attainment areas into categories with progressively more stringent requirements (Sections 40918-40920.5, H&SC). As specified, it is the responsibility of each air pollution control district (APCD) and air quality management district (AQMD) within the State to attain and maintain California Ambient Air Quality Standards (CAAQS).[2] The CCAA requires that an attainment plan be developed by all non-attainment districts for O_3, CO, sulfur oxides (SOx), and nitrogen oxides (NOx) that are either receptors or contributors of transported air pollutants. The CAAQS are listed in Table AQ-1 (Ambient Air Quality Standards for Criteria Pollutants).[3] Areas meeting CAAQS are classified as attainment; areas not meeting CAAQS are classified as non-attainment.

Assembly Bill 32 (California Global Warming Solutions Act of 2006), codified in Section 38500 et seq. of the H&SC, established a comprehensive program to reduce GHG by 2020 and identifies several major requirements that CARB is required to implement, including: (1) adoption and

[1]/ California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, p. 58.

[2]/ The CARB considers an area to be non-attainment of a CAAQS for a particular pollutant if the standards for O_3, CO (except Lake Tahoe), SO_2 (1 hour and 24 hour), NO_2, PM_{10}, and visibility-reducing particles are exceeded.

[3]/ These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. In addition to primary and secondary ambient air quality standards, the State has established a set of episode criteria for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and particulate matter. These criteria refer to episode levels representing periods of short-term exposure to air pollutants which threaten public health.

implementation of a list of discrete and early action GHG reduction measures; (2) approval of a Statewide1990 emission level that becomes the Statewide 2020 emissions limits; (3) adoption of mandatory GHG reporting rules for significant GHG sources; and (4) adoption of regulations to achieve the maximum technologically feasible and cost-effective reductions. As defined in Section 38505 of the H&SC, greenhouse gases include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

2.4.4 Federal Clean Air Act Requirements

The CAA requires any new major stationary sources of air pollution and any major modifications to major stationary sources to obtain an air pollution permit before commencing construction. New Source Review (NSR) requirements (42 USC 7411) differ depending on the attainment status of the area where the major facility is to be located. Prevention of Significant Deterioration (PSD) requirements (42 USC 7470-7491) apply in areas that are in attainment of the National Ambient Air Quality Standards (NAAQS). Non-attainment area NSR requirements apply to areas that have not been able to demonstrate compliance with the NAAQS.

Section 108 of the CAA directs the United States Environmental Protection Agency (USEPA) to list pollutants that may reasonably be anticipated to endanger public health and welfare and to issue air quality criteria for those pollutants. The USEPA has set NAAQS for the following pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), and sulfur dioxide (SO_2). The NAAQS for those primary pollutants are listed in Table AQ-1 (Ambient Air Quality Standards for Criteria Pollutants). Section 176(c) prohibits federal agencies from taking actions in NAAQS non-attainment or maintenance areas that do not conform to the State Implementation Plan (SIP) for the attainment and maintenance of NAAQS pursuant to Section 110(a).[4]

2.5 Baseline Air Quality

Existing levels of ambient air quality and historical trends and projections in the project area are best documented by measurements made by the SCAQMD. The project is located within Source Receptor Area (SRA) 9 (East San Gabriel Valley). Data from this station is summarized in Table AQ-3. (Air Quality Monitoring Summary for the East San Gabriel Valley Monitoring Station) The measurements have shown that while ozone levels continue to exceed the California and national hourly standards, these occurrences show no clear trend over the last 5 years, though latter years show a marked decrease in the number of violations from the historical numbers of earlier years.

Although NO_2 measurements indicate that no standards were exceeded, NO_2 is a precursor to O_3 formation, which occasionally does exceed the standards. Hydrocarbons and NO_2 are emitted by both mobile and stationary sources, with the greater portion emanating from mobile sources in the Basin. These concentrations increase during the summer, with concentrations increasing from the late morning through the afternoon.

With regard to particulate matter, no trend is readily apparent. The State standard for PM_{10} was exceeded 40 of the 278 times (14.4 percent) in the last 5 years that it was monitored. The federal standard has not been violated in the last 5 years. However, the federal standard for $PM_{2.5}$ was exceeded 14 of the 803 times (1.7 percent) in the last 5 years. Suspended particulate matter

[4]/ The purpose of conformity is to ensure federal activities do not interfere with the budgets in the SIPs, ensure actions do not cause or contribute to new violations, and ensure attainment and maintenance of the NAAQS.

(both total suspended particulates [TSP], and PM_{10} and $PM_{2.5}$) is a mixture of natural and manmade materials that include soil particles, biological materials, sulfates, nitrates, organic compounds, and lead. Smaller particles (PM_{10}, $PM_{2.5}$) are created by the combustion of fossil fuels, but are also given off from tire wear and brake dust.

Table AQ-3
AIR QUALITY MONITORING SUMMARY FOR THE EAST SAN GABRIEL VALLEY MONITORING STATION
(Number of Days Standards were Exceeded and Maximum Levels During such Violations[1])

State and Federal Pollutant/Standard	2008	2009	2010	2011	2012
Ozone (O_3)					
State 1-hour > 0.09 ppm	34	23	5	13	18
State 8-hour >0.07 ppm	39	32	10	19	18
Federal 1-hour > 0.12 ppm	7	4	0	0	1
Federal 8-hour > 0.075 ppm	14	17	3	12	10
Max. 1-hour conc. (ppm)	0.135	0.150	0.081	0.111	0.134
Max. 8-hour conc. (ppm)	0.111	0.107	0.075	0.092	0.095
Carbon Monoxide (CO)					
State 8-hour ≥ 9.1 ppm	0	0	0	0	0
Max. 8-hour conc. (ppm)	1.6	1.7	1.3	1.4	1.2
Nitrogen Dioxide (NO_2)					
State 1-hour > 0.18 (ppm)	0	0	0	0	0
Max. 1-hour conc. (ppm)	0.10	0.10	0.0772	0.0795	0.0718
Inhalable Particulates (PM_{10})[1]					
State 24-hour > 50 µg/m^3	13/49	7/52	5/55	9/61	6/61
Federal 24-hour > 150 (µg/m^3)	0/49	0/52	0/55	0/61	0/61
Max. 24-hour conc. (µg/m^3)	98	74	70	65	78
Inhalable Particulates ($PM_{2.5}$)[1]					
Federal 24-Hour > 35 µg/m^3	5/321	6/153	1/93	1/118	1/118
Max. 24-Hour Conc. (µg/m^3)	53.1	72.1	44.4	49.5	39.6

Notes:
1. Violations per number of samples.

Source: South Coast Air Quality Management District

2.6 Standard Conditions and Uniform Codes

All projects constructed in the SCAB are subject to standard conditions and uniform codes. Compliance with these provisions is mandatory and, as such, does not constitute mitigation under CEQA. Those conditions specific to air quality are included below.

- Adherence to SCAQMD Rule 403, which sets requirements for dust control associated with grading and construction activities.
- Adherence to SCAQMD Rules 431.1 and 431.2, which require the use of low sulfur fuel for stationary construction equipment.
- Adherence to SCAQMD Rule 1108, which sets limitations on ROG content in asphalt.
- Adherence to SCAQMD Rule 1113, which sets limitations on ROG content in architectural coatings.
- Adherence to SCAQMD Rule 1143, which sets limitations on ROG content in consumer paint thinners and multi-purpose solvents.

Furthermore, with the proposed updates, the project shall comply with Title 24 energy-efficient design requirements as well as the provision of window glazing, wall insulation, and efficient ventilation methods in accordance with the requirements of the Uniform Building Code (UBC).

During construction, the project would be subject to SCAQMD Rule 403 (Fugitive Dust). SCAQMD Rule 403 does not require a permit for construction activities but sets forth general and specific requirements for all construction sites (as well as other fugitive dust sources) in the Basin. The general requirement prohibits a person from causing or allowing emissions of fugitive dust from construction (or other fugitive dust source) such that the presence of such dust remains visible in the atmosphere beyond the property line of the emissions source. SCAQMD Rule 403 also prohibits a construction site from causing an incremental PM_{10} concentration impact at the property line of more than 50 $\mu g/m^3$ as determined through PM_{10} high-volume sampling. The concentration standard and associated PM_{10} sampling do not apply if specific measures identified in the rule are implemented and appropriately documented.

In accordance with Rule 403, the SCAQMD requires that contractors implement Best Available Control Technology (BACT) for construction activities. Rule 403 identifies two sets of specific measures, one for projects less than 50 acres and another set of conditions for projects that exceed 50 acres. The requirements applicable to the project are included in Table AQ-4 (SCAQMD Required Best Available Control Measures). Note that these measures are regulatory requirements and as such, do not constitute mitigation under CEQA.

2.7 Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are considered to be sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered as sensitive since children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution since exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. The working population is generally the healthiest segment of the public.

The project is in a zoned industrial use area and is not sensitive in nature. The areas to the north, south, and east are also industrial and are not sensitive by nature; however, residential land uses are located immediately across Azusa Canyon Road to the west of the project with the nearest of these units on the order of 100 feet from the site boundary.

3.0 THRESHOLD OF SIGNIFICANCE CRITERIA

Presented below are the threshold of significance criteria identified by the SCAQMD relative to this topical issue. In accordance therewith, the proposed project would normally be deemed to produce a significant land use impact if the project or if project-related activities were to:

Table AQ-4
SCAQMD REQUIRED BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measures	Guidance
Backfilling	Stabilize backfill material when not actively handling; and Stabilize backfill material during handling; and Stabilize soil at completion of activity	Mix backfill soil with water prior to moving; and Dedicate water truck or high capacity hose to backfilling equipment; and Empty loader bucket slowly so that no dust plumes are generated; and Minimize drop height from loader bucket.
Clearing and Grubbing	Maintain stability of soil through prewatering of site prior to clearing and grubbing; and Stabilize soil during clearing and grubbing activities; and Stabilize soil immediately after clearing and grubbing activities.	Maintain live perennial vegetation where possible; and Apply water in sufficient quantity to prevent generation of dust plumes.
Clearing Forms	Use water spray to clear forms; or Use sweeping and water spray to clear forms; or Use vacuum system to clear forms.	Use of high pressure air to clear forms may cause exceedance of Rule requirements.
Crushing	Stabilize surface soils prior to operation of support equipment; and Stabilize material after crushing.	Follow permit conditions for crushing equipment; Pre-water material prior to loading into crusher; Monitor crusher emissions opacity; and Apply water to crushed material to prevent dust plumes.
Cut and Fill	Pre-water soils prior to cut and fill activities; and Stabilize soil during and after cut and fill activities.	For large sites, pre-water with sprinklers or water trucks and allow time for penetration; and Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts.
Demolition Mechanical/Manual	Stabilize wind erodible surfaces to reduce dust; and Stabilize surface soil where support equipment and vehicles will operate; and Stabilize loose soil and demolition debris; and comply with Rule 1403.	Apply water in sufficient quantities to prevent the generation of visible dust plumes.
Disturbed Soil	Stabilize disturbed soil throughout the construction site; and Stabilize disturbed soil between structures	Limit vehicular traffic and disturbances on soils where possible; and If interior block walls are planned, install as early as possible; and Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.
Earth-Moving Activities	Pre-apply water to depth of proposed cuts; and Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and Stabilize soils once earth-moving activities are complete.	Grade each project phase separately, timed to coincide with construction phase; and Upwind fencing can prevent material movement on site; and Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.

Table AQ-4 (Continued)
SCAQMD REQUIRED BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measures	Guidance
Importing/Exporting of Bulk Materials	Stabilize material while loading to reduce fugitive dust emissions; and Maintain at least six inches of freeboard on haul vehicles; and Stabilize material while transporting to reduce fugitive dust emissions; and Stabilize material while unloading to reduce fugitive dust emissions; and Comply with CVC Section 23114.	Use tarps or other suitable enclosures on haul trucks; and Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage; and Comply with track-out prevention/mitigation requirements; and Provide water while loading and unloading to reduce visible dust plumes.
Landscaping	Stabilize soils, materials, slopes	Apply water to materials to stabilize; and Maintain materials in a crusted condition; and Maintain effective cover over materials; and Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes; and Hydroseed prior to rain season.
Road Shoulder Maintenance	Apply water to unpaved shoulders prior to clearing; and Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs; and Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs.
Screening	Pre-water material prior to screening; and Limit fugitive dust emissions to opacity and plume length standards; and Stabilize material immediately after screening.	Dedicate water truck or high capacity hose to screening operation; and Drop material through the screen slowly and minimize drop height; and Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point.
Staging Areas	Stabilize staging areas during use; and Stabilize staging area soils at project completion.	Limit size of staging area; and Limit vehicle speeds to 15 miles per hour; and Limit number and size of staging area entrances/exits.
Stockpiles/Bulk Material Handling	Stabilize stockpiled materials, and stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	Add or remove material from the downwind portion of the storage pile; and Maintain storage piles to avoid steep sides or faces.

Table AQ-4 (Continued)
SCAQMD REQUIRED BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measures	Guidance
Traffic Areas for Construction Activities	Stabilize all off-road traffic and parking areas; and Stabilize all haul routes; and Direct construction traffic over established haul routes.	Apply gravel/paving to all haul routes as soon as possible to all future roadway areas; and Barriers can be used to ensure vehicles are only used on established parking areas/haul routes.
Trenching	Stabilize surface soils where trencher or excavator and support equipment will operate; and Stabilize soils at the completion of trenching activities.	Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching; and Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment.
Truck Loading	Pre-water material prior to loading; and Ensure that freeboard exceeds six inches (CVC 23114)	Empty loader bucket such that no visible dust plumes are created; and Ensure that the loader bucket is close to the truck to minimize drop height while loading.
Turf Overseeding	Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; Cover haul vehicles prior to exiting the site.	Haul waste material immediately off-site.
Unpaved Roads/Parking Lots	Stabilize soils to meet the applicable performance standards; and Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements.
Vacant Land	In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Source: South Coast Air Quality Management District

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standards.
- Expose sensitive receptors to substantial air pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.
- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

As indicated in Section 15064(i)(1) of the State CEQA Guidelines, “cumulatively considerable” is defined to mean “that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

In order to determine whether or not the proposed project would cause a significant effect on the environment, the impact of the project must be determined by examining the types and levels of emissions generated and its impacts on factors that affect air quality. To accomplish this determination of significance, the SCAQMD has established air pollution thresholds against which a proposed project can be evaluated and assist lead agencies in determining whether or not the proposed project is significant. If the thresholds are exceeded by a proposed project, then it should be considered significant.

While the final determination of whether or not a project is significant is within the purview of the lead agency, the SCAQMD recommends that the following air pollution thresholds be used in determining whether the construction or operational phase of a proposed project is significant. As recommended by the SCAQMD, if the lead agency finds that the proposed project has the potential to exceed any of these air pollution thresholds, the project should be considered significant.

3.1 Construction Phase - Thresholds of Significance

The following significance thresholds for air quality have been established by the SCAQMD on a daily basis for construction emissions:

- 75 pounds per day for ROG
- 100 pounds per day for NOx
- 550 pounds per day for CO
- 150 pounds per day of SOx
- 150 pounds per day for PM_{10}
- 55 pounds per day for $PM_{2.5}$

During construction, if any of the identified daily air pollutant thresholds are exceeded by the proposed project, then the project’s air quality impacts may be considered significant.

3.2 Operational Phase - Thresholds of Significance

Specific criteria air pollutants have been identified by the SCAQMD as pollutants of special regional concern. Based upon this categorization, the following significance thresholds have been established by the SCAQMD for project operations:

- 55 pounds per day of ROG
- 55 pounds per day of NOx
- 550 pounds per day of CO
- 150 pounds per day of SOx
- 150 pounds per day of PM_{10}
- 55 pounds per day for $PM_{2.5}$

Projects within the SCAB with daily operation-related emissions that exceed any of the above emission thresholds may be considered significant. The SCAQMD indicates in Chapter 6 of their Handbook that they consider a project to be mitigated to a level of insignificance if its primary effects are mitigated below the thresholds provided above.

In addition to the criteria pollutants, the SCAQMD Working Group has established a tentative threshold of 3,000 metric tons (Mtons) per year for CO_2e emissions for residential and commercial projects, and a threshold of 10,000 Mtons per year for industrial projects.

3.3 Local Emission Standards

In addition to the mass daily threshold values presented above, projects that have the ability to exceed or add measurably to an existing excess of the ambient concentrations presented in Table 1 may be considered significant. The following localized significance thresholds have been established by the SCAQMD for individual projects:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm
- California State 1-hour NO_2 standard of 0.18 ppm
- SCAQMD 24-hour construction PM_{10} and $PM_{2.5}$ standards of 10.4 $\mu g/m^3$
- SCAQMD 24-hour operational PM_{10} and $PM_{2.5}$ standards of 2.5 $\mu g/m^3$

If ambient levels already exceed a State or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. In the case of CO, the SCAQMD defines a measurable amount as 1.0 ppm or more for the 1-hour CO concentration or 0.45 ppm or more for the 8-hour CO concentrations. The SCAQMD indicates that they consider a project to be mitigated to a level of insignificance if its secondary effects are mitigated below these thresholds.

4.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The Azusa Canyon Industrial Park project would remove four existing residential units, estimated at about 6,000 square feet, and approximately 32,012 square feet of general industrial uses and replace those existing facilities with an approximately 172,000 square foot light industrial park. The entire parcel is approximately 7.1 acres, some of which is presently covered with pavement. For the purposes of this analysis, it is assumed that 3.5 acres of the existing site includes a 6-inch layer of paving material that will be removed during demolition.

Once operational, the project would attract additional trucks, as well as employees and other people who would call on the facility. Projected air emissions are calculated using the CalEEMod emissions model, as distributed by the SCAQMD. The CalEEMod emissions model uses EMFAC2011 emissions factors for vehicle traffic and the OFFROAD2011 emissions factors for construction equipment. The daily number of vehicle trips is as projected in the project's transportation analysis.

For the purposes of this analysis, construction is scheduled to begin in 2015 and follow the CalEEMod construction schedule, thereby allowing operations to begin in 2016. Daily emissions are based on the higher of the summer or winter emissions projections, regardless of when those emissions actually occur.

The subsequent occupation of the project site is also based on the CalEEMod emissions model using traffic-projections provided in Gibson Transportation Consulting's "Draft Transportation Study for the Azusa Canyon Industrial Park, Irwindale California" (September 2013). In accordance with the transportation analysis, the project is estimated to generate approximately 803 passenger car trips and 396 truck trips on a on a "typical" weekday. These weekday trips are used in the calculation of the daily emissions.

The transportation analysis does not project weekend trips; however, because greenhouse gases are based on an annual threshold, weekend trips were modeled using the CalEEMod emission model's "default" values for the existing land use to be removed and for the proposed land use to be constructed.

For ease of the reference, the analysis follows the format included in the State CEQA Guidelines' Appendix G (Environmental Checklist Form) for Section III (Air Quality) and Section VII (Greenhouse Gas Emissions), addressing each issue included therein, respectively.

4.1 Project Consistency with the Applicable Air Quality Plan

- **Less than Significant Impact**. CEQA requires that projects be consistent with the AQMP. A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the AQMP in the following ways: (1) fulfilling the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed; and (2) providing the local agency with ongoing information assuring local decision-makers that they are making real contributions to clean air goals contained in the AQMP.

  Only new or amended general plan elements, specific plans, and regionally significant projects need to undergo a consistency review. This is because the AQMP strategy is based on projections from local general plans. Projects that are consistent with the local general plan are, therefore, considered consistent with the AQMP.

  As proposed, the Applicant seeks approval to replace 32,012 square feet of general industrial uses and four residential units with a 172,000-square foot industrial park. The project is compatible with the existing zoning and operational emissions are is not projected to exceed the daily threshold values suggested by the SCAQMD. Additionally, the project would not result in significant localized air quality impacts. With the provided mitigation for paint and coating emissions, site construction would not exceed the

SCAQMD's recommended threshold values. As such, the project is consistent with the goals of 2012 AQMP and, in that respect, does not present a significant air quality impact.

4.2 Potential to Violate or Add to a Violation of an Air Quality Standard

The potential air quality impacts associated with and attributable to the proposed project's construction and operation are separately addressed below.

4.2.1 Construction Impacts

- **Less than Significant with Mitigation**. Air quality impacts may occur during demolition and construction activities required to implement the proposed land use. The project would remove four existing residential units, estimated to total about 6,000 square feet, and about 32,012 square feet of general industrial uses and replace them with 172,000-square feet of light industrial use. The entire parcel is approximately 7.1 acres, some of which is already paved. For the purposes of this analysis it is assumed that 3.5 acres of the existing site includes a 6-inch layer of paving material that will be removed during demolition and replaced with the proposed land use during the construction period.

  Demolition equipment and debris removal are based on the CalEEMod emission model's "default" values for the removal of the existing structures and the number of haul trips required to remove existing site paving. As noted, it is assumed that 3.5 acres of paving would be removed and this is estimated to have a 6-inch (0.5 foot) depth.

  $$3.5 \text{ acres} \times 43{,}560 \text{ ft}^2/\text{acre} \times 0.5 \text{ foot} = 76{,}230 \text{ ft}^3$$

  Asphaltic concrete is reported to weigh 140 pounds per cubic foot and documentation for the CalEEMod emissions model notes that each haul truck can move 20 tons at a time.

  $$76{,}230 \text{ ft}^3 \times 140 \text{ pounds/ft}^3 / 2{,}000 \text{ pounds/ton} / 20 \text{ tons/trip} = 267 \text{ truck trips}$$

  These trips were then added to the 172 truck trips predicted by the CalEEMod emissions model for the removal of the existing on-site structures for a total of 439 haul trips over the default 20 day demolition period or approximately 22 trucks per day.

  The remainder of the site construction was modeled using the "default" schedule which starts with demolition on January 1, 2015 and ends with the final painting of the structures on February 25, 2016. The major sources of emissions during construction include dust and exhaust emissions generated during demolition, site preparation, and site grading and the emission of ROGs (VOCs) during the painting of the structures. Table AQ-5 (Comparison of Projected Construction Emissions and Daily Criteria Values) includes the daily emissions projected for site construction. As indicated therein, ROG (VOC) emissions given off from the application of paints and coatings could exceed the SCAQMD's recommended daily threshold after building construction. Mitigation is, therefore, warranted to reduce this impact to a less-than-significant level.

  Mitigation of ROG (VOC) emissions can be accomplished by either of the following methods: (1) Option No. 1 - Painting and surface coating shall be limited to an aggregate area of no more than 6,400 square feet per day during any phase of construction; or (2)

Option No. 2 - Paints and surface coatings shall be limited to no more than 93 milligrams per liter of VOC content.

Table AQ-5
COMPARISON OF PROJECTED CONSTRUCTION EMISSIONS AND DAILY CRITERIA VALUES[1]
(pounds/day)

Source	ROG	NOx	CO	SO_2	PM_{10} Dust	PM_{10} Exhaust	PM_{10} Total	$PM_{2.5}$ Dust	$PM_{2.5}$ Exhaust	$PM_{2.5}$ Total
Demolition										
Off Road Diesel	4.51	48.36	36.07	0.04	0.38	2.45	2.83	0.06	2.29	2.34
Hauling	0.47	7.21	5.44	0.02	0.38	0.12	0.50	0.10	0.11	0.21
Worker Trips	0.08	0.10	1.15	0.00	0.17	0.00	0.17	0.04	0.00	0.05
Totals	5.06	55.67	42.66	0.06	0.93	2.57	3.50	0.20	2.40	2.60
Site Preparation										
Off Road Diesel	5.26	56.89	42.63	0.04	3.65	3.09	6.75	2.01	0.00	2.01
Worker Trips	0.09	0.12	1.38	0.00	0.20	0.00	0.20	0.05	0.00	0.06
Totals	5.35	57.01	44.01	0.04	3.85	3.09	6.95	2.06	0.00	2.07
Grading										
Off Road Diesel	3.83	40.41	26.67	0.03	1.33	2.33	3.66	0.68	2.14	2.82
Worker Trips	0.08	0.10	1.15	0.00	0.17	0.00	0.17	0.04	0.00	0.05
Totals	3.91	40.51	27.82	0.03	1.50	2.33	3.83	0.72	2.14	2.87
Building Construction										
Off Road Diesel	3.66	30.03	18.74	0.03	0.00	2.12	2.12	0.00	1.99	1.99
Vendor Trips	0.30	2.84	3.74	0.01	0.17	0.05	0.22	0.05	0.04	0.09
Worker Trips	0.37	0.50	5.51	0.01	0.80	0.01	0.81	0.21	0.01	0.22
Totals	4.33	33.37	27.99	0.05	0.97	2.18	3.15	0.26	2.04	2.30
Asphalt Paving										
Off Road Diesel	2.09	22.39	14.82	0.02	0.00	1.26	1.26	0.00	1.16	1.16
Worker Trips	0.07	0.09	1.04	0.00	0.17	0.00	0.17	0.04	0.00	0.05
Asphalt Totals	2.16	22.48	15.86	0.02	0.17	1.26	1.43	0.04	1.16	1.21
Coating										
Off-Gas	**199.3**[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off Road Diesel	0.37	2.37	1.88	0.00	0.00	0.20	0.20	0.00	0.20	0.20
Worker Trips	0.06	0.09	0.97	0.00	0.16	0.00	0.16	0.04	0.00	0.04
Coating Totals	**199.74**[2]	2.46	2.85	0.00	0.16	0.20	0.36	0.04	0.20	0.24
Daily Threshold	75	100	550	150	→	→	150	→	→	55

Notes:
1. The CalEEMod emissions model projects summer and winter emissions and the higher of the two values was included in the table.
2 Bold value denotes a potentially significant air quality impact.

Source: Environmental Impact Sciences

Residual Impact

Building construction is estimated to release 199.31 pounds of ROG (VOC) per day from the "off-gassing" of paints and coatings for each of the 20 days associated with this phase of the schedule. The CalEEMod emissions model bases the area to be painted on twice the floor area (172,000 square feet x 2 = 344,000 square feet) and divides that area by the number of days allocated for this phase. Based on the model's default construction schedule, 20 days are allocated to painting the structures and 17,200 square feet (344,000 square feet/20 days = 17,200 square feet) per day of area would be painted. The reduction to under the 75 pound-per-day ROG (VOC) threshold could be attained if the daily area to be painted is limited.

199.31 pounds/day / 17,200 ft^2/day = 0.0116 lb/ft^2
75 pounds/day – (0.37 [equipment] + 0.06 [worker travel]) pounds/day = 74.57 lbs/day
74.57 pounds/day / 0.0116 pounds/ft^2 = 6,435 ft^2/day

The restriction to coating no more than 6,400 square feet per day would ensure that the impact is reduced to a less-than-significant level. Alternatives, the CalEEMod emissions model uses a value of 250 milligrams per liter (mg/l) for the VOC content in commercial and industrial paints and coatings.

75 pounds/day – (0.37 [equipment] + 0.06 [worker travel]) pounds/day = 74.57 lbs/day
74.57 pounds/day / 199.31 pounds/day x 250 mg/l = 93.5 mg/l

The restriction to no more than 93 milligrams per liter of VOC content in the coatings would, therefore, ensure that the impact is reduced to a less-than-significant level.

4.2.2 Operational Impacts

- **Less than Significant Impact**. The major source of long-term air quality impact is that associated with the emissions produced from project-generated vehicle trips. Stationary sources add only minimally to these values. In accordance with the transportation analysis, the proposed land uses would generate approximately 1,119 average daily trips (ADT) and approximately 33 percent of these trips would be trucks.

  The existing land uses are estimated to generate 261 ADT and, while these uses do include four residential units, over 85 percent of these trips are associated with the existing industrial uses. A ratio of 33 percent trucks was, therefore, used in the traffic study. Emissions associated with the existing land uses, both mobile and stationary, would be removed as a result of project implementation so those emissions were modeled separately and are removed in the tables below.

  The CalEEMod emissions model uses a vehicle mix that is projected from the BURDEN module of the EMFAC2011 computer model. The mix is reported to be representative of Los Angeles County as a whole and includes 89.94 percent automobiles, 6.70 percent medium trucks, and 3.36 percent heavy trucks. Because the existing and proposed land uses represent industrial development, a larger number percentage would be trucks.

  The ratio for both medium and heavy trucks, combined, is estimated at 33 percent in the transportation analysis and that value is also used here. In this case, the ratio of medium

to heavy trucks was retained from the CalEEMod emissions model. The CalEEMod model's "default" and revised ratios are shown in Table AQ-6 (CalEEMod Versus Proposed Project Vehicle Mixes).

Table AQ-6
CALEEMOD VERSUS PROPOSED PROJECT VEHICLE MIXES

Vehicle Type	CalEEMod Default Ratio	Proposed Project Ratio
Overall Ratios		
Automobiles	89.94	67.00
Medium Trucks	6.70	20.41
Heavy Trucks	3.36	12.59
Ratios By Vehicle Technology		
Automobiles		
LDA	53.36	39.75
LDT1	5.84	4.35
LDT2	17.82	13.27
MDV	12.55	9.35
MCY	0.37	0.28
Medium Trucks		
LHD1	3.89	11.85
LHD2	0.63	1.92
MHD	1.64	5.00
UBUS	0.32	0.97
SBUS	0.05	0.15
MH	0.17	0.52
Heavy Trucks		
HHD	3.11	11.65
OBUS	0.25	0.94

Source: Environmental Impact Sciences

Emissions associated with these trips are based on the CalEEMod computer model and assume occupancy in 2016. Since emissions per vehicle are reduced each year due to tightening emissions restrictions and the replacement of older vehicles from the road, the use of 2016 emission factors presents a worst-case analysis with regards to operational air quality impacts.

Both summer and winter scenarios were modeled and the higher of the two values are included in Table AQ-7 (Comparison of Projected Daily Operational Emissions and Daily Criteria Values). Note that all emissions are within their respective threshold values and the impact is less than significant.

Stationary Source Emissions

With regards to stationary source emissions, in addition to vehicle trips, the occupants would produce emissions from on-site sources, including the combustion of natural gas for space and water heating. Additionally, the structures would be maintained and this

requires repainting over time, thus resulting in the release of additional VOC (ROG) emissions. Also, the use of aerosol products such as cleaners, are associated with the project. The resultant emissions are included in Table AQ-7 (Comparison of Projected Daily Operational Emissions and Daily Criteria Values). All emissions are within their respective SCAQMD-recommended thresholds and the impact is less than significant.

Table AQ-7
COMPARISON OF PROJECTED DAILY OPERATIONAL EMISSIONS AND DAILY CRITERIA VALUES[1]
(pounds/day)

Source	ROG	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Proposed Project						
Mobile Sources	6.84	43.71	81.72	0.19	11.12	3.42
Natural Gas	0.06	0.51	0.42	0.00	0.04	0.04
Structural Maintenance	1.09	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.41	0.00	0.00	0.00	0.00	0.00
Landscape Maintenance	0.00	0.00	0.02	0.00	0.00	0.00
Total	11.40	44.22	82.16	0.19	11.16	3.46
Existing Land Uses						
Mobile Sources	1.55	10.24	18.77	0.05	2.62	0.81
Natural Gas	0.02	0.19	0.15	0.00	0.01	0.01
Structural Maintenance	0.22	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.78	0.00	0.00	0.00	0.00	0.00
Landscape Maintenance	0.01	0.00	0.34	0.00	0.00	0.00
Hearth[2]	1.05	0.03	2.01	0.00	0.31	0.31
Total	3.63	10.46	21.27	0.05	2.94	1.13
Net Increase	7.77	33.76	60.89	0.14	8.22	2.33
Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:
1. The CalEEMod model projects summer and winter emissions. These differ for mobile sources and the higher of the two values were included in the table.
2. These emissions are only produced by residential development.

Source: Environmental Impact Sciences

4.3 Potential to Result in a Cumulatively Considerable Increase in Criteria Pollutants

- **Less than Significant Impact**. In accordance with SCAQMD methodology, projects that do not exceed or can be mitigated to less than the daily threshold values do not add significantly to a cumulative impact. With application of the construction mitigation for paints and coatings, criteria pollutants are all within the SCAQMD-recommended thresholds for both construction and operation and this impact is less than significant.

4.4 Potential to Expose Sensitive Receptors to Substantial Pollutant Concentrations

4.4.1 Short-Term Localized Impacts

- **Less than Significant Impact**. In addition to the mass daily threshold standards discussed above, project construction has the potential to raise localized ambient pollutant concentrations. This could present a significant impact if these concentrations were to exceed the ambient air quality standards included in Table AQ-1 (Ambient Air Quality Standards for Criteria Pollutants) at receptor locations.

  The SCAQMD has developed screening tables for the construction and operation of projects up to five acres in size. These tables are included in the SCAQMD's "Final Localized Significance Threshold Methodology" (June 2003) and are periodically updated on the SCAQMD Internet web site. The most current update was in 2008 and these data are use in the analysis. The emissions values included in the screening tables are based on the emissions produced at the site and do not include off-site mobile source emissions (i.e., trucks and worker vehicles) that spread over a much larger area.

  Screening level allowable emissions are calculated from the "mass-rate look-up tables" included in the "Final Localized Significance Threshold Methodology" (Appendix C). Rather than using the entirety of the site, the CalEEMod emissions model bases the area of disturbance on equipment use. Dozers, graders, and crawler tractors are estimated to disturb an area of 0.5 acre while scrapers are estimated to disturb 1.0 acre over an 8-hour work day.

  The CalEEMod model estimates that site preparation results in the highest levels of emission using three rubber tired dozers, each estimated at 0.5 acre of disturbance, or 1.5 acres per day in total. This phase would also include four tractor/loader/backhoes and while these pieces generate on-site emissions, they operate primarily in one area so are not additive to the disturbed area, though their emissions are included in the area disturbed by the three dozers.

  The screening tables include sites of 1, 2, and 5 acres with receptors at 25, 50, 100, 200, and 500 meters away. The provided methodology notes that site sizes and receptor distances that lie between those values included in the screening manual may be determined by linear interpolation.

  The daily activity associated with site preparation is 1.5 acres and lies between the 1-and 2-acre sizes included in the manual. The most proximate sensitive receptors are those across Azusa Canyon Road at a distance of about 30 meters to the most proximate site boundary.

  In the cases of CO and NOx, construction emission levels are so far below the screening values that the project may be compared at the minimal screening size (i.e., 1 acre) and the most proximate receptor location (i.e., 25 meters). In this case, the screening levels for CO and NOx at 25 meters are 623 and 89 pounds per day, respectively, for projects located in Source Receptor Area (SRA) 9 (East San Gabriel Valley). At peak values of 42.63 and 56.89 pounds per day for CO and NOx, respectively, during site preparation, construction emissions would not create localized impacts.

Because the Basin is a non-attainment area for particulate matter, the thresholds for both PM_{10} and $PM_{2.5}$ are much more stringent than those for CO and NOx. In the case of PM_{10}, the screening tables show allowable values of 5 and 7 pounds per day for 1- and 2-acre sites, respectively, with receptors at 25 meters, and 14 and 22 pounds per day for 1- and 2-acre sites, with receptors at 50 meters, respectively.

(5 lb/day + 7 lb/day) / 2 = 6 lbs/day threshold for 1.5 acres with receptors at 25 meters
(14 lb/day + 22 lb/day) / 2 = 18 lbs/day threshold for 1.5 acres with receptors at 50 meters
(18 pounds – 6 pounds) / (50 meters – 25 meters) = 0.46 pounds/meter
5 meters x 0.46 pound/meter = 2.4 pounds
6 pounds + 2.4 pounds = 8.4 pounds at 30 meters

For a receptor at 30 meters, the threshold would be set at 8.4 pounds per day. At 6.75 pounds per day for on-site PM_{10}, this impact is less than significant. Similarly, in the case of $PM_{2.5}$, the screening tables show allowable values of 3 and 5 pounds per day for 1- and 2-acre sites, respectively, with receptors at 25 meters, and 5 and 7 pounds per day for a 1- and 2-acre sites, with receptors at 50 meters, respectively.

(3 lb/day + 5 lb/day) / 2 = 4 lb/day threshold for 1.5 acres with receptors at 25 meters
(5 lb/day + 7 lb/day) / 2 = 6 lb/day threshold for 1.5 acres with receptors at 50 meters
(6 pounds – 4 pounds) / (50 meters – 25 meters) = 0.08 pounds/meter
5 meters x 0.08 pounds/meter = 0.4 pounds
4 pounds + 0.4 pounds = 4.4 pounds at 30 meters

For a receptor at 30 meters, the threshold would be set at 4.4 pounds per day. At 2.01 pounds per day for on-site $PM_{2.5}$, this impact is less than significant. Additionally, at 2.34 and 2.82 pounds per day, respectively, neither demolition nor grading would exceed this threshold value.

4.4.2 Long-Term Localized Impacts

- **Less than Significant Impact**. Long-term effects of the proposed project could also be significant if they exceed the CAAQS. As noted for construction, these criteria only apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. CO and NO_2 would be significant if the proposed project were to raise existing levels above those values included in the CAAQS. Because the Basin is a non-attainment area for particulate matter, the operational thresholds for both PM_{10} and $PM_{2.5}$ are set at a measurable increase of 2.5 $\mu g/m^3$.

  Because the proposed project will draw trucks that maneuver and idle on the project site, emissions from the on-site movement of vehicles was calculated and these values compared with the values presented in the SCAQMD's "Final Localized Significance Threshold Methodology." The analysis assumes that vehicles may idle on the site for a period of no more than 5 minutes at any one time. In this case, all 1,199 vehicles that would call on the site are estimated to idle on the site for 10 minutes per day to include ingress and egress. While this may be true of trucks, most people who call on the facility would spend far less time idling. These assumptions, therefore, represents a potential worst-case scenario.

  Emission factors are obtained from the CARB based on the Internet's on-line EMFAC2011 model. The CARB does not project idle emissions, however, a speed of 5 miles per hour

can be used in determining these factors (i.e., emission factor x 5 miles/hour/60 minutes/hour = emissions/minute). The results of this analysis indicate that 10.19 pounds of CO, 5.56 pounds of NOx, 0.09 pound of PM_{10}, and 0.08 pound of $PM_{2.5}$ would be produced on the project site per day.

As noted in the analysis of localized construction emissions, operational emission levels are far below the screening values and that the project may be compared both at the minimal screening size (i.e., 1 acre) and the most proximate receptor location (i.e., 25 meters). As with construction, the screening levels for CO and NOx at 25 meters are 623 and 89 pounds per day, respectively for projects located in SRA 9. At 10.19 and 5.56 pounds per day for CO and NOx, respectively, on-site vehicle movement and idling emissions would not create significant localized impacts.

Because the Basin is a non-attainment area for particulate matter, the thresholds for both PM_{10} and $PM_{2.5}$ are much more stringent than those for CO and NOx and, in these cases, there are different threshold values for construction and operation. In the case of PM_{10}, the screening tables show an allowable value of just 2 pounds per day for project operations over a 1-acre site with receptors at 25 meters. At 0.09 pound per day, this threshold value would not be exceeded. Similarly, the screening tables allow for an operational $PM_{2.5}$ threshold of just 1 pound per day for a 1-acre site with receptors at 25 meters. At 0.08 pound per day, this value would not be exceeded. The project site is far larger than 1 acre and the most proximate receptors are in excess of the 25 meter minimum distance used in the analysis.

4.5 Potential to Create Objectionable Odors

- **Less than Significant Impact**. Project construction would involve some use of heavy equipment creating exhaust pollutants. With regards to nuisance odors, any air quality impacts will be confined to the immediate vicinity of the equipment itself. By the time such emissions reach any sensitive receptor sites away from the project site, they will be diluted to well below any level of air quality concern. An occasional “whiff” of diesel exhaust from passing equipment and trucks accessing the site from public roadways may result. Such brief exhaust odors are an adverse but less-than-significant air quality impact. Additionally, some odor would be produced from the application of asphalt, paints, and coatings. Any exposure to these common odors would be of short-term duration and, while potentially adverse, are less than significant.

  Project operations would involve various light industrial uses. Such uses are not typically associated with the production of odors. Furthermore, the nearest sensitive land uses are located about 130 feet from the nearest on-site structures. In light of the industrial nature of the area and adjoining properties, no project-related objectionable odors are anticipated at any proximate sensitive residential locations.

4.6 Potential to Generate Greenhouse Gas Emissions, Either Directly or Indirectly, that may have a Significant Impact on the Environment

- **Less than Significant Impact**. To provide guidance to local agencies on determining the significance for GHG emissions in their CEQA documents, the SCAQMD has convened a GHG CEQA Significance Threshold Working Group for the process of establishing a threshold for GHG emissions to determine a project’s regional contribution toward global

climate change impacts. On September 28, 2010 the SCAQMD put forth a threshold of 3,000 metric tons (Mtons) of carbon dioxide equivalent (CO_2e) per year for residential, commercial, and mixed use projects and 10,000 Mtons CO_2e for industrial projects under CEQA. The SCAQMD also suggests that a threshold of 3,500 Mtons may be appropriate for residential development, commercial is limited to 1,400 Mtons, and mixed-use is limited to 3,000 Mtons so long as these values are used consistently.

Construction

Construction activities would consume fuel and result in the generation of GHGs. Construction CO_2e emissions are as projected using the CalEEMod emissions model and included in Table AQ-8 (Construction-Related Greenhouse Gas Emissions). The CalEEMod model begins construction on January 1 and includes an entire year in its prediction of the construction schedule. All emissions are within the threshold value and the impact is less than significant.

Table AQ-8
CONSTRUCTION-RELATED GREENHOUSE GAS EMISSIONS
(Mtons/year)

Year	CO_2	CH_4	N_2O	Total CO_2e[1]
2015	504.82	0.09	0.00	506.81
2016	62.28	0.01	0.00	62.55
Threshold	---	---	---	10,000
Exceeds Threshold?	---	---	---	No

Notes:
1. Because different gases have different conversion factors, totals may not equal.

Source: Environmental Impact Sciences

Site Operations

In the case of site operations, the majority of GHG emissions and specifically CO_2 is due to vehicle travel, energy consumption, and water use. As shown in Table AQ-9 (Yearly Operational Greenhouse Gas Emissions), CalEEMod projects that combined, mobile, area source, energy, waste, and water conveyance for the proposed project is estimated at about 4,221.43 Mtons of CO_2e on an annual basis. This value is well under the suggested threshold of 10,000 Mtons per year and the impact is less than significant.

Additionally, the project would displace the existing land uses, thus removing 907.84 Mtons of CO_2e for a net increase of 3,313.84 Mtons per year. This value is under the 10,000 Mtons per year threshold and is less than significant.

4.7 Potential to Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

- **Less than Significant Impact**. An impact can also be potentially significant if the project does not comply with the applicable plans necessary for the reduction of GHGs. Like air quality impacts, projects that generate de minimus levels (i.e., less than 10,000 Mtons per year) and do not result in a significant impact or can be mitigated to less than significant would be deemed to be in compliance of the local policies with respect to GHG.

Table AQ-9
YEARLY OPERATIONAL GREENHOUSE GAS EMISSIONS
(Mtons/year)

Source	CO_2	CH_4	N_2O	Total CO_2e[1]
Proposed Project				
Mobile Sources	2,337.52	0.07	0.00	2,338.92
Energy	1,492.26	0.03	0.01	1,495.67
Area	0.00	0.00	0.00	0.00
Water Use	301.07	1.30	0.03	338.34
Waste Disposal	43.29	2.56	0.00	97/02
Project Total	4,174.14	3.96	0.04	4,221.43
Existing Land Uses				
Mobile Sources	549.55	0.02	0.00	549.88
Energy	269.59	0.01	0.00	270.29
Area	1.31	0.00	0.00	1.35
Water Use	59.02	0.25	0.01	66.21
Waste Disposal	8.97	0.53	0.00	20.11
Existing Total	888.44	0.81	0.01	907.84
Net Increase	3,285.70	3.15	0.03	3,313.59
Threshold	---	---	---	10,000
Exceeds Threshold?	---	---	---	No

Notes:
1. Because different gases have different conversion factors, totals may not equal.

Source: Environmental Impact Sciences

The project replaces the existing structures and the new land uses would be required to comply with Title 24 standards increasing their energy efficiency and reducing GHG emissions associated with energy use. In addition, the project is subject to the requirements of Assembly Bill (AB) 32 and the requirements set forth therein. Compliance with existing statutes, regulations, and standards does not constitute mitigation under CEQA.

Construction

Construction is estimated to generate about 506.81 Mtons of CO_2e during the peak year. This value is below the 10,000-Mton threshold value and the cumulative impact to climate change is less than significant. As such, construction would not conflict with existing plans and policies. If the entirety of the construction were to take place simultaneously within one year, the combined total is calculated at just 569.36 Mtons of CO_2e (506.81 Mtons + 62.55 Mtons) and remains under the 10,000 Mtons per year threshold.

Site Operations

The project would upgrade the existing land uses to no less than Title 24 requirements. With the removal of the existing land uses, the operational total is estimated at about

3,313.59 Mtons of CO_2e on an annual basis and is less than the 10,000-Mton per year threshold suggested by the SCAQMD. As such, the impact is less than significant.

5.0 References

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- South Coast Air Quality Management District, 2008-2012, Air Pollution Data Monitoring Cards (2019, 2010, 2011, 2012, 2013).
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- South Coast Air Quality Management District, Sample Construction Scenarios for Projects Less than Five Acres in Size, February 2005.
- South Coast Air Quality Management District, CEQA Air Quality Handbook, April 1993.

6.0 Appendices

Appendix A	CalEEMod Model Results for Existing Land Uses, Winter Emissions
Appendix B	CalEEMod Model Results for Existing Land Uses, Summer Emissions
Appendix C	CalEEMod Model Results for Existing Land Uses, Annual Emissions
Appendix D	CalEEMod Model Results for Azusa Canyon Industrial Park Winter Emissions
Appendix E	CalEEMod Model Results for Azusa Canyon Industrial Park Summer Emissions
Appendix F	CalEEMod Model Results for Azusa Canyon Industrial Park Annual Emissions

Appendix A

CalEEMod Model Results for Existing Land Uses Winter Emissions

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Azusa Canyon Industrial Park

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	32.01	1000sqft	5.80	32,012.00	0
Single Family Housing	4.00	Dwelling Unit	1.30	7,200.00	11

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size to total 7.1 acres.

Vehicle Trips - Value is per transporation analysis.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	32,010.00	32,012.00
tblLandUse	LotAcreage	0.73	5.80

tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003

tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleTrips	WD_TR	9.57	9.52

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3534	57.0134	43.9286	0.0420	18.2675	3.0903	21.3578	9.9840	2.8431	12.8271	0.0000	4,327.7637	4,327.7637	1.2406	0.0000	4,353.8161
2016	40.2920	29.1378	20.2264	0.0302	0.2051	1.9773	2.1824	0.0551	1.8576	1.9127	0.0000	2,974.3263	2,974.3263	0.7087	0.0000	2,989.2098
Total	**45.6455**	**86.1512**	**64.1550**	**0.0721**	**18.4725**	**5.0676**	**23.5401**	**10.0392**	**4.7006**	**14.7398**	**0.0000**	**7,302.0901**	**7,302.0901**	**1.9493**	**0.0000**	**7,343.0259**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3534	57.0134	43.9286	0.0420	18.2675	3.0903	21.3578	9.9840	2.8431	12.8271	0.0000	4,327.7637	4,327.7637	1.2406	0.0000	4,353.8161
2016	40.2920	29.1378	20.2264	0.0302	0.2051	1.9773	2.1824	0.0551	1.8576	1.9127	0.0000	2,974.3263	2,974.3263	0.7087	0.0000	2,989.2098
Total	**45.6455**	**86.1512**	**64.1550**	**0.0721**	**18.4725**	**5.0676**	**23.5401**	**10.0392**	**4.7006**	**14.7398**	**0.0000**	**7,302.0900**	**7,302.0900**	**1.9493**	**0.0000**	**7,343.0259**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0541	0.0305	2.3485	3.2200e-003		0.3074	0.3074		0.3073	0.3073	37.4677	72.6012	110.0689	0.1124	2.5400e-003	113.2168
Energy	0.0213	0.1918	0.1487	1.1600e-003		0.0147	0.0147		0.0147	0.0147		232.5059	232.5059	4.4600e-003	4.2600e-003	233.9209
Mobile	1.5524	10.2397	18.7699	0.0456	2.4807	0.1441	2.6248	0.6749	0.1326	0.8074		4,249.4017	4,249.4017	0.1221		4,251.9652
Total	**3.6278**	**10.4620**	**21.2670**	**0.0500**	**2.4807**	**0.4662**	**2.9469**	**0.6749**	**0.4546**	**1.1295**	**37.4677**	**4,554.5088**	**4,591.9765**	**0.2389**	**6.8000e-003**	**4,599.1029**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0541	0.0305	2.3485	3.2200e-003		0.3074	0.3074		0.3073	0.3073	37.4677	72.6012	110.0689	0.1124	2.5400e-003	113.2168
Energy	0.0213	0.1918	0.1487	1.1600e-003		0.0147	0.0147		0.0147	0.0147		232.5059	232.5059	4.4600e-003	4.2600e-003	233.9209
Mobile	1.5524	10.2397	18.7699	0.0456	2.4807	0.1441	2.6248	0.6749	0.1326	0.8074		4,249.4017	4,249.4017	0.1221		4,251.9652
Total	**3.6278**	**10.4620**	**21.2670**	**0.0500**	**2.4807**	**0.4662**	**2.9469**	**0.6749**	**0.4546**	**1.1295**	**37.4677**	**4,554.5088**	**4,591.9765**	**0.2389**	**6.8000e-003**	**4,599.1029**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 14,580; Residential Outdoor: 4,860; Non-Residential Indoor: 48,018; Non-Residential Outdoor: 16,006 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**		**2.4508**	**2.4508**		**2.2858**	**2.2858**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.0771**	**0.1031**	**1.0807**	**2.0600e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**180.0161**	**180.0161**	**0.0109**		**180.2447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**		**2.4508**	**2.4508**		**2.2858**	**2.2858**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.0771**	**0.1031**	**1.0807**	**2.0600e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**180.0161**	**180.0161**	**0.0109**		**180.2447**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**0.0925**	**0.1238**	**1.2968**	**2.4700e-003**	**0.2012**	**2.0100e-003**	**0.2032**	**0.0534**	**1.8400e-003**	**0.0552**		**216.0194**	**216.0194**	**0.0131**		**216.2936**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**0.0925**	**0.1238**	**1.2968**	**2.4700e-003**	**0.2012**	**2.0100e-003**	**0.2032**	**0.0534**	**1.8400e-003**	**0.0552**		**216.0194**	**216.0194**	**0.0131**		**216.2936**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.0771**	**0.1031**	**1.0807**	**2.0600e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**180.0161**	**180.0161**	**0.0109**		**180.2447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.0771**	**0.1031**	**1.0807**	**2.0600e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**180.0161**	**180.0161**	**0.0109**		**180.2447**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0636	0.6086	0.8004	1.3100e-003	0.0374	0.0101	0.0475	0.0106	9.2600e-003	0.0199		132.4671	132.4671	1.1000e-003		132.4902
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.1407**	**0.7117**	**1.8811**	**3.3700e-003**	**0.2051**	**0.0118**	**0.2168**	**0.0551**	**0.0108**	**0.0659**		**312.4832**	**312.4832**	**0.0120**		**312.7349**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0636	0.6086	0.8004	1.3100e-003	0.0374	0.0101	0.0475	0.0106	9.2600e-003	0.0199		132.4671	132.4671	1.1000e-003		132.4902
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.1407**	**0.7117**	**1.8811**	**3.3700e-003**	**0.2051**	**0.0118**	**0.2168**	**0.0551**	**0.0108**	**0.0659**		**312.4832**	**312.4832**	**0.0120**		**312.7349**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0558	0.5382	0.7427	1.3100e-003	0.0374	8.3000e-003	0.0457	0.0107	7.6300e-003	0.0183		131.0353	131.0353	1.0000e-003		131.0562
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.1253**	**0.6315**	**1.7198**	**3.3700e-003**	**0.2051**	**9.8900e-003**	**0.2150**	**0.0551**	**9.0900e-003**	**0.0642**		**305.0399**	**305.0399**	**0.0110**		**305.2716**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0558	0.5382	0.7427	1.3100e-003	0.0374	8.3000e-003	0.0457	0.0107	7.6300e-003	0.0183		131.0353	131.0353	1.0000e-003		131.0562
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.1253**	**0.6315**	**1.7198**	**3.3700e-003**	**0.2051**	**9.8900e-003**	**0.2150**	**0.0551**	**9.0900e-003**	**0.0642**		**305.0399**	**305.0399**	**0.0110**		**305.2716**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	39.9097					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**40.2781**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0139	0.0187	0.1954	4.1000e-004	0.0335	3.2000e-004	0.0339	8.8900e-003	2.9000e-004	9.1800e-003		34.8009	34.8009	2.0100e-003		34.8431
Total	**0.0139**	**0.0187**	**0.1954**	**4.1000e-004**	**0.0335**	**3.2000e-004**	**0.0339**	**8.8900e-003**	**2.9000e-004**	**9.1800e-003**		**34.8009**	**34.8009**	**2.0100e-003**		**34.8431**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	39.9097					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**40.2781**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0139	0.0187	0.1954	4.1000e-004	0.0335	3.2000e-004	0.0339	8.8900e-003	2.9000e-004	9.1800e-003		34.8009	34.8009	2.0100e-003		34.8431
Total	**0.0139**	**0.0187**	**0.1954**	**4.1000e-004**	**0.0335**	**3.2000e-004**	**0.0339**	**8.8900e-003**	**2.9000e-004**	**9.1800e-003**		**34.8009**	**34.8009**	**2.0100e-003**		**34.8431**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5524	10.2397	18.7699	0.0456	2.4807	0.1441	2.6248	0.6749	0.1326	0.8074		4,249.4017	4,249.4017	0.1221		4,251.9652
Unmitigated	1.5524	10.2397	18.7699	0.0456	2.4807	0.1441	2.6248	0.6749	0.1326	0.8074		4,249.4017	4,249.4017	0.1221		4,251.9652

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	223.11	42.25	21.77	746,208	746,208
Single Family Housing	38.08	40.32	35.08	129,754	129,754
Total	261.19	82.57	56.85	875,962	875,962

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.397500	0.043500	0.132700	0.093500	0.118500	0.019200	0.050000	0.116500	0.009400	0.009700	0.002800	0.001500	0.005200

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0213	0.1918	0.1487	1.1600e-003		0.0147	0.0147		0.0147	0.0147		232.5059	232.5059	4.4600e-003	4.2600e-003	233.9209
NaturalGas Unmitigated	0.0213	0.1918	0.1487	1.1600e-003		0.0147	0.0147		0.0147	0.0147		232.5059	232.5059	4.4600e-003	4.2600e-003	233.9209

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1649.71	0.0178	0.1617	0.1359	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.0840	194.0840	3.7200e-003	3.5600e-003	195.2652
Single Family Housing	326.586	3.5200e-003	0.0301	0.0128	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003		38.4218	38.4218	7.4000e-004	7.0000e-004	38.6557
Total		**0.0213**	**0.1918**	**0.1487**	**1.1600e-003**		**0.0147**	**0.0147**		**0.0147**	**0.0147**		**232.5059**	**232.5059**	**4.4600e-003**	**4.2600e-003**	**233.9209**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	0.326586	3.5200e-003	0.0301	0.0128	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003		38.4218	38.4218	7.4000e-004	7.0000e-004	38.6557
General Light Industry	1.64971	0.0178	0.1617	0.1359	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.0840	194.0840	3.7200e-003	3.5600e-003	195.2652
Total		**0.0213**	**0.1918**	**0.1487**	**1.1600e-003**		**0.0147**	**0.0147**		**0.0147**	**0.0147**		**232.5059**	**232.5059**	**4.4600e-003**	**4.2600e-003**	**233.9209**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0541	0.0305	2.3485	3.2200e-003		0.3074	0.3074		0.3073	0.3073	37.4677	72.6012	110.0689	0.1124	2.5400e-003	113.2168
Unmitigated	2.0541	0.0305	2.3485	3.2200e-003		0.3074	0.3074		0.3073	0.3073	37.4677	72.6012	110.0689	0.1124	2.5400e-003	113.2168

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2187					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0481	0.0266	2.0106	3.2000e-003		0.3056	0.3056		0.3055	0.3055	37.4677	72.0000	109.4677	0.1117	2.5400e-003	112.6025
Landscaping	0.0109	3.9500e-003	0.3380	2.0000e-005		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		0.6012	0.6012	6.3000e-004		0.6144
Total	**2.0541**	**0.0305**	**2.3485**	**3.2200e-003**		**0.3074**	**0.3074**		**0.3073**	**0.3073**	**37.4677**	**72.6012**	**110.0689**	**0.1124**	**2.5400e-003**	**113.2168**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2187					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0481	0.0266	2.0106	3.2000e-003		0.3056	0.3056		0.3055	0.3055	37.4677	72.0000	109.4677	0.1117	2.5400e-003	112.6025
Landscaping	0.0109	3.9500e-003	0.3380	2.0000e-005		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		0.6012	0.6012	6.3000e-004		0.6144
Total	**2.0541**	**0.0305**	**2.3485**	**3.2200e-003**		**0.3074**	**0.3074**		**0.3073**	**0.3073**	**37.4677**	**72.6012**	**110.0689**	**0.1124**	**2.5400e-003**	**113.2168**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

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Appendix B

CalEEMod Model Results for Existing Land Uses Summer Emissions

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Azusa Canyon Industrial Park

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	32.01	1000sqft	5.80	32,012.00	0
Single Family Housing	4.00	Dwelling Unit	1.30	7,200.00	11

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size to total 7.1 acres.

Vehicle Trips - Value is per transporation analysis.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	32,010.00	32,012.00
tblLandUse	LotAcreage	0.73	5.80

tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003

tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleTrips	WD_TR	9.57	9.52

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3497	57.0013	44.0081	0.0421	18.2675	3.0903	21.3578	9.9840	2.8431	12.8271	0.0000	4,340.6002	4,340.6002	1.2406	0.0000	4,366.6526
2016	40.2915	29.1155	20.1572	0.0303	0.2051	1.9772	2.1823	0.0551	1.8575	1.9126	0.0000	2,985.7720	2,985.7720	0.7087	0.0000	3,000.6554
Total	**45.6412**	**86.1167**	**64.1653**	**0.0724**	**18.4725**	**5.0675**	**23.5400**	**10.0392**	**4.7005**	**14.7397**	**0.0000**	**7,326.3722**	**7,326.3722**	**1.9493**	**0.0000**	**7,367.3080**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3497	57.0013	44.0081	0.0421	18.2675	3.0903	21.3578	9.9840	2.8431	12.8271	0.0000	4,340.6002	4,340.6002	1.2406	0.0000	4,366.6526
2016	40.2915	29.1155	20.1572	0.0303	0.2051	1.9772	2.1823	0.0551	1.8575	1.9126	0.0000	2,985.7720	2,985.7720	0.7087	0.0000	3,000.6554
Total	**45.6412**	**86.1167**	**64.1653**	**0.0724**	**18.4725**	**5.0675**	**23.5400**	**10.0392**	**4.7005**	**14.7397**	**0.0000**	**7,326.3722**	**7,326.3722**	**1.9493**	**0.0000**	**7,367.3080**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0541	0.0305	2.3485	3.2200e-003		0.3074	0.3074		0.3073	0.3073	37.4677	72.6012	110.0689	0.1124	2.5400e-003	113.2168
Energy	0.0213	0.1918	0.1487	1.1600e-003		0.0147	0.0147		0.0147	0.0147		232.5059	232.5059	4.4600e-003	4.2600e-003	233.9209
Mobile	1.4770	9.8304	17.9820	0.0469	2.4807	0.1435	2.6242	0.6749	0.1320	0.8069		4,360.3473	4,360.3473	0.1218		4,362.9053
Total	**3.5524**	**10.0528**	**20.4792**	**0.0513**	**2.4807**	**0.4656**	**2.9463**	**0.6749**	**0.4541**	**1.1289**	**37.4677**	**4,665.4544**	**4,702.9220**	**0.2386**	**6.8000e-003**	**4,710.0430**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0541	0.0305	2.3485	3.2200e-003		0.3074	0.3074		0.3073	0.3073	37.4677	72.6012	110.0689	0.1124	2.5400e-003	113.2168
Energy	0.0213	0.1918	0.1487	1.1600e-003		0.0147	0.0147		0.0147	0.0147		232.5059	232.5059	4.4600e-003	4.2600e-003	233.9209
Mobile	1.4770	9.8304	17.9820	0.0469	2.4807	0.1435	2.6242	0.6749	0.1320	0.8069		4,360.3473	4,360.3473	0.1218		4,362.9053
Total	**3.5524**	**10.0528**	**20.4792**	**0.0513**	**2.4807**	**0.4656**	**2.9463**	**0.6749**	**0.4541**	**1.1289**	**37.4677**	**4,665.4544**	**4,702.9220**	**0.2386**	**6.8000e-003**	**4,710.0430**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 14,580; Residential Outdoor: 4,860; Non-Residential Indoor: 48,018; Non-Residential Outdoor: 16,006 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**		**2.4508**	**2.4508**		**2.2858**	**2.2858**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.0740**	**0.0930**	**1.1469**	**2.1800e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**190.7132**	**190.7132**	**0.0109**		**190.9418**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**		**2.4508**	**2.4508**		**2.2858**	**2.2858**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.0740**	**0.0930**	**1.1469**	**2.1800e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**190.7132**	**190.7132**	**0.0109**		**190.9418**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
Total	**0.0888**	**0.1116**	**1.3763**	**2.6200e-003**	**0.2012**	**2.0100e-003**	**0.2032**	**0.0534**	**1.8400e-003**	**0.0552**		**228.8559**	**228.8559**	**0.0131**		**229.1301**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
Total	**0.0888**	**0.1116**	**1.3763**	**2.6200e-003**	**0.2012**	**2.0100e-003**	**0.2032**	**0.0534**	**1.8400e-003**	**0.0552**		**228.8559**	**228.8559**	**0.0131**		**229.1301**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.0740**	**0.0930**	**1.1469**	**2.1800e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**190.7132**	**190.7132**	**0.0109**		**190.9418**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.0740**	**0.0930**	**1.1469**	**2.1800e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**190.7132**	**190.7132**	**0.0109**		**190.9418**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0575	0.5933	0.6662	1.3200e-003	0.0374	9.9400e-003	0.0474	0.0106	9.1400e-003	0.0198		133.5713	133.5713	1.0700e-003		133.5938
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.1314**	**0.6863**	**1.8131**	**3.5000e-003**	**0.2051**	**0.0116**	**0.2167**	**0.0551**	**0.0107**	**0.0658**		**324.2845**	**324.2845**	**0.0120**		**324.5356**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0575	0.5933	0.6662	1.3200e-003	0.0374	9.9400e-003	0.0474	0.0106	9.1400e-003	0.0198		133.5713	133.5713	1.0700e-003		133.5938
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.1314**	**0.6863**	**1.8131**	**3.5000e-003**	**0.2051**	**0.0116**	**0.2167**	**0.0551**	**0.0107**	**0.0658**		**324.2845**	**324.2845**	**0.0120**		**324.5356**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0506	0.5251	0.6100	1.3200e-003	0.0374	8.2100e-003	0.0456	0.0107	7.5500e-003	0.0182		132.1324	132.1324	9.7000e-004		132.1527
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.1174**	**0.6091**	**1.6506**	**3.5000e-003**	**0.2051**	**9.8000e-003**	**0.2149**	**0.0551**	**9.0100e-003**	**0.0641**		**316.4856**	**316.4856**	**0.0110**		**316.7167**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0506	0.5251	0.6100	1.3200e-003	0.0374	8.2100e-003	0.0456	0.0107	7.5500e-003	0.0182		132.1324	132.1324	9.7000e-004		132.1527
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.1174**	**0.6091**	**1.6506**	**3.5000e-003**	**0.2051**	**9.8000e-003**	**0.2149**	**0.0551**	**9.0100e-003**	**0.0641**		**316.4856**	**316.4856**	**0.0110**		**316.7167**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.0668**	**0.0841**	**1.0406**	**2.1800e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**184.3532**	**184.3532**	**0.0100**		**184.5639**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.0668**	**0.0841**	**1.0406**	**2.1800e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**184.3532**	**184.3532**	**0.0100**		**184.5639**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	39.9097					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**40.2781**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0134	0.0168	0.2081	4.4000e-004	0.0335	3.2000e-004	0.0339	8.8900e-003	2.9000e-004	9.1800e-003		36.8706	36.8706	2.0100e-003		36.9128
Total	**0.0134**	**0.0168**	**0.2081**	**4.4000e-004**	**0.0335**	**3.2000e-004**	**0.0339**	**8.8900e-003**	**2.9000e-004**	**9.1800e-003**		**36.8706**	**36.8706**	**2.0100e-003**		**36.9128**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	39.9097					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**40.2781**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0134	0.0168	0.2081	4.4000e-004	0.0335	3.2000e-004	0.0339	8.8900e-003	2.9000e-004	9.1800e-003		36.8706	36.8706	2.0100e-003		36.9128
Total	**0.0134**	**0.0168**	**0.2081**	**4.4000e-004**	**0.0335**	**3.2000e-004**	**0.0339**	**8.8900e-003**	**2.9000e-004**	**9.1800e-003**		**36.8706**	**36.8706**	**2.0100e-003**		**36.9128**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4770	9.8304	17.9820	0.0469	2.4807	0.1435	2.6242	0.6749	0.1320	0.8069		4,360.3473	4,360.3473	0.1218		4,362.9053
Unmitigated	1.4770	9.8304	17.9820	0.0469	2.4807	0.1435	2.6242	0.6749	0.1320	0.8069		4,360.3473	4,360.3473	0.1218		4,362.9053

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	223.11	42.25	21.77	746,208	746,208
Single Family Housing	38.08	40.32	35.08	129,754	129,754
Total	261.19	82.57	56.85	875,962	875,962

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.397500	0.043500	0.132700	0.093500	0.118500	0.019200	0.050000	0.116500	0.009400	0.009700	0.002800	0.001500	0.005200

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0213	0.1918	0.1487	1.1600e-003		0.0147	0.0147		0.0147	0.0147		232.5059	232.5059	4.4600e-003	4.2600e-003	233.9209
NaturalGas Unmitigated	0.0213	0.1918	0.1487	1.1600e-003		0.0147	0.0147		0.0147	0.0147		232.5059	232.5059	4.4600e-003	4.2600e-003	233.9209

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1649.71	0.0178	0.1617	0.1359	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.0840	194.0840	3.7200e-003	3.5600e-003	195.2652
Single Family Housing	326.586	3.5200e-003	0.0301	0.0128	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003		38.4218	38.4218	7.4000e-004	7.0000e-004	38.6557
Total		**0.0213**	**0.1918**	**0.1487**	**1.1600e-003**		**0.0147**	**0.0147**		**0.0147**	**0.0147**		**232.5059**	**232.5059**	**4.4600e-003**	**4.2600e-003**	**233.9209**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	0.326586	3.5200e-003	0.0301	0.0128	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003		38.4218	38.4218	7.4000e-004	7.0000e-004	38.6557
General Light Industry	1.64971	0.0178	0.1617	0.1359	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.0840	194.0840	3.7200e-003	3.5600e-003	195.2652
Total		**0.0213**	**0.1918**	**0.1487**	**1.1600e-003**		**0.0147**	**0.0147**		**0.0147**	**0.0147**		**232.5059**	**232.5059**	**4.4600e-003**	**4.2600e-003**	**233.9209**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0541	0.0305	2.3485	3.2200e-003		0.3074	0.3074		0.3073	0.3073	37.4677	72.6012	110.0689	0.1124	2.5400e-003	113.2168
Unmitigated	2.0541	0.0305	2.3485	3.2200e-003		0.3074	0.3074		0.3073	0.3073	37.4677	72.6012	110.0689	0.1124	2.5400e-003	113.2168

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2187					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0481	0.0266	2.0106	3.2000e-003		0.3056	0.3056		0.3055	0.3055	37.4677	72.0000	109.4677	0.1117	2.5400e-003	112.6025
Landscaping	0.0109	3.9500e-003	0.3380	2.0000e-005		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		0.6012	0.6012	6.3000e-004		0.6144
Total	**2.0541**	**0.0305**	**2.3485**	**3.2200e-003**		**0.3074**	**0.3074**		**0.3073**	**0.3073**	**37.4677**	**72.6012**	**110.0689**	**0.1124**	**2.5400e-003**	**113.2168**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2187					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0481	0.0266	2.0106	3.2000e-003		0.3056	0.3056		0.3055	0.3055	37.4677	72.0000	109.4677	0.1117	2.5400e-003	112.6025
Landscaping	0.0109	3.9500e-003	0.3380	2.0000e-005		1.8200e-003	1.8200e-003		1.8200e-003	1.8200e-003		0.6012	0.6012	6.3000e-004		0.6144
Total	**2.0541**	**0.0305**	**2.3485**	**3.2200e-003**		**0.3074**	**0.3074**		**0.3073**	**0.3073**	**37.4677**	**72.6012**	**110.0689**	**0.1124**	**2.5400e-003**	**113.2168**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

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Appendix C

CalEEMod Model Results for Existing Land Uses Annual Emissions

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Azusa Canyon Industrial Park

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	32.01	1000sqft	5.80	32,012.00	0
Single Family Housing	4.00	Dwelling Unit	1.30	7,200.00	11

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size to total 7.1 acres.

Vehicle Trips - Value is per transporation analysis.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Vechicle Emission Factors - Ratios revised to reflect 33 percent trucks.

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	32,010.00	32,012.00
tblLandUse	LotAcreage	0.73	5.80

tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003

tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleTrips	WD_TR	9.57	9.52

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.5118	4.4198	3.0445	4.1400e-003	0.1814	0.2878	0.4692	0.0902	0.2696	0.3598	0.0000	376.4512	376.4512	0.0902	0.0000	378.3449
2016	0.4580	0.5257	0.3711	5.6000e-004	3.8800e-003	0.0334	0.0373	1.0400e-003	0.0312	0.0323	0.0000	51.1549	51.1549	0.0126	0.0000	51.4184
Total	**0.9698**	**4.9455**	**3.4155**	**4.7000e-003**	**0.1852**	**0.3212**	**0.5064**	**0.0912**	**0.3009**	**0.3921**	**0.0000**	**427.6060**	**427.6060**	**0.1027**	**0.0000**	**429.7633**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.5118	4.4198	3.0445	4.1400e-003	0.1814	0.2878	0.4692	0.0902	0.2696	0.3598	0.0000	376.4508	376.4508	0.0902	0.0000	378.3445
2016	0.4580	0.5257	0.3711	5.6000e-004	3.8800e-003	0.0334	0.0373	1.0400e-003	0.0312	0.0323	0.0000	51.1548	51.1548	0.0126	0.0000	51.4184
Total	**0.9698**	**4.9455**	**3.4155**	**4.7000e-003**	**0.1852**	**0.3212**	**0.5064**	**0.0912**	**0.3009**	**0.3921**	**0.0000**	**427.6056**	**427.6056**	**0.1027**	**0.0000**	**429.7629**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1961	8.3000e-004	0.0674	4.0000e-005		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.4249	0.8846	1.3095	1.3400e-003	3.0000e-005	1.3466
Energy	3.8900e-003	0.0350	0.0271	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	269.5904	269.5904	6.2000e-003	1.8300e-003	270.2894
Mobile	0.2129	1.4774	2.6471	6.5000e-003	0.3448	0.0203	0.3651	0.0940	0.0187	0.1127	0.0000	549.5486	549.5486	0.0157	0.0000	549.8774
Waste						0.0000	0.0000		0.0000	0.0000	8.9722	0.0000	8.9722	0.5302	0.0000	20.1073
Water						0.0000	0.0000		0.0000	0.0000	2.4311	56.5897	59.0208	0.2510	6.1700e-003	66.2060
Total	**0.4128**	**1.5132**	**2.7416**	**6.7500e-003**	**0.3448**	**0.0271**	**0.3718**	**0.0940**	**0.0255**	**0.1194**	**11.8282**	**876.6134**	**888.4416**	**0.8045**	**8.0300e-003**	**907.8266**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1961	8.3000e-004	0.0674	4.0000e-005		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.4249	0.8846	1.3095	1.3400e-003	3.0000e-005	1.3466
Energy	3.8900e-003	0.0350	0.0271	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	269.5904	269.5904	6.2000e-003	1.8300e-003	270.2894
Mobile	0.2129	1.4774	2.6471	6.5000e-003	0.3448	0.0203	0.3651	0.0940	0.0187	0.1127	0.0000	549.5486	549.5486	0.0157	0.0000	549.8774
Waste						0.0000	0.0000		0.0000	0.0000	8.9722	0.0000	8.9722	0.5302	0.0000	20.1073
Water						0.0000	0.0000		0.0000	0.0000	2.4311	56.5897	59.0208	0.2510	6.1600e-003	66.2021
Total	**0.4128**	**1.5132**	**2.7416**	**6.7500e-003**	**0.3448**	**0.0271**	**0.3718**	**0.0940**	**0.0255**	**0.1194**	**11.8282**	**876.6134**	**888.4416**	**0.8044**	**8.0200e-003**	**907.8227**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.12**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 14,580; Residential Outdoor: 4,860; Non-Residential Indoor: 48,018; Non-Residential Outdoor: 16,006 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544
Total	**0.0451**	**0.4836**	**0.3607**	**4.0000e-004**		**0.0245**	**0.0245**		**0.0229**	**0.0229**	**0.0000**	**37.4413**	**37.4413**	**0.0102**	**0.0000**	**37.6544**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**7.3000e-004**	**1.0600e-003**	**0.0110**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**1.6593**	**1.6593**	**1.0000e-004**	**0.0000**	**1.6614**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544
Total	**0.0451**	**0.4836**	**0.3607**	**4.0000e-004**		**0.0245**	**0.0245**		**0.0229**	**0.0229**	**0.0000**	**37.4412**	**37.4412**	**0.0102**	**0.0000**	**37.6544**

3.2 Demolition - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**7.3000e-004**	**1.0600e-003**	**0.0110**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**1.6593**	**1.6593**	**1.0000e-004**	**0.0000**	**1.6614**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6506**	**18.6506**	**5.5700e-003**	**0.0000**	**18.7675**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.4000e-004	6.6200e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9956	0.9956	6.0000e-005	0.0000	0.9968
Total	**4.4000e-004**	**6.4000e-004**	**6.6200e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9956**	**0.9956**	**6.0000e-005**	**0.0000**	**0.9968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6505**	**18.6505**	**5.5700e-003**	**0.0000**	**18.7675**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.4000e-004	6.6200e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9956	0.9956	6.0000e-005	0.0000	0.9968
Total	**4.4000e-004**	**6.4000e-004**	**6.6200e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9956**	**0.9956**	**6.0000e-005**	**0.0000**	**0.9968**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3860	28.3860	8.4700e-003	0.0000	28.5639
Total	**0.0383**	**0.4042**	**0.2667**	**3.0000e-004**	**0.0655**	**0.0233**	**0.0888**	**0.0337**	**0.0214**	**0.0551**	**0.0000**	**28.3860**	**28.3860**	**8.4700e-003**	**0.0000**	**28.5639**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**7.3000e-004**	**1.0600e-003**	**0.0110**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**1.6593**	**1.6593**	**1.0000e-004**	**0.0000**	**1.6614**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3859	28.3859	8.4700e-003	0.0000	28.5639
Total	**0.0383**	**0.4042**	**0.2667**	**3.0000e-004**	**0.0655**	**0.0233**	**0.0888**	**0.0337**	**0.0214**	**0.0551**	**0.0000**	**28.3859**	**28.3859**	**8.4700e-003**	**0.0000**	**28.5639**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**7.3000e-004**	**1.0600e-003**	**0.0110**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**1.6593**	**1.6593**	**1.0000e-004**	**0.0000**	**1.6614**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4140	257.4140	0.0646	0.0000	258.7703
Total	**0.3860**	**3.1682**	**1.9776**	**2.8300e-003**		**0.2233**	**0.2233**		**0.2100**	**0.2100**	**0.0000**	**257.4140**	**257.4140**	**0.0646**	**0.0000**	**258.7703**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4800e-003	0.0655	0.0813	1.4000e-004	3.8800e-003	1.0500e-003	4.9400e-003	1.1100e-003	9.7000e-004	2.0800e-003	0.0000	12.7395	12.7395	1.0000e-004	0.0000	12.7416
Worker	7.6700e-003	0.0112	0.1163	2.2000e-004	0.0173	1.8000e-004	0.0175	4.6100e-003	1.6000e-004	4.7700e-003	0.0000	17.5057	17.5057	1.0400e-003	0.0000	17.5276
Total	**0.0142**	**0.0767**	**0.1976**	**3.6000e-004**	**0.0212**	**1.2300e-003**	**0.0225**	**5.7200e-003**	**1.1300e-003**	**6.8500e-003**	**0.0000**	**30.2452**	**30.2452**	**1.1400e-003**	**0.0000**	**30.2692**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4137	257.4137	0.0646	0.0000	258.7700
Total	**0.3860**	**3.1682**	**1.9776**	**2.8300e-003**		**0.2233**	**0.2233**		**0.2100**	**0.2100**	**0.0000**	**257.4137**	**257.4137**	**0.0646**	**0.0000**	**258.7700**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4800e-003	0.0655	0.0813	1.4000e-004	3.8800e-003	1.0500e-003	4.9400e-003	1.1100e-003	9.7000e-004	2.0800e-003	0.0000	12.7395	12.7395	1.0000e-004	0.0000	12.7416
Worker	7.6700e-003	0.0112	0.1163	2.2000e-004	0.0173	1.8000e-004	0.0175	4.6100e-003	1.6000e-004	4.7700e-003	0.0000	17.5057	17.5057	1.0400e-003	0.0000	17.5276
Total	**0.0142**	**0.0767**	**0.1976**	**3.6000e-004**	**0.0212**	**1.2300e-003**	**0.0225**	**5.7200e-003**	**1.1300e-003**	**6.8500e-003**	**0.0000**	**30.2452**	**30.2452**	**1.1400e-003**	**0.0000**	**30.2692**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
Total	**0.0324**	**0.2708**	**0.1758**	**2.5000e-004**		**0.0187**	**0.0187**		**0.0176**	**0.0176**	**0.0000**	**23.0046**	**23.0046**	**5.7100e-003**	**0.0000**	**23.1244**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	5.2100e-003	6.7700e-003	1.0000e-005	3.5000e-004	8.0000e-005	4.3000e-004	1.0000e-004	7.0000e-005	1.7000e-004	0.0000	1.1348	1.1348	1.0000e-005	0.0000	1.1350
Worker	6.2000e-004	9.1000e-004	9.4800e-003	2.0000e-005	1.5600e-003	2.0000e-005	1.5800e-003	4.1000e-004	1.0000e-005	4.3000e-004	0.0000	1.5237	1.5237	9.0000e-005	0.0000	1.5255
Total	**1.1300e-003**	**6.1200e-003**	**0.0163**	**3.0000e-005**	**1.9100e-003**	**1.0000e-004**	**2.0100e-003**	**5.1000e-004**	**8.0000e-005**	**6.0000e-004**	**0.0000**	**2.6585**	**2.6585**	**1.0000e-004**	**0.0000**	**2.6605**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
Total	**0.0324**	**0.2708**	**0.1758**	**2.5000e-004**		**0.0187**	**0.0187**		**0.0176**	**0.0176**	**0.0000**	**23.0046**	**23.0046**	**5.7100e-003**	**0.0000**	**23.1244**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	5.2100e-003	6.7700e-003	1.0000e-005	3.5000e-004	8.0000e-005	4.3000e-004	1.0000e-004	7.0000e-005	1.7000e-004	0.0000	1.1348	1.1348	1.0000e-005	0.0000	1.1350
Worker	6.2000e-004	9.1000e-004	9.4800e-003	2.0000e-005	1.5600e-003	2.0000e-005	1.5800e-003	4.1000e-004	1.0000e-005	4.3000e-004	0.0000	1.5237	1.5237	9.0000e-005	0.0000	1.5255
Total	**1.1300e-003**	**6.1200e-003**	**0.0163**	**3.0000e-005**	**1.9100e-003**	**1.0000e-004**	**2.0100e-003**	**5.1000e-004**	**8.0000e-005**	**6.0000e-004**	**0.0000**	**2.6585**	**2.6585**	**1.0000e-004**	**0.0000**	**2.6605**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	9.6000e-004	9.9800e-003	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6039	1.6039	9.0000e-005	0.0000	1.6058
Total	**6.6000e-004**	**9.6000e-004**	**9.9800e-003**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.6039**	**1.6039**	**9.0000e-005**	**0.0000**	**1.6058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	9.6000e-004	9.9800e-003	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6039	1.6039	9.0000e-005	0.0000	1.6058
Total	**6.6000e-004**	**9.6000e-004**	**9.9800e-003**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.6039**	**1.6039**	**9.0000e-005**	**0.0000**	**1.6058**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3991					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.4028**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.9000e-004	2.0000e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3208	0.3208	2.0000e-005	0.0000	0.3212
Total	**1.3000e-004**	**1.9000e-004**	**2.0000e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.3208**	**0.3208**	**2.0000e-005**	**0.0000**	**0.3212**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3991					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.4028**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.9000e-004	2.0000e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3208	0.3208	2.0000e-005	0.0000	0.3212
Total	**1.3000e-004**	**1.9000e-004**	**2.0000e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.3208**	**0.3208**	**2.0000e-005**	**0.0000**	**0.3212**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2129	1.4774	2.6471	6.5000e-003	0.3448	0.0203	0.3651	0.0940	0.0187	0.1127	0.0000	549.5486	549.5486	0.0157	0.0000	549.8774
Unmitigated	0.2129	1.4774	2.6471	6.5000e-003	0.3448	0.0203	0.3651	0.0940	0.0187	0.1127	0.0000	549.5486	549.5486	0.0157	0.0000	549.8774

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	223.11	42.25	21.77	746,208	746,208
Single Family Housing	38.08	40.32	35.08	129,754	129,754
Total	261.19	82.57	56.85	875,962	875,962

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.397500	0.043500	0.132700	0.093500	0.118500	0.019200	0.050000	0.116500	0.009400	0.009700	0.002800	0.001500	0.005200

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	231.0965	231.0965	5.4600e-003	1.1300e-003	231.5612
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	231.0965	231.0965	5.4600e-003	1.1300e-003	231.5612
NaturalGas Mitigated	3.8900e-003	0.0350	0.0271	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	38.4940	38.4940	7.4000e-004	7.1000e-004	38.7282
NaturalGas Unmitigated	3.8900e-003	0.0350	0.0271	2.1000e-004		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	38.4940	38.4940	7.4000e-004	7.1000e-004	38.7282

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	602146	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003	0.0000	32.1328	32.1328	6.2000e-004	5.9000e-004	32.3283
Single Family Housing	119204	6.4000e-004	5.4900e-003	2.3400e-003	4.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	6.3612	6.3612	1.2000e-004	1.2000e-004	6.3999
Total		**3.8900e-003**	**0.0350**	**0.0271**	**2.2000e-004**		**2.6800e-003**	**2.6800e-003**		**2.6800e-003**	**2.6800e-003**	**0.0000**	**38.4940**	**38.4940**	**7.4000e-004**	**7.1000e-004**	**38.7282**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	119204	6.4000e-004	5.4900e-003	2.3400e-003	4.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	6.3612	6.3612	1.2000e-004	1.2000e-004	6.3999
General Light Industry	602146	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003	0.0000	32.1328	32.1328	6.2000e-004	5.9000e-004	32.3283
Total		**3.8900e-003**	**0.0350**	**0.0271**	**2.2000e-004**		**2.6800e-003**	**2.6800e-003**		**2.6800e-003**	**2.6800e-003**	**0.0000**	**38.4940**	**38.4940**	**7.4000e-004**	**7.1000e-004**	**38.7282**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	385745	214.8449	5.0700e-003	1.0500e-003	215.2769
Single Family Housing	29179	16.2516	3.8000e-004	8.0000e-005	16.2843
Total		**231.0965**	**5.4500e-003**	**1.1300e-003**	**231.5612**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	385745	214.8449	5.0700e-003	1.0500e-003	215.2769
Single Family Housing	29179	16.2516	3.8000e-004	8.0000e-005	16.2843
Total		**231.0965**	**5.4500e-003**	**1.1300e-003**	**231.5612**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1961	8.3000e-004	0.0674	4.0000e-005		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.4249	0.8846	1.3095	1.3400e-003	3.0000e-005	1.3466
Unmitigated	0.1961	8.3000e-004	0.0674	4.0000e-005		4.0500e-003	4.0500e-003		4.0500e-003	4.0500e-003	0.4249	0.8846	1.3095	1.3400e-003	3.0000e-005	1.3466

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1417					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0131	3.3000e-004	0.0251	4.0000e-005		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.4249	0.8165	1.2413	1.2700e-003	3.0000e-005	1.2769
Landscaping	1.3600e-003	4.9000e-004	0.0422	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	0.0682	0.0682	7.0000e-005	0.0000	0.0697
Total	**0.1961**	**8.2000e-004**	**0.0674**	**4.0000e-005**		**4.0500e-003**	**4.0500e-003**		**4.0500e-003**	**4.0500e-003**	**0.4249**	**0.8847**	**1.3095**	**1.3400e-003**	**3.0000e-005**	**1.3466**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1417					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0131	3.3000e-004	0.0251	4.0000e-005		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.4249	0.8165	1.2413	1.2700e-003	3.0000e-005	1.2769
Landscaping	1.3600e-003	4.9000e-004	0.0422	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	0.0682	0.0682	7.0000e-005	0.0000	0.0697
Total	**0.1961**	**8.2000e-004**	**0.0674**	**4.0000e-005**		**4.0500e-003**	**4.0500e-003**		**4.0500e-003**	**4.0500e-003**	**0.4249**	**0.8847**	**1.3095**	**1.3400e-003**	**3.0000e-005**	**1.3466**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	59.0208	0.2510	6.1600e-003	66.2021
Unmitigated	59.0208	0.2510	6.1700e-003	66.2060

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	7.40231 / 0	56.0314	0.2425	5.9600e-003	62.9702
Single Family Housing	0.260616 / 0.164301	2.9894	8.5600e-003	2.1000e-004	3.2357
Total		**59.0208**	**0.2510**	**6.1700e-003**	**66.2060**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	7.40231 / 0	56.0314	0.2424	5.9500e-003	62.9665
Single Family Housing	0.260616 / 0.164301	2.9894	8.5600e-003	2.1000e-004	3.2356
Total		**59.0208**	**0.2510**	**6.1600e-003**	**66.2021**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.9722	0.5302	0.0000	20.1073
Unmitigated	8.9722	0.5302	0.0000	20.1073

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	39.69	8.0567	0.4761	0.0000	18.0556
Single Family Housing	4.51	0.9155	0.0541	0.0000	2.0517
Total		**8.9722**	**0.5302**	**0.0000**	**20.1073**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	39.69	8.0567	0.4761	0.0000	18.0556
Single Family Housing	4.51	0.9155	0.0541	0.0000	2.0517
Total		**8.9722**	**0.5302**	**0.0000**	**20.1073**

9.0 Operational Offroad

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

10.0 Vegetation

Appendix D

CalEEMod Model Results for Azusa Canyon Industrial Park Winter Emissions

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Azusa Canyon Industrial Park Project

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	172.00	1000sqft	7.10	172,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size increased to 7.1 acres to reflect the actual parcel.

Trips and VMT - Haul trips increased to reflect removal of the existing paving. See the text.

Demolition -

Vehicle Trips - Weekday trip rate was changed from the default of 6.96 to 6.97 trips per 1,000 square feet to reflect the data included in the transportation analysis. Sat and Sun values are unchanged.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	3.95	7.10
tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	HaulingTripNumber	173.00	439.00
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09

tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleTrips	WD_TR	6.96	6.97

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3534	57.0134	43.9286	0.0584	18.2675	3.0903	21.3578	9.9840	2.8431	12.8271	0.0000	5,973.8949	5,973.8949	1.2406	0.0000	5,999.9473
2016	199.7383	31.4656	26.6624	0.0428	0.9794	2.0137	2.9931	0.2631	1.8911	2.1542	0.0000	4,116.0067	4,116.0067	0.7149	0.0000	4,131.0187
Total	**205.0918**	**88.4791**	**70.5910**	**0.1012**	**19.2469**	**5.1040**	**24.3509**	**10.2472**	**4.7341**	**14.9813**	**0.0000**	**10,089.9016**	**10,089.9016**	**1.9555**	**0.0000**	**10,130.9660**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3534	57.0134	43.9286	0.0584	3.8596	3.0903	6.9499	2.0643	2.8431	4.9074	0.0000	5,973.8949	5,973.8949	1.2406	0.0000	5,999.9473
2016	199.7383	31.4656	26.6624	0.0428	0.9794	2.0137	2.9931	0.2631	1.8911	2.1542	0.0000	4,116.0067	4,116.0067	0.7149	0.0000	4,131.0187
Total	**205.0918**	**88.4791**	**70.5910**	**0.1012**	**4.8390**	**5.1040**	**9.9430**	**2.3274**	**4.7341**	**7.0616**	**0.0000**	**10,089.9016**	**10,089.9016**	**1.9555**	**0.0000**	**10,130.9659**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**74.86**	**0.00**	**59.17**	**77.29**	**0.00**	**52.86**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.4994	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Energy	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
Mobile	6.8408	43.7072	81.7245	0.1934	10.5056	0.6116	11.1172	2.8580	0.5625	3.4205		18,026.1529	18,026.1529	0.5201		18,037.0741
Total	**11.3958**	**44.2123**	**82.1667**	**0.1965**	**10.5056**	**0.6500**	**11.1556**	**2.8580**	**0.6009**	**3.4589**		**18,632.1406**	**18,632.1406**	**0.5318**	**0.0111**	**18,646.7517**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.4994	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Energy	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
Mobile	6.8408	43.7072	81.7245	0.1934	10.5056	0.6116	11.1172	2.8580	0.5625	3.4205		18,026.1529	18,026.1529	0.5201		18,037.0741
Total	**11.3958**	**44.2123**	**82.1667**	**0.1965**	**10.5056**	**0.6500**	**11.1556**	**2.8580**	**0.6009**	**3.4589**		**18,632.1406**	**18,632.1406**	**0.5318**	**0.0111**	**18,646.7517**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 258,000; Non-Residential Outdoor: 86,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	439.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	72.00	28.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.8709	0.0000	1.8709	0.2833	0.0000	0.2833			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**1.8709**	**2.4508**	**4.3217**	**0.2833**	**2.2858**	**2.5691**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4669	7.2098	5.4418	0.0164	0.3822	0.1152	0.4974	0.1046	0.1060	0.2106		1,666.6854	1,666.6854	0.0138		1,666.9740
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.5440**	**7.3130**	**6.5225**	**0.0184**	**0.5498**	**0.1169**	**0.6667**	**0.1491**	**0.1075**	**0.2566**		**1,846.7015**	**1,846.7015**	**0.0246**		**1,847.2187**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3789	0.0000	0.3789	0.0574	0.0000	0.0574			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**0.3789**	**2.4508**	**2.8297**	**0.0574**	**2.2858**	**2.3431**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4669	7.2098	5.4418	0.0164	0.3822	0.1152	0.4974	0.1046	0.1060	0.2106		1,666.6854	1,666.6854	0.0138		1,666.9740
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.5440**	**7.3130**	**6.5225**	**0.0184**	**0.5498**	**0.1169**	**0.6667**	**0.1491**	**0.1075**	**0.2566**		**1,846.7015**	**1,846.7015**	**0.0246**		**1,847.2187**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**0.0925**	**0.1238**	**1.2968**	**2.4700e-003**	**0.2012**	**2.0100e-003**	**0.2032**	**0.0534**	**1.8400e-003**	**0.0552**		**216.0194**	**216.0194**	**0.0131**		**216.2936**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6584	0.0000	3.6584	2.0110	0.0000	2.0110			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**3.6584**	**3.0883**	**6.7467**	**2.0110**	**2.8412**	**4.8522**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**0.0925**	**0.1238**	**1.2968**	**2.4700e-003**	**0.2012**	**2.0100e-003**	**0.2032**	**0.0534**	**1.8400e-003**	**0.0552**		**216.0194**	**216.0194**	**0.0131**		**216.2936**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.0771**	**0.1031**	**1.0807**	**2.0600e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**180.0161**	**180.0161**	**0.0109**		**180.2447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3269	0.0000	1.3269	0.6819	0.0000	0.6819			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**1.3269**	**2.3284**	**3.6552**	**0.6819**	**2.1421**	**2.8240**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.0771**	**0.1031**	**1.0807**	**2.0600e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**180.0161**	**180.0161**	**0.0109**		**180.2447**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2967	2.8400	3.7353	6.1200e-003	0.1745	0.0470	0.2215	0.0497	0.0432	0.0929		618.1796	618.1796	5.1400e-003		618.2875
Worker	0.3701	0.4950	5.1873	9.8800e-003	0.8048	8.0400e-003	0.8128	0.2134	7.3700e-003	0.2208		864.0774	864.0774	0.0522		865.1745
Total	**0.6668**	**3.3350**	**8.9226**	**0.0160**	**0.9793**	**0.0550**	**1.0344**	**0.2631**	**0.0506**	**0.3137**		**1,482.2570**	**1,482.2570**	**0.0574**		**1,483.4621**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2967	2.8400	3.7353	6.1200e-003	0.1745	0.0470	0.2215	0.0497	0.0432	0.0929		618.1796	618.1796	5.1400e-003		618.2875
Worker	0.3701	0.4950	5.1873	9.8800e-003	0.8048	8.0400e-003	0.8128	0.2134	7.3700e-003	0.2208		864.0774	864.0774	0.0522		865.1745
Total	**0.6668**	**3.3350**	**8.9226**	**0.0160**	**0.9793**	**0.0550**	**1.0344**	**0.2631**	**0.0506**	**0.3137**		**1,482.2570**	**1,482.2570**	**0.0574**		**1,483.4621**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2603	2.5118	3.4659	6.1100e-003	0.1746	0.0387	0.2133	0.0497	0.0356	0.0853		611.4979	611.4979	4.6600e-003		611.5957
Worker	0.3336	0.4476	4.6899	9.8800e-003	0.8048	7.6100e-003	0.8124	0.2134	6.9900e-003	0.2204		835.2224	835.2224	0.0482		836.2340
Total	**0.5939**	**2.9593**	**8.1558**	**0.0160**	**0.9794**	**0.0463**	**1.0257**	**0.2631**	**0.0426**	**0.3057**		**1,446.7203**	**1,446.7203**	**0.0528**		**1,447.8297**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2603	2.5118	3.4659	6.1100e-003	0.1746	0.0387	0.2133	0.0497	0.0356	0.0853		611.4979	611.4979	4.6600e-003		611.5957
Worker	0.3336	0.4476	4.6899	9.8800e-003	0.8048	7.6100e-003	0.8124	0.2134	6.9900e-003	0.2204		835.2224	835.2224	0.0482		836.2340
Total	**0.5939**	**2.9593**	**8.1558**	**0.0160**	**0.9794**	**0.0463**	**1.0257**	**0.2631**	**0.0426**	**0.3057**		**1,446.7203**	**1,446.7203**	**0.0528**		**1,447.8297**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	199.3050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**199.6735**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0870	0.9119	1.9200e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		162.4044	162.4044	9.3700e-003		162.6011
Total	**0.0649**	**0.0870**	**0.9119**	**1.9200e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**162.4044**	**162.4044**	**9.3700e-003**		**162.6011**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	199.3050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**199.6735**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0870	0.9119	1.9200e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		162.4044	162.4044	9.3700e-003		162.6011
Total	**0.0649**	**0.0870**	**0.9119**	**1.9200e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**162.4044**	**162.4044**	**9.3700e-003**		**162.6011**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.8408	43.7072	81.7245	0.1934	10.5056	0.6116	11.1172	2.8580	0.5625	3.4205		18,026.1529	18,026.1529	0.5201		18,037.0741
Unmitigated	6.8408	43.7072	81.7245	0.1934	10.5056	0.6116	11.1172	2.8580	0.5625	3.4205		18,026.1529	18,026.1529	0.5201		18,037.0741

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,198.84	428.28	125.56	3,720,116	3,720,116
Total	1,198.84	428.28	125.56	3,720,116	3,720,116

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.397500	0.043500	0.132700	0.093500	0.118500	0.019200	0.050000	0.116500	0.009400	0.009700	0.002800	0.001500	0.005200

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
NaturalGas Unmitigated	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	5150.58	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
Total		**0.0556**	**0.5050**	**0.4242**	**3.0300e-003**		**0.0384**	**0.0384**		**0.0384**	**0.0384**		**605.9500**	**605.9500**	**0.0116**	**0.0111**	**609.6378**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	5.15058	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
Total		**0.0556**	**0.5050**	**0.4242**	**3.0300e-003**		**0.0384**	**0.0384**		**0.0384**	**0.0384**		**605.9500**	**605.9500**	**0.0116**	**0.0111**	**609.6378**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.4994	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Unmitigated	4.4994	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4056					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7600e-003	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Total	**4.4994**	**1.7000e-004**	**0.0180**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0376**	**0.0376**	**1.1000e-004**		**0.0399**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	3.4056					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7600e-003	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Architectural Coating	1.0921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.4994**	**1.7000e-004**	**0.0180**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0376**	**0.0376**	**1.1000e-004**		**0.0399**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Appendix E

CalEEMod Model Results for Azusa Canyon Industrial Park Summer Emissions

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Azusa Canyon Industrial Park Project

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	172.00	1000sqft	7.10	172,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size increased to 7.1 acres to reflect the actual parcel.

Trips and VMT - Haul trips increased to reflect removal of the existing paving. See the text.

Demolition -

Vehicle Trips - Weekday trip rate was changed from the default of 6.96 to 6.97 trips per 1,000 square feet to reflect the data included in the transportation analysis. Sat and Sun values are unchanged.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	3.95	7.10
tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	HaulingTripNumber	173.00	439.00
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09

tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleTrips	WD_TR	6.96	6.97

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3497	57.0013	44.0081	0.0585	18.2675	3.0903	21.3578	9.9840	2.8431	12.8271	0.0000	5,988.5029	5,988.5029	1.2406	0.0000	6,014.5552
2016	199.7358	31.3602	26.3479	0.0434	0.9794	2.0133	2.9927	0.2631	1.8907	2.1538	0.0000	4,170.7994	4,170.7994	0.7147	0.0000	4,185.8087
Total	**205.0855**	**88.3614**	**70.3560**	**0.1019**	**19.2469**	**5.1036**	**24.3505**	**10.2472**	**4.7337**	**14.9809**	**0.0000**	**10,159.3023**	**10,159.3023**	**1.9553**	**0.0000**	**10,200.3639**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3497	57.0013	44.0081	0.0585	3.8596	3.0903	6.9499	2.0643	2.8431	4.9074	0.0000	5,988.5029	5,988.5029	1.2406	0.0000	6,014.5552
2016	199.7358	31.3602	26.3479	0.0434	0.9794	2.0133	2.9927	0.2631	1.8907	2.1538	0.0000	4,170.7994	4,170.7994	0.7147	0.0000	4,185.8087
Total	**205.0855**	**88.3614**	**70.3560**	**0.1019**	**4.8390**	**5.1036**	**9.9426**	**2.3274**	**4.7337**	**7.0612**	**0.0000**	**10,159.3023**	**10,159.3023**	**1.9553**	**0.0000**	**10,200.3639**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**74.86**	**0.00**	**59.17**	**77.29**	**0.00**	**52.87**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.4994	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Energy	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
Mobile	6.4942	41.9777	77.8857	0.1989	10.5056	0.6088	11.1144	2.8580	0.5599	3.4179		18,498.6693	18,498.6693	0.5189		18,509.5655
Total	**11.0492**	**42.4828**	**78.3279**	**0.2019**	**10.5056**	**0.6473**	**11.1529**	**2.8580**	**0.5984**	**3.4564**		**19,104.6570**	**19,104.6570**	**0.5306**	**0.0111**	**19,119.2431**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.4994	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Energy	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
Mobile	6.4942	41.9777	77.8857	0.1989	10.5056	0.6088	11.1144	2.8580	0.5599	3.4179		18,498.6693	18,498.6693	0.5189		18,509.5655
Total	**11.0492**	**42.4828**	**78.3279**	**0.2019**	**10.5056**	**0.6473**	**11.1529**	**2.8580**	**0.5984**	**3.4564**		**19,104.6570**	**19,104.6570**	**0.5306**	**0.0111**	**19,119.2431**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 258,000; Non-Residential Outdoor: 86,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	439.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	72.00	28.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.8709	0.0000	1.8709	0.2833	0.0000	0.2833			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**1.8709**	**2.4508**	**4.3217**	**0.2833**	**2.2858**	**2.5691**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4393	6.9646	4.7479	0.0164	0.3822	0.1148	0.4970	0.1046	0.1056	0.2102		1,670.5962	1,670.5962	0.0136		1,670.8815
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.5133**	**7.0576**	**5.8948**	**0.0186**	**0.5498**	**0.1165**	**0.6663**	**0.1491**	**0.1071**	**0.2562**		**1,861.3095**	**1,861.3095**	**0.0245**		**1,861.8233**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3789	0.0000	0.3789	0.0574	0.0000	0.0574			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**0.3789**	**2.4508**	**2.8297**	**0.0574**	**2.2858**	**2.3431**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

3.2 Demolition - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.4393	6.9646	4.7479	0.0164	0.3822	0.1148	0.4970	0.1046	0.1056	0.2102		1,670.5962	1,670.5962	0.0136		1,670.8815
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.5133**	**7.0576**	**5.8948**	**0.0186**	**0.5498**	**0.1165**	**0.6663**	**0.1491**	**0.1071**	**0.2562**		**1,861.3095**	**1,861.3095**	**0.0245**		**1,861.8233**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
Total	**0.0888**	**0.1116**	**1.3763**	**2.6200e-003**	**0.2012**	**2.0100e-003**	**0.2032**	**0.0534**	**1.8400e-003**	**0.0552**		**228.8559**	**228.8559**	**0.0131**		**229.1301**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6584	0.0000	3.6584	2.0110	0.0000	2.0110			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**3.6584**	**3.0883**	**6.7467**	**2.0110**	**2.8412**	**4.8522**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
Total	**0.0888**	**0.1116**	**1.3763**	**2.6200e-003**	**0.2012**	**2.0100e-003**	**0.2032**	**0.0534**	**1.8400e-003**	**0.0552**		**228.8559**	**228.8559**	**0.0131**		**229.1301**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.0740**	**0.0930**	**1.1469**	**2.1800e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**190.7132**	**190.7132**	**0.0109**		**190.9418**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3269	0.0000	1.3269	0.6819	0.0000	0.6819			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**1.3269**	**2.3284**	**3.6552**	**0.6819**	**2.1421**	**2.8240**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.0740**	**0.0930**	**1.1469**	**2.1800e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**190.7132**	**190.7132**	**0.0109**		**190.9418**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2681	2.7686	3.1087	6.1600e-003	0.1745	0.0464	0.2210	0.0497	0.0427	0.0923		623.3325	623.3325	5.0000e-003		623.4376
Worker	0.3551	0.4464	5.5052	0.0105	0.8048	8.0400e-003	0.8128	0.2134	7.3700e-003	0.2208		915.4235	915.4235	0.0522		916.5206
Total	**0.6232**	**3.2150**	**8.6140**	**0.0166**	**0.9793**	**0.0544**	**1.0338**	**0.2631**	**0.0500**	**0.3131**		**1,538.7560**	**1,538.7560**	**0.0572**		**1,539.9582**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2681	2.7686	3.1087	6.1600e-003	0.1745	0.0464	0.2210	0.0497	0.0427	0.0923		623.3325	623.3325	5.0000e-003		623.4376
Worker	0.3551	0.4464	5.5052	0.0105	0.8048	8.0400e-003	0.8128	0.2134	7.3700e-003	0.2208		915.4235	915.4235	0.0522		916.5206
Total	**0.6232**	**3.2150**	**8.6140**	**0.0166**	**0.9793**	**0.0544**	**1.0338**	**0.2631**	**0.0500**	**0.3131**		**1,538.7560**	**1,538.7560**	**0.0572**		**1,539.9582**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2359	2.4502	2.8467	6.1500e-003	0.1746	0.0383	0.2129	0.0497	0.0352	0.0849		616.6177	616.6177	4.5300e-003		616.7128
Worker	0.3207	0.4036	4.9946	0.0105	0.8048	7.6100e-003	0.8124	0.2134	6.9900e-003	0.2204		884.8953	884.8953	0.0482		885.9069
Total	**0.5566**	**2.8538**	**7.8413**	**0.0166**	**0.9794**	**0.0459**	**1.0253**	**0.2631**	**0.0422**	**0.3053**		**1,501.5130**	**1,501.5130**	**0.0527**		**1,502.6197**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2359	2.4502	2.8467	6.1500e-003	0.1746	0.0383	0.2129	0.0497	0.0352	0.0849		616.6177	616.6177	4.5300e-003		616.7128
Worker	0.3207	0.4036	4.9946	0.0105	0.8048	7.6100e-003	0.8124	0.2134	6.9900e-003	0.2204		884.8953	884.8953	0.0482		885.9069
Total	**0.5566**	**2.8538**	**7.8413**	**0.0166**	**0.9794**	**0.0459**	**1.0253**	**0.2631**	**0.0422**	**0.3053**		**1,501.5130**	**1,501.5130**	**0.0527**		**1,502.6197**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.0668**	**0.0841**	**1.0406**	**2.1800e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**184.3532**	**184.3532**	**0.0100**		**184.5639**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.0668**	**0.0841**	**1.0406**	**2.1800e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**184.3532**	**184.3532**	**0.0100**		**184.5639**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	199.3050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**199.6735**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0785	0.9712	2.0400e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		172.0630	172.0630	9.3700e-003		172.2597
Total	**0.0624**	**0.0785**	**0.9712**	**2.0400e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**172.0630**	**172.0630**	**9.3700e-003**		**172.2597**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	199.3050					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**199.6735**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0785	0.9712	2.0400e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		172.0630	172.0630	9.3700e-003		172.2597
Total	**0.0624**	**0.0785**	**0.9712**	**2.0400e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**172.0630**	**172.0630**	**9.3700e-003**		**172.2597**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.4942	41.9777	77.8857	0.1989	10.5056	0.6088	11.1144	2.8580	0.5599	3.4179		18,498.6693	18,498.6693	0.5189		18,509.5655
Unmitigated	6.4942	41.9777	77.8857	0.1989	10.5056	0.6088	11.1144	2.8580	0.5599	3.4179		18,498.6693	18,498.6693	0.5189		18,509.5655

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,198.84	428.28	125.56	3,720,116	3,720,116
Total	1,198.84	428.28	125.56	3,720,116	3,720,116

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.397500	0.043500	0.132700	0.093500	0.118500	0.019200	0.050000	0.116500	0.009400	0.009700	0.002800	0.001500	0.005200

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
NaturalGas Unmitigated	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	5150.58	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
Total		**0.0556**	**0.5050**	**0.4242**	**3.0300e-003**		**0.0384**	**0.0384**		**0.0384**	**0.0384**		**605.9500**	**605.9500**	**0.0116**	**0.0111**	**609.6378**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	5.15058	0.0556	0.5050	0.4242	3.0300e-003		0.0384	0.0384		0.0384	0.0384		605.9500	605.9500	0.0116	0.0111	609.6378
Total		**0.0556**	**0.5050**	**0.4242**	**3.0300e-003**		**0.0384**	**0.0384**		**0.0384**	**0.0384**		**605.9500**	**605.9500**	**0.0116**	**0.0111**	**609.6378**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.4994	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Unmitigated	4.4994	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.4056					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7600e-003	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Total	**4.4994**	**1.7000e-004**	**0.0180**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0376**	**0.0376**	**1.1000e-004**		**0.0399**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	3.4056					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7600e-003	1.7000e-004	0.0180	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0376	0.0376	1.1000e-004		0.0399
Architectural Coating	1.0921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.4994**	**1.7000e-004**	**0.0180**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0376**	**0.0376**	**1.1000e-004**		**0.0399**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Appendix F

CalEEMod Model Results for Azusa Canyon Industrial Park Annual Emissions

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Azusa Canyon Industrial Park Project

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	172.00	1000sqft	7.10	172,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot size increased to 7.1 acres to reflect the actual parcel.

Trips and VMT - Haul trips increased to reflect removal of the existing paving. See the text.

Demolition -

Vehicle Trips - Weekday trip rate was changed from the default of 6.96 to 6.97 trips per 1,000 square feet to reflect the data included in the transportation analysis. Sat and Sun values are unchanged.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Vechicle Emission Factors - Vehicle ratios modified to represent 33 percent trucks. See text.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	3.95	7.10
tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	HaulingTripNumber	173.00	439.00
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	HHD	0.03	0.12
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDA	0.53	0.40
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT1	0.06	0.04
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LDT2	0.18	0.13
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD1	0.04	0.12
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	LHD2	6.2830e-003	0.02
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MCY	3.6910e-003	2.8000e-003
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09
tblVehicleEF	MDV	0.13	0.09

tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MH	1.6550e-003	5.2000e-003
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	OBUS	2.4530e-003	9.4000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	SBUS	5.4300e-004	1.5000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleEF	UBUS	3.1570e-003	9.7000e-003
tblVehicleTrips	WD_TR	6.96	6.97

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.5693	4.7757	3.8375	5.6500e-003	0.2839	0.2935	0.5775	0.1156	0.2749	0.3905	0.0000	504.8247	504.8247	0.0946	0.0000	506.8122
2016	2.0566	0.5489	0.4392	7.0000e-004	0.0123	0.0337	0.0460	3.3000e-003	0.0316	0.0349	0.0000	62.2821	62.2821	0.0130	0.0000	62.5546
Total	**2.6259**	**5.3247**	**4.2767**	**6.3500e-003**	**0.2962**	**0.3272**	**0.6235**	**0.1189**	**0.3064**	**0.4253**	**0.0000**	**567.1067**	**567.1067**	**0.1076**	**0.0000**	**569.3667**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.5693	4.7757	3.8375	5.6500e-003	0.1447	0.2935	0.4382	0.0469	0.2749	0.3218	0.0000	504.8243	504.8243	0.0946	0.0000	506.8118
2016	2.0566	0.5489	0.4392	7.0000e-004	0.0123	0.0337	0.0460	3.3000e-003	0.0316	0.0349	0.0000	62.2820	62.2820	0.0130	0.0000	62.5545
Total	**2.6259**	**5.3247**	**4.2767**	**6.3500e-003**	**0.1570**	**0.3272**	**0.4843**	**0.0502**	**0.3064**	**0.3566**	**0.0000**	**567.1063**	**567.1063**	**0.1076**	**0.0000**	**569.3663**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**46.99**	**0.00**	**22.33**	**57.80**	**0.00**	**16.16**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.8211	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2700e-003	4.2700e-003	1.0000e-005	0.0000	4.5200e-003
Energy	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003	0.0000	1,492.2578	1,492.2578	0.0348	8.6400e-003	1,495.6672
Mobile	0.9358	6.3189	11.5143	0.0277	1.4641	0.0865	1.5506	0.3991	0.0796	0.4786	0.0000	2,337.5205	2,337.5205	0.0668	0.0000	2,338.9240
Waste						0.0000	0.0000		0.0000	0.0000	43.2939	0.0000	43.2939	2.5586	0.0000	97.0245
Water						0.0000	0.0000		0.0000	0.0000	12.6188	288.4561	301.0749	1.3029	0.0320	338.3593
Total	**1.7669**	**6.4110**	**11.5940**	**0.0282**	**1.4641**	**0.0935**	**1.5577**	**0.3991**	**0.0866**	**0.4856**	**55.9127**	**4,118.2387**	**4,174.1514**	**3.9631**	**0.0407**	**4,269.9794**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.8211	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2700e-003	4.2700e-003	1.0000e-005	0.0000	4.5200e-003
Energy	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003	0.0000	1,492.2578	1,492.2578	0.0348	8.6400e-003	1,495.6672
Mobile	0.9358	6.3189	11.5143	0.0277	1.4641	0.0865	1.5506	0.3991	0.0796	0.4786	0.0000	2,337.5205	2,337.5205	0.0668	0.0000	2,338.9240
Waste						0.0000	0.0000		0.0000	0.0000	43.2939	0.0000	43.2939	2.5586	0.0000	97.0245
Water						0.0000	0.0000		0.0000	0.0000	12.6188	288.4561	301.0749	1.3027	0.0320	338.3391
Total	**1.7669**	**6.4110**	**11.5940**	**0.0282**	**1.4641**	**0.0935**	**1.5577**	**0.3991**	**0.0866**	**0.4856**	**55.9127**	**4,118.2387**	**4,174.1514**	**3.9629**	**0.0406**	**4,269.9593**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.12**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/28/2015	5	20	
2	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
3	Grading	Grading	2/12/2015	3/11/2015	5	20	
4	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
5	Paving	Paving	1/28/2016	2/24/2016	5	20	
6	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 258,000; Non-Residential Outdoor: 86,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	439.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	72.00	28.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0187	0.0000	0.0187	2.8300e-003	0.0000	2.8300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4413	37.4413	0.0102	0.0000	37.6544
Total	**0.0451**	**0.4836**	**0.3607**	**4.0000e-004**	**0.0187**	**0.0245**	**0.0432**	**2.8300e-003**	**0.0229**	**0.0257**	**0.0000**	**37.4413**	**37.4413**	**0.0102**	**0.0000**	**37.6544**

3.2 Demolition - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5800e-003	0.0734	0.0529	1.6000e-004	3.7600e-003	1.1500e-003	4.9100e-003	1.0300e-003	1.0600e-003	2.0900e-003	0.0000	15.1405	15.1405	1.2000e-004	0.0000	15.1431
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**5.3100e-003**	**0.0744**	**0.0640**	**1.8000e-004**	**5.4000e-003**	**1.1700e-003**	**6.5700e-003**	**1.4700e-003**	**1.0800e-003**	**2.5400e-003**	**0.0000**	**16.7998**	**16.7998**	**2.2000e-004**	**0.0000**	**16.8045**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7900e-003	0.0000	3.7900e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0451	0.4836	0.3607	4.0000e-004		0.0245	0.0245		0.0229	0.0229	0.0000	37.4412	37.4412	0.0102	0.0000	37.6544
Total	**0.0451**	**0.4836**	**0.3607**	**4.0000e-004**	**3.7900e-003**	**0.0245**	**0.0283**	**5.7000e-004**	**0.0229**	**0.0234**	**0.0000**	**37.4412**	**37.4412**	**0.0102**	**0.0000**	**37.6544**

3.2 Demolition - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5800e-003	0.0734	0.0529	1.6000e-004	3.7600e-003	1.1500e-003	4.9100e-003	1.0300e-003	1.0600e-003	2.0900e-003	0.0000	15.1405	15.1405	1.2000e-004	0.0000	15.1431
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**5.3100e-003**	**0.0744**	**0.0640**	**1.8000e-004**	**5.4000e-003**	**1.1700e-003**	**6.5700e-003**	**1.4700e-003**	**1.0800e-003**	**2.5400e-003**	**0.0000**	**16.7998**	**16.7998**	**2.2000e-004**	**0.0000**	**16.8045**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6506**	**18.6506**	**5.5700e-003**	**0.0000**	**18.7675**

3.3 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.4000e-004	6.6200e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9956	0.9956	6.0000e-005	0.0000	0.9968
Total	**4.4000e-004**	**6.4000e-004**	**6.6200e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9956**	**0.9956**	**6.0000e-005**	**0.0000**	**0.9968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0183	0.0000	0.0183	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0183**	**0.0154**	**0.0337**	**0.0101**	**0.0142**	**0.0243**	**0.0000**	**18.6505**	**18.6505**	**5.5700e-003**	**0.0000**	**18.7675**

3.3 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.4000e-004	6.6200e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9956	0.9956	6.0000e-005	0.0000	0.9968
Total	**4.4000e-004**	**6.4000e-004**	**6.6200e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9956**	**0.9956**	**6.0000e-005**	**0.0000**	**0.9968**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3860	28.3860	8.4700e-003	0.0000	28.5639
Total	**0.0383**	**0.4042**	**0.2667**	**3.0000e-004**	**0.0655**	**0.0233**	**0.0888**	**0.0337**	**0.0214**	**0.0551**	**0.0000**	**28.3860**	**28.3860**	**8.4700e-003**	**0.0000**	**28.5639**

3.4 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**7.3000e-004**	**1.0600e-003**	**0.0110**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**1.6593**	**1.6593**	**1.0000e-004**	**0.0000**	**1.6614**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0133	0.0000	0.0133	6.8200e-003	0.0000	6.8200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3859	28.3859	8.4700e-003	0.0000	28.5639
Total	**0.0383**	**0.4042**	**0.2667**	**3.0000e-004**	**0.0133**	**0.0233**	**0.0366**	**6.8200e-003**	**0.0214**	**0.0282**	**0.0000**	**28.3859**	**28.3859**	**8.4700e-003**	**0.0000**	**28.5639**

3.4 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**7.3000e-004**	**1.0600e-003**	**0.0110**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**1.6593**	**1.6593**	**1.0000e-004**	**0.0000**	**1.6614**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4140	257.4140	0.0646	0.0000	258.7703
Total	**0.3860**	**3.1682**	**1.9776**	**2.8300e-003**		**0.2233**	**0.2233**		**0.2100**	**0.2100**	**0.0000**	**257.4140**	**257.4140**	**0.0646**	**0.0000**	**258.7703**

3.5 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0302	0.3056	0.3793	6.5000e-004	0.0181	4.9200e-003	0.0230	5.1600e-003	4.5200e-003	9.6900e-003	0.0000	59.4508	59.4508	4.8000e-004	0.0000	59.4609
Worker	0.0368	0.0536	0.5584	1.0600e-003	0.0832	8.5000e-004	0.0841	0.0221	7.8000e-004	0.0229	0.0000	84.0274	84.0274	5.0000e-003	0.0000	84.1324
Total	**0.0671**	**0.3592**	**0.9377**	**1.7100e-003**	**0.1014**	**5.7700e-003**	**0.1071**	**0.0273**	**5.3000e-003**	**0.0326**	**0.0000**	**143.4782**	**143.4782**	**5.4800e-003**	**0.0000**	**143.5933**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4137	257.4137	0.0646	0.0000	258.7700
Total	**0.3860**	**3.1682**	**1.9776**	**2.8300e-003**		**0.2233**	**0.2233**		**0.2100**	**0.2100**	**0.0000**	**257.4137**	**257.4137**	**0.0646**	**0.0000**	**258.7700**

3.5 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0302	0.3056	0.3793	6.5000e-004	0.0181	4.9200e-003	0.0230	5.1600e-003	4.5200e-003	9.6900e-003	0.0000	59.4508	59.4508	4.8000e-004	0.0000	59.4609
Worker	0.0368	0.0536	0.5584	1.0600e-003	0.0832	8.5000e-004	0.0841	0.0221	7.8000e-004	0.0229	0.0000	84.0274	84.0274	5.0000e-003	0.0000	84.1324
Total	**0.0671**	**0.3592**	**0.9377**	**1.7100e-003**	**0.1014**	**5.7700e-003**	**0.1071**	**0.0273**	**5.3000e-003**	**0.0326**	**0.0000**	**143.4782**	**143.4782**	**5.4800e-003**	**0.0000**	**143.5933**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
Total	**0.0324**	**0.2708**	**0.1758**	**2.5000e-004**		**0.0187**	**0.0187**		**0.0176**	**0.0176**	**0.0000**	**23.0046**	**23.0046**	**5.7100e-003**	**0.0000**	**23.1244**

3.5 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3900e-003	0.0243	0.0316	6.0000e-005	1.6300e-003	3.7000e-004	2.0000e-003	4.7000e-004	3.4000e-004	8.0000e-004	0.0000	5.2956	5.2956	4.0000e-005	0.0000	5.2965
Worker	2.9900e-003	4.3600e-003	0.0455	1.0000e-004	7.5000e-003	7.0000e-005	7.5700e-003	1.9900e-003	7.0000e-005	2.0600e-003	0.0000	7.3139	7.3139	4.2000e-004	0.0000	7.3226
Total	**5.3800e-003**	**0.0287**	**0.0771**	**1.6000e-004**	**9.1300e-003**	**4.4000e-004**	**9.5700e-003**	**2.4600e-003**	**4.1000e-004**	**2.8600e-003**	**0.0000**	**12.6095**	**12.6095**	**4.6000e-004**	**0.0000**	**12.6191**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
Total	**0.0324**	**0.2708**	**0.1758**	**2.5000e-004**		**0.0187**	**0.0187**		**0.0176**	**0.0176**	**0.0000**	**23.0046**	**23.0046**	**5.7100e-003**	**0.0000**	**23.1244**

3.5 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3900e-003	0.0243	0.0316	6.0000e-005	1.6300e-003	3.7000e-004	2.0000e-003	4.7000e-004	3.4000e-004	8.0000e-004	0.0000	5.2956	5.2956	4.0000e-005	0.0000	5.2965
Worker	2.9900e-003	4.3600e-003	0.0455	1.0000e-004	7.5000e-003	7.0000e-005	7.5700e-003	1.9900e-003	7.0000e-005	2.0600e-003	0.0000	7.3139	7.3139	4.2000e-004	0.0000	7.3226
Total	**5.3800e-003**	**0.0287**	**0.0771**	**1.6000e-004**	**9.1300e-003**	**4.4000e-004**	**9.5700e-003**	**2.4600e-003**	**4.1000e-004**	**2.8600e-003**	**0.0000**	**12.6095**	**12.6095**	**4.6000e-004**	**0.0000**	**12.6191**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

3.6 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	9.6000e-004	9.9800e-003	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6039	1.6039	9.0000e-005	0.0000	1.6058
Total	**6.6000e-004**	**9.6000e-004**	**9.9800e-003**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.6039**	**1.6039**	**9.0000e-005**	**0.0000**	**1.6058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

3.6 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	9.6000e-004	9.9800e-003	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6039	1.6039	9.0000e-005	0.0000	1.6058
Total	**6.6000e-004**	**9.6000e-004**	**9.9800e-003**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.6039**	**1.6039**	**9.0000e-005**	**0.0000**	**1.6058**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.9931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**1.9967**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

3.7 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	8.9000e-004	9.3100e-003	2.0000e-005	1.5300e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.4970	1.4970	8.0000e-005	0.0000	1.4988
Total	**6.1000e-004**	**8.9000e-004**	**9.3100e-003**	**2.0000e-005**	**1.5300e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.4970**	**1.4970**	**8.0000e-005**	**0.0000**	**1.4988**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.9931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**1.9967**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

3.7 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	8.9000e-004	9.3100e-003	2.0000e-005	1.5300e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.4970	1.4970	8.0000e-005	0.0000	1.4988
Total	**6.1000e-004**	**8.9000e-004**	**9.3100e-003**	**2.0000e-005**	**1.5300e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.4970**	**1.4970**	**8.0000e-005**	**0.0000**	**1.4988**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9358	6.3189	11.5143	0.0277	1.4641	0.0865	1.5506	0.3991	0.0796	0.4786	0.0000	2,337.5205	2,337.5205	0.0668	0.0000	2,338.9240
Unmitigated	0.9358	6.3189	11.5143	0.0277	1.4641	0.0865	1.5506	0.3991	0.0796	0.4786	0.0000	2,337.5205	2,337.5205	0.0668	0.0000	2,338.9240

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,198.84	428.28	125.56	3,720,116	3,720,116
Total	1,198.84	428.28	125.56	3,720,116	3,720,116

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.397500	0.043500	0.132700	0.093500	0.118500	0.019200	0.050000	0.116500	0.009400	0.009700	0.002800	0.001500	0.005200

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,391.9360	1,391.9360	0.0329	6.8000e-003	1,394.7349
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,391.9360	1,391.9360	0.0329	6.8000e-003	1,394.7349
NaturalGas Mitigated	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003	0.0000	100.3218	100.3218	1.9200e-003	1.8400e-003	100.9324
NaturalGas Unmitigated	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003	0.0000	100.3218	100.3218	1.9200e-003	1.8400e-003	100.9324

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	1.87996e+006	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003	0.0000	100.3218	100.3218	1.9200e-003	1.8400e-003	100.9324
Total		**0.0101**	**0.0922**	**0.0774**	**5.5000e-004**		**7.0000e-003**	**7.0000e-003**		**7.0000e-003**	**7.0000e-003**	**0.0000**	**100.3218**	**100.3218**	**1.9200e-003**	**1.8400e-003**	**100.9324**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	1.87996e+006	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003	0.0000	100.3218	100.3218	1.9200e-003	1.8400e-003	100.9324
Total		**0.0101**	**0.0922**	**0.0774**	**5.5000e-004**		**7.0000e-003**	**7.0000e-003**		**7.0000e-003**	**7.0000e-003**	**0.0000**	**100.3218**	**100.3218**	**1.9200e-003**	**1.8400e-003**	**100.9324**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.49916e+006	1,391.9360	0.0329	6.8000e-003	1,394.7349
Total		**1,391.9360**	**0.0329**	**6.8000e-003**	**1,394.7349**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.49916e+006	1,391.9360	0.0329	6.8000e-003	1,394.7349
Total		**1,391.9360**	**0.0329**	**6.8000e-003**	**1,394.7349**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8211	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2700e-003	4.2700e-003	1.0000e-005	0.0000	4.5200e-003
Unmitigated	0.8211	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2700e-003	4.2700e-003	1.0000e-005	0.0000	4.5200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1993					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2700e-003	4.2700e-003	1.0000e-005	0.0000	4.5200e-003
Total	**0.8211**	**2.0000e-005**	**2.2500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.2700e-003**	**4.2700e-003**	**1.0000e-005**	**0.0000**	**4.5200e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1993					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2700e-003	4.2700e-003	1.0000e-005	0.0000	4.5200e-003
Total	**0.8211**	**2.0000e-005**	**2.2500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.2700e-003**	**4.2700e-003**	**1.0000e-005**	**0.0000**	**4.5200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	301.0749	1.3027	0.0320	338.3391
Unmitigated	301.0749	1.3029	0.0320	338.3593

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	39.775 / 0	301.0749	1.3029	0.0320	338.3593
Total		**301.0749**	**1.3029**	**0.0320**	**338.3593**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	39.775 / 0	301.0749	1.3027	0.0320	338.3391
Total		**301.0749**	**1.3027**	**0.0320**	**338.3391**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	43.2939	2.5586	0.0000	97.0245
Unmitigated	43.2939	2.5586	0.0000	97.0245

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	213.28	43.2939	2.5586	0.0000	97.0245
Total		**43.2939**	**2.5586**	**0.0000**	**97.0245**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	213.28	43.2939	2.5586	0.0000	97.0245
Total		**43.2939**	**2.5586**	**0.0000**	**97.0245**

9.0 Operational Offroad

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

10.0 Vegetation

Appendix D

Azusa Canyon Industrial Park
Phase I/II Environmental Site Assessments

(AMEC Environmental & Infrastructure, October 9, 2013)

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PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE

4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906,

and 4910 Azusa Canyon Road,

and Adjoining Alleys/Yards

Irwindale, California

Prepared for:

Shubin-Nadal Realty Investors, LLC
901 Dove Street, Suite 225
Newport Beach, California 92660

Prepared by:

AMEC
121 Innovation Drive, Suite 200
Irvine, California 92617-3094
(949) 642-0245

October 9, 2013

Project No. IR13164320

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PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE
4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906,
and 4910 Azusa Canyon Road,
and Adjoining Alleys/Yards
Irwindale, California

1.0 INTRODUCTION

AMEC Environment & Infrastructure, Inc. (AMEC), has prepared this report to document findings from a Phase I Environmental Site Assessment (ESA) update conducted for Shubin - Nadal Realty Investors (SNRI) for the properties located at 4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906, and 4910 Azusa Canyon Road, and adjoining alleys/yards, in Irwindale, California (the site or subject property; Figure 1). A Phase I ESA, conducted in June 2013 by Orswell & Kasman, Inc. for the subject properties (excluding 4854 Azusa Canyon Road), identified several recognized environmental conditions (RECs) in connection with the subject property. A copy of this Phase I ESA is included in Appendix A.

The subject property is approximately 7 acres in size and is occupied by residences, commercial buildings and warehouses, huts and sheds, and land used for storage of miscellaneous items including pallets, equipment, and refrigerant/other chemicals in containers. The subject property is owned by Mr. Frank Smith, who occupies one of the residential properties (4850 Azusa Canyon Road) at the subject property.

1.1 PURPOSE

The Phase I ESA update reported herein was performed at the request of SNRI, which is considering the purchase of the subject property. This ESA update was conducted in accordance with ASTM International (ASTM) E1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM, 2005). ASTM E1527-05 complies with United States Environmental Protection Agency (USEPA) All Appropriate Inquiries (AAI) Final Rule [Code of Federal Regulations (CFR) Title 40, Part 312], which took effect on November 1, 2006.

The purpose of the Phase I ESA is to compile and review available information about the subject property and immediate vicinity to identify RECs to the extent feasible pursuant to ASTM E1527-05. According to ASTM E1527-05, a REC is defined as:

> "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground

> water, 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 threat 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."

The AAI Final Rule applies to:

> "conditions indicative of releases and threatened releases of hazardous substances…(and) petroleum or petroleum products are excluded from the definition of hazardous substance… (as referenced in 40 CFR 312.1)."

According to ASTM E1527-05, a historical REC (HREC) is defined as:

> "an environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently."

In addition, other environmental issues related to the site, which are not considered RECs as defined by ASTM E152705, are referred to as potential environmental conditions (PECs). For purposes of this assessment, PECs were defined as features or conditions that do not meet the ASTM definition of a REC or HREC, but have been identified as potentially having an environmental component of interest. PECs also include items that are generally not included within the scope of ASTM, such as lead-based paint (LBP), asbestos-containing materials (ACM), and indoor dust. PECs do not necessarily require any actions to address their presence or condition, but are identified for the sake of thoroughness and completeness.

1.2 REASON FOR PERFORMING THE PHASE I ESA UPDATE

SNRI requested that a Phase I ESA update be performed for the subject property in order to evaluate environmental site conditions for potential purchase of the subject property. As such, we understand that SNRI has commissioned this Phase I ESA update to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on Comprehensive Environmental Response, Compensation, and Liability Act liability (referred to as the landowner liability protections or LLPs). This Phase I ESA update has been prepared using the ASTM E1527-05 standard as guidance and constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 United States Code §9601(35)(B).

1.3 SCOPE OF SERVICES

The general scope of services for this Phase I ESA update included the following tasks:

- conducting a site reconnaissance to observe and document current conditions and activities at the site;
- conducting a visual survey of immediately adjacent parcels from the site or from public streets;
- interviewing the site owner or representatives of the owner;
- reviewing available historical documents including state, tribal, and local government records covering the period that the site had structures or was used for residential, agricultural, commercial, industrial, or governmental purposes;
- reviewing available historical records including aerial photographs; historical topographical maps; city directories; and Sanborn Fire Insurance (Sanborn) maps for the site and vicinity, if available;
- retaining Environmental Data Resources, Inc. (EDR), of Milford Connecticut to conduct a regulatory database search to identify reported on-site and off-site chemical releases that may affect soil or groundwater conditions at the site;
- evaluating the data and identifying data gaps, open issues, and key uncertainties, if any; and,
- preparing this report documenting these activities and summarizing environmental issues identified.

1.4 EXCLUSIONS

ASTM E1527-05 includes the following list of additional issues that are outside the scope of the ASTM Phase I practice: asbestos-containing building materials (ACMs), radon, lead-based paint (LBP), lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality (such as vapor intrusion), and biologic agents and mold. The following additional items were not included in our assessment of the subject property: an evaluation of seismic or geotechnical characteristics, and the collection and chemical analysis of samples of bulk materials, wastes, soil, soil vapor, water, or air.

1.5 SIGNIFICANT ASSUMPTIONS

According to a June 2013 Phase I Environmental Site Assessment Report (Orswell & Kasman, 2013), Los Angeles County Department of Public Works Hydraulic Water Conservation Division records and maps revealed "…the site is located at an elevation of approximately 430 feet above sea level. According to well data, the groundwater level in the area is approximately 275 feet above sea level, or about 155 feet below the ground surface. The groundwater contour lines in the area of the subject property indicate the groundwater flows in a southerly direction." Assessing the actual groundwater depth and flow direction at the subject property was not within the scope of this Phase I ESA. However, based on the

available information groundwater may be present beneath the subject property at a depth of 155 feet below ground surface (bgs). The groundwater flow direction is presumed to be in a southerly flow direction.

1.6 LIMITATIONS

This report does not constitute legal advice. In addition, AMEC makes no determination or recommendations regarding the decision to lease, purchase, sell, or provide financing to SNRI.

1.6.1 Time Constraint

A Phase I ESA update report is required to meet the transaction deadlines. The opinions and conclusions presented in this report are only based on the site conditions observed and information reviewed at the time of this assessment. Information pertaining to site conditions or changes may exist that AMEC is not aware of or which we have not had the opportunity to evaluate within the time available for this Phase I ESA update.

1.6.2 Uncertainty Not Eliminated

As acknowledged in ASTM E1527-05, no Phase I ESA or update can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. The use of ASTM E1527-05 is intended to reduce, but not eliminate, this uncertainty.

Within the limitations of the agreed-upon scope of work and ASTM E1527-05, AMEC has conducted this Phase I ESA update in a professional manner in accordance with generally accepted practices, using the degree of skill and care ordinarily exercised by environmental consultants under similar circumstances. Due to physical limitations inherent to this or any environmental assessment, AMEC does not warrant that the site is free of pollutants or that all pollutants have been identified. As such, no absolute determination of environmental risks can be made. No other warranties, expressed or implied, are made.

1.6.3 Reliance on Information Provided by Others

AMEC has relied upon information provided by others in the evaluation of environmental site conditions reported herein. AMEC did not attempt to independently verify the accuracy or completeness of that information. To the extent that the opinion and conclusions in this report are based in whole or in part on such information, those conclusions are contingent on its accuracy and validity. AMEC assumes no responsibility for any consequence arising from any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to AMEC.

1.7 USER RELIANCE

The Phase I ESA update report has been completed for the use of SNRI. No other person or organization shall rely upon any part of the report without the prior written consent of AMEC. SNRI may not release parts of the report but may release the whole report to third parties; however, in doing so, SNRI shall indemnify and defend AMEC from and against all claims arising out of or in conjunction with such use or reliance by a third party. Additionally, any third party in using this report agrees that it shall have no legal recourse against AMEC.

2.0 SITE DESCRIPTION

The characteristics and uses of the subject property and the properties within the site vicinity are described in the following sections.

2.1 LOCATION AND SITE DESCRIPTION

The subject property consists of the properties located at 4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906, and 4910 Azusa Canyon Road, and adjoining alleys/yards, in Irwindale, California. Based on the Los Angeles County Assessor, the Assessor's Parcel Numbers (APNs) for the subject property (where available) are 8417-026-005, -008, -015, -018, -019, -020, -021, -022, -023, -024, and -025. The subject property is comprised of approximately 7 acres and is occupied by residences, commercial buildings and warehouses, huts and sheds, and land used for storage of miscellaneous items including pallets, equipment, and refrigerant/other chemicals in containers. The subject property is bounded on the west by Azusa Canyon Road and residential neighborhoods, on the north by Malcolm Drilling, on the east by a railroad easement, 4th Street, and commercial buildings, and on the south by a commercial building (Figure 2).

2.2 SUBJECT PROPERTY AND VICINITY GENERAL CHARACTERISTICS

The general characteristics of the site setting, geology and hydrogeology in the vicinity of the subject property are summarized in the following subsections.

2.2.1 General Site Setting

The general setting and topographic features of the subject property and its vicinity are shown on the Unites States Geological Survey (USGS) Baldwin Park 7.5-minute topographic quadrangle map, 1981 (EDR, 2013c; Appendix B). The ground surface elevation at the subject property is approximately 430 feet above mean sea level (msl) in the southwestern portion of the subject property, and approximately 440 feet msl in the northeastern portion of the subject property.

2.2.2 Local Geology and Hydrogeology

Based on a Site Assessment Workplan for property located at 4938 Azusa Canyon Road in Irwindale, California, situated approximately 370 feet south of the southern edge of the subject property, the area "…lies within the northeasterly portion of the Peninsular Ranges Geomorphic Province. The trace of the active Sierra Madre Fault (geologic feature separating the Peninsular Ranges and the Transverse Ranges Geomorphic Provinces) is approximately two miles north of the property. The deposits immediately underlying the site consist of recent alluvium consisting of a pebble to boulder gravel with minor coarse grained sand as a matrix and interbeds. Irwindale is a known rock quarry area, and soil lithology in this area is mostly gravel, large cobbles, and sand" (Ami Adini and Associates, Inc. [Ami Adini], 2008).

According to the above-referenced workplan, the subject property is "…located in the north-central part of the San Gabriel Valley sub-basin to the South Coastal Basin. Depth to groundwater in this area ranges from 160 to 200 feet below ground surface (bgs). The County of Los Angeles Department of Public Works (LADPW) well 3050 is located near the intersection of Los Angeles Street and North Azusa Canyon Road" (or approximately ½ mile south of the subject property). "Depth to groundwater in this well was 166.5 feet bgs (244 feet mean sea level) on April 30, 2003" (Ami Adini, 2008). As previously stated in Section 1.6 of this report, the subject property is located at an elevation of approximately 430 feet above sea level, and the depth to groundwater in the area of the subject property is approximately 275 feet above sea level, or about 155 feet bgs. The groundwater flow direction in vicinity of the subject property is southerly (Orswell & Kasman, 2013).

2.3 CURRENT USE OF THE SITE AND ADJOINING PARCELS

The subject property is located in an area generally developed for residential, light industrial, and commercial land uses. The subject property is currently used as a storage yard, a pallet construction and storage area, warehouse storage, vehicle parking, and residential use. The adjacent parcels are used as follows: to the north is a contractor business, to the east and south are commercial buildings, and to the west is a residential neighborhood. A detailed description of the subject property is provided in Sections 3.2, 6.2.1, and 6.3.

3.0 INFORMATION PROVIDED BY SNRI

The following subsections present information regarding environmental liens and specialized knowledge provided by SNRI.

3.1 ENVIRONMENTAL LIENS

AMEC was not provided with environmental lien records for the subject property.

3.2 SPECIALIZED KNOWLEDGE

SNIR provided AMEC with a June 2013 Phase I ESA report (Orswell & Kasman, Inc., 2013; Appendix A). Key elements, findings and opinions pertaining to the subject property as presented in the previous Phase I ESA, are summarized below.

- The previous Phase I ESA describes property tenants and improvements as follows:
    - 4832 Azusa Canyon Road – Vacant residence. The west side of the property was occupied by a single-story, wood frame with a stucco finish residence. 4838 Azusa Canyon Road – Vacant residence. The west side of the property was occupied by a single-story, wood frame with a stucco finish residence.
    - Assessor Parcel Number 8417-026-005 (No Address) – MJ Roofing, a roofing contractor, and Julio Machado, a construction contractor. The property was an unpaved storage yard.
    - East side of 4832 and 4838 Azusa Canyon Road and Assessor Parcel Number 8417-026-005 – Montalvo Concrete, a concrete paving contractor.
    - 4848 Azusa Canyon Road – S&J Plastering, a storage yard for scaffolding equipment; Sierra Pallets, a pallet manufacturer; Fraijo Brothers, a contractor's storage yard; and, Utility Partners of America, a business that exchanges gas meters. The property was mostly paved and unpaved storage yards. The largest storage yard was located on the east side of the property. On the south side of the large storage yard was a concrete block office building. The building was connected to a septic tank which was located on the north side of the building. On the east side of the storage yard were the remains of a burned out concrete block building which was being used as a mill. Southwest of the mill area was a corrugated steel Quonset hut. An outhouse was located adjacent to the southwest corner of the building and there was a septic tank located south of the outhouse.
    - East of the residence at 4850 Azusa Canyon Road property was a single-story, brick office building. The HVAC system was located on the roof of the building. The building was connected to a septic tank which was located on the east side of the building. Outside were paved parking lots on the east and west sides of the building. Southeast of the office building was a large steel frame with corrugated steel siding warehouse building. Attached to the north side of the warehouse was a long narrow concrete block storage building. There was no HVAC system in the building. The building was connected to a septic tank located in a small storage yard on the north side of the building. There was a parking lot on the south and west sides of the building.
    - 4850 Azusa Canyon Road – Frank Smith residence. The west side of the property was occupied by a single-story, wood frame with a stucco finish residence. The residence had a central HVAC system.

- 4858 Azusa Canyon Road – Hugo Commacho residence. The property was occupied by a single-story, wood frame with a stucco finish residence. The residence had wall-mounted air conditioning units.

- 4900 Azusa Canyon Road – Refrigerant Exchange, a refrigerant recycling business. The property was a partially paved storage yard.

- 4906 Azusa Canyon Road – Corky's Place & Coffee Shop, a warehouse for restaurant equipment, catering equipment and party supplies; and, Winpak, a warehouse for packaging materials. On the south side of the property was a single-story, concrete block industrial building, which was divided into four units. Each unit had an office area and a warehouse area. The HVAC system appeared to be located on the roof of the building. Outside, on the north side of the building, was a paved parking lot.

- Assessor Parcel Number 8417-026-005 (No Address) – This property was a driveway easement which provided access to 4910 Azusa Canyon Road property.

- 4910 Azusa Canyon Road – Osco landscaping, a landscaping contractor, and Refrigerant Exchange. This property was occupied by a single-story, steel frame with corrugated steel siding storage building in the central portion of the property. There was no HVAC system in the building. The building was connected to a septic tank which is located on the north side of the storage building. Outside, on the east side of the building was an unpaved storage yard. South of the storage building was a Quonset hut. A partially paved storage yard was located on the east, south, and west sides of the hut.

- A review of the Los Angeles County Department of Public Works maps and data indicated groundwater depth in the site vicinity is approximately 155 feet bgs with a southerly groundwater flow direction.

- Four underground storage tanks (USTs) were installed at the address believed to be 4848 Azusa Canyon Road including: one 500 gallon gasoline tank was installed in 1949; one 6,000 gallon UST was installed in 1960; one 10,000 and one 5,000 UST were installed in 1972. No building permits were on file showing the tanks were removed. Orswell & Kasman, Inc. recommended additional investigation to determine the existence, location, and impacts of the USTs.

- The 4900 and 4910 Azusa Canyon Road addresses were occupied by Refrigerant Exchange, a refrigerant recycling business. The properties were used to store containers of spent refrigerant. Hundreds of drums and compressed gas cylinders containing refrigerant oil, lithium bromide solution, chlorofluoromethane mixture and propane were reported. Some of the containers were bulging and damaged, and staining on the asphalt was observed. Containers of propane, Freon, and compressed gas cylinders were carelessly stockpiled on the ground west of the Quonset hut. Some of the drums containing lithium bromide solution were reported to be leaking onto the ground surface. Orswell & Kasman, Inc. indicated that although waste lithium bromide solution readily dissolves in water and is not considered a significant threat to the environment, the business should take

immediate steps to prevent the containers from leaking and all of the spilled materials and impacted soil should be properly cleaned up and disposed.

- 4838 Azusa Canyon Road was occupied by a single-family residence. The building was boarded up, vacant, and unoccupied. The residence had severe water damage and there was extensive mold growth. The interior ceilings were sprayed with a white acoustical material and there were several locations where the ceiling was coming down and the material was delaminating from the ceiling. Asbestos and mold surveys should be conducted inside the residence and a licensed contractor should be hired to mitigate the hazardous conditions.

4.0 ENVIRONMENTAL RECORDS REVIEW

As part of this Phase I ESA update, AMEC reviewed environmental records pertaining to the subject property and the findings are presented in the following subsections.

4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

AMEC retained EDR to search federal, state, and tribal environmental regulatory databases for the subject property, as well as properties located within ASTM-specified radii of the subject property (ASTM E1527-05), with documented environmental releases and/or those that use, store, or dispose of regulated chemicals and waste. A list of the regulatory databases searched and the results are presented in EDR's Radius Report (EDR report), dated July 24, 2013 (EDR, 2013a [Appendix C]).

The following sections describe those databases identified for the subject property or adjacent properties with a potential for environmental impacts on the subject property. The EDR report did not identify activity and use limitations or institutional controls relating to the subject property.

4.1.1 Subject Property

The subject property is comprised of the following addresses: 4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906, 4910 Azusa Canyon Road, and adjoining alleys/yards. EDR identified the following listings for addresses associated with the subject property:

- **Jims Roofing Materials, 4848 Azusa Canyon Road, Irwindale, CA:** This business is listed in EDR report as a "historical" site, and is assigned to the Well Investigation Program (WIP)[1] database. This business is not listed in the State Water Resources Control Board (SWRCB) Geotracker database. Based on the lack of reported release(s), this business is not expected to represent an environmental concern for the subject property.

[1] Based on information found on the State Water Resources Control Board (SWRCB) website, the "Well Investigation Program was developed to locate, assess and remediate sources of solvent contamination impacting drinking water wells. WIP is no longer in use. Existing WIP cases that are still being assessed or remediated are now overseen under the SLIC program." If active, these WIP sites can be found on Geotracker.

- **Aircraft Welding Inc., 4848 Azusa Canyon Road, Irwindale, CA:** This business is listed in the Hazardous Waste Manifest Tracking System (HAZNET); database, with a TSD EPA ID CAD099452708. In 1997, 2005, and 2007, the property generated between 0.1251 and 1.1 tons of waste oil and mixed oil. Based on the lack of reported release(s), this business is not expected to represent an environmental concern for the subject property.

- **Utility Disposal Company, 4854 Azusa Canyon Road, Irwindale, CA:** This business, located along the western portion of the subject property, is listed in the WIP database. This facility is not listed in the Geotracker database. Based on the lack of reported release(s), this business is not expected to represent an environmental concern for the subject property.

- **Harpeng Match Plate, 4910 Azusa Canyon Road, Irwindale, CA:** This business, located in the north-central portion of the subject property, is listed in the WIP database. This facility is not listed in the Geotracker database. The file status is listed as "Historical". Based on the lack of reported release(s), this business is not expected to represent an environmental concern for the subject property.

- **Jorge Auto (Yr. 1999), 4900 Azusa Canyon Road, Baldwin Park, CA:** This business, located along the western edge of the property, is listed in the EDR US Historical Auto Station. Based on the lack of reported release(s), this facility is not expected to represent an environmental concern for the subject property.

- **National Priority List (NPL) Region, San Gabriel Valley (Area 2) Sunset & San Bernardino Freeway, Baldwin Park, CA:** The subject property lies within the San Gabriel Valley NPL Area of Concern (AOC) where volatile organic compounds (VOCs) in groundwater are at or above the Maximum Contaminant Level (MCL) as designated by Region 9, USEPA office. The San Gabriel Valley (Area 2) NPL site is listed in the following databases: Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), US Engineering (ENG) CONTROLS, Record of Decision (ROD), Facility Index Data Systems (FINDS), and Potential Responsible Party (PRP). The NPL site is listed with EPA ID #CAD980818512. Specific substances of concern for the San Gabriel Valley (Area 2) include tetrachloroethene (PCE), carbon tetrachloride, and trichloroethene (TCE).

  According to the EDR report (Appendix C), as of September 1983, the San Gabriel Valley (Area 2) conditions are described as follows: "…a groundwater plume that parallels the San Gabriel River to the west in the San Gabriel ground water basin in the Baldwin Park area of Los Angeles County, California. The plume is about 7.5 miles long and 1.5 miles wide. Groundwater is contaminated with TCE, perchloroethylene (PCE), and carbon tetrachloride, according to analyses by State agencies and local water companies. Many public wells in the area exceed the EPA Suggested No Adverse Response Levels (SNARL) for TCE and PCE. Approximately 100,000 people are affected. Utilities and public water companies in the area have tested to ensure that their water supplies contain less than 5 parts per billion (ppb) TCE, a level considered safe for human consumption. When alternative methods of reducing the TCE level below 5 ppb are not effective, wells are removed from service. Status in June 1984: A supplemental sampling program

of contaminated wells will begin soon to get a snapshot view of the degree of contamination. The State Department of Health Services and EPA are preparing to initiate a remedial investigation/feasibility study to determine the aerial and vertical extent of contamination and to develop alternatives for treatment and management of the problem. EPA continues its investigation to identify sources of the contamination. Area 2, along with the three other San Gabriel Valley sites, was added to the NPL in May 1984 because it involves a serious problem that required taking immediate remedial action" (EDR 2013a).

Based on information obtained from the USEPA Superfund website (http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/ViewByEPAID/CAD980818512), "The Baldwin Park Operable Unit (BPOU) addresses several commingled plumes of groundwater contamination that have resulted in an area of contamination over a mile wide and eight miles long". "…the remedy at the [NPL] site is a large-scale groundwater extraction and treatment (i.e., "pump and treat") system. Four pump and treat "sub-projects" have been built, having a combined treatment capacity of 26,000 gallons per minute (equivalent to 37 million gallons per day [MGD]). Each sub-project has two or more groundwater extraction wells and three or more water treatment processes (e.g., air stripping, granular activated carbon, ion exchange, advanced oxidation) for removal of the contaminants from the groundwater" (AMEC and ERM – West, Inc. [ERM], 2013).

One treatment plant within the BPOU is the Valley County Water District (VCWD), located at 1520 Lante Street, which is approximately 1500 feet northwest of the subject property. As discussed in a 2012 Annual Performance Evaluation Report, Volume 1, three extraction wells associated with the VCWD treatment plant are SA1-1, located north of the subject property; SA1-2, located southwest of the subject property; and, SA1-3, located northwest of the subject property (AMEC and ERM, 2013). Groundwater monitoring well MW5-03 is located north-northeast of the subject property (presumably upgradient), and groundwater monitoring well MW5-25 is located southwest of the subject property (presumably down gradient). Groundwater flow direction across the area (including the subject property) is generally southwest (AMEC and ERM, 2013). According to information presented in the report, generalized distribution of 1,2-dichloroethane (DCA), 1,4-dioxane, carbon tetrachloride, N-nitrosodimethylamine (NDMA), perchlorate, PCE, and TCE trend southwest to northeast, along the northwestern edge of the subject property. (Note: Based on the regional maps, perchlorate is apparently the only constituent of those listed found in groundwater under the subject property).

The potentially responsible parties (PRPs) listed on the USEPA Superfund website as the largest contributors to the groundwater contamination included Aerojet General Corporation (and Gencorp Inc.), Huffy Corporation, Oil & Solvent Process Co., and Wynn Oil Co. 17 other facilities were listed as lesser contributors to groundwater contamination. Further, none of businesses or addresses associated with the subject property were listed as PRPs (USEPA Superfund website, 2013).

Because of the close proximity of impacted groundwater with respect to the subject property, the NPL site (BPOU) represents an area of environmental concern for the

subject property. The reported condition of groundwater beneath and near the subject property constitutes a REC.

4.1.2 Surrounding Properties

As previously discussed in Section 2.2.2, the presumed groundwater flow direction in the vicinity of the subject property is southerly.

Based on the EDR database search, the following sections discuss relevant properties in the site vicinity. Where feasible, based on existing information, statements regarding the potential for a nearby property to impact environmental conditions at the subject property are included.

- **Rodriguez Trucking (also listed as J.G. Rodriguez Trucking), 4938 Azusa Canyon Road, Irwindale, CA:** This property, located approximately 225 feet north of the subject property (presumably upgradient), is listed on the Leaking Underground Storage Tank (LUST), Hist UST, WIP, and Los Angeles Co. HMS databases. One 12,000 gallon gasoline and one 500 gallon waste oil tanks are listed at the property. It is also listed on Geotracker as a LUST Cleanup Site and Open Site Assessment, as of October 21, 2008. The most recent document found on Geotracker for this property is a letter from Los Angeles County Department of Public Works (LADPW) dated June 26, 2013, indicating that they have reviewed a site assessment for this property (dated August 30, 2001), and have referred this matter to the State Water Resources Control Board. As stated in the LADPW letter, "there is a significant amount of soil contamination at the site". Due to the close proximity of this property and presumed upgradient location, the open site assessment status, and lack of environmental information regarding vertical and lateral extent of contamination, this property is considered a potential environmental concern (PEC) for the subject property with respect to potential groundwater impacts.

- **U.S. Rentals, 15402 Arrow Hwy E, Baldwin Park, CA:** This property is located approximately 1700 feet north-northwest, and presumably upgradient, of the subject property. It is listed on DTSC'S Historic Hazardous Waste and Substances Site List (Hist Cortese) and LUST databases. EDR and Geotracker show this property as a LUST cleanup site with an open site assessment. Gasoline is listed as the potential contaminant of concern; however the potential media affected is still under investigation. The most recent document available on Geotracker indicates that the extent of contamination is unknown and groundwater has not been evaluated. Based on the distance of this property from the site, it is unlikely that the subject property has been impacted by environmental concerns known to exist at this property. However, due to the presumed upgradient location, the open site assessment status, and lack of environmental information regarding extent of groundwater contamination, this property is considered a PEC for the subject property.

- **4926 Azusa Canyon Road, Baldwin Park, CA: Malcolm Drilling Co. Inc.:** This property, located adjacent to the northern site boundary, is presumably upgradient of the subject property. It is listed in the UST, Resource Conservation Recovery Act – Small Quantity Generator (RCRA-SQG), FINDS, Los Angeles Co. HMS, and

Emissions Inventory Data (EMI) databases. In 1992, waste codes were listed as D001 (ignitable hazardous waste) and D002 (corrosive hazardous waste). No violations were found. Based on the lack of reported release(s), this business is not expected to represent an environmental concern for the subject property.

- **CMZ Co. (also listed as 4926 Azusa Canyon Road, as above):** This property is listed in the Los Angeles Co. HMS, WIP, and Statewide Environmental Evaluation and Planning System (SWEEPS) UST databases. EDR report lists two active tanks (one 6,000 gallon gasoline and one 6,000 gallon diesel) at this property. Based on the lack of reported release(s), this business is not expected to represent an environmental concern for the subject property.

4.1.3 Other Properties Identified in the EDR Databases

Based on their regulatory status, their relative distances from the subject property, their locations in relation to the assumed direction of groundwater flow, and/or lack of reported release(s), additional facilities listed in the EDR report including 20 orphan (unmapped) properties are not expected to represent an environmental concern for the subject property.

4.1.4 Water Wells

According to the EDR regulatory database search report (EDR 2013a), the following wells are located within approximately one mile of the subject property: one Federal United States Geological Survey (USGS) well; one Federal FRDS public water supply well; and seven state wells. One state well, located approximately ½ to 1 mile west of the subject property, on Lante Street, is listed as an “Active Treated” groundwater well. Chemical findings in 2011 include carbon tetrachloride, chloroform (THM), n-nitrosodimethylamine (NDMA), PCE, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethane, TCE, nitrate (NO_3), cis-1,2-dichloroethene, 1,2,3-trichloropropane, perchlorate, and 1,4-dioxane.

4.1.5 Abandoned Oil and Gas Wells

Abandoned oil and gas wells, if present, can present an environmental concern due to potential methane migration or soil or groundwater contamination from mud pits, storage pits, or other features. Based on information listed in the EDR report (2013a) and State of California Department of Oil, Gas, and Geothermal Resources (DOGGR) website (DOGGR, 2013), there are no oil and gas wells on site or within a 1 mile radius of the subject property.

4.2 ADDITIONAL RECORDS REVIEW

In conformance with ASTM E1527-05, AMEC conducted inquiries with environmental and other public agencies in an attempt to obtain additional information on potential environmental conditions at the subject property. This section summarizes file request and review findings. Copies of agency correspondences are included in Appendix D.

4.2.1 Geotracker

The subject property was not listed in Geotracker. AMEC reviewed information from Geotracker for properties adjacent to and upgradient of the subject property including Rodriguez Trucking, Malcolm Drilling, CMZ Co., and U.S. Rentals, as described in Section 4.1.2 of this report.

4.2.2 U.S. Environmental Protection Agency

AMEC requested records for the subject property from the U.S. Environmental Protection Agency (U.S. EPA) on July 17, 2013. The U.S. EPA indicated that no records were found for the subject property.

4.2.3 California Regional Water Quality Control Board, Los Angeles Region

AMEC requested to review records for the subject property from the Los Angeles Regional Water Quality Control Board (RWQCB). The RWQCB has indicated that no records were found for the subject property.

4.2.4 Los Angeles County Fire Department

AMEC requested to review records for the subject property from the Los Angeles County Fire Department (LACFD). The LACFD indicated that the agency to contact regarding site records is the Public Health Investigation (PHI), Custodian of Records. Details of this correspondence are in Section 4.2.7 below.

4.2.5 Department of Toxic Substances Control

AMEC requested to review records for the subject property from the Department of Toxic Substance Control (DTSC) Chatsworth and Cypress offices. Responses from both offices indicated that no records were found for the subject property.

AMEC searched DTSC's Envirostor online environmental database (www.envirostor.dtsc.ca.gov/public), and no listings of environmental concerns were found for the subject property.

AMEC searched DTSC's Hazardous Waste Tracking System (HWTS) (hwts.dtsc.ca.gov/report_search.cfm?id=5 for EPA ID) profiles for the subject property and found the following records:

- CAC000763192 Frank Schmoranzer, 4906 Azusa Canyon Road; generated approximately 0.6 tons unspecified solvent mixture/other organics (214) in 1992.
- CAC001310336 Aircraft Welding Inc., 4848 Azusa Canyon Road; generated approximately 0.11 tons waste oil/mixed oil in 1997.

- CAL000272398 Aircraft Welding Inc., 4848 Azusa Canyon Road; generated waste oil/mixed oil, approximately 1 ton in 2004, 0.7 ton in 2005, 0.5 ton in 2007.

- CAC002372031 Frank Smith, 4900 Azusa Canyon Road; generated approximately 0.2 tons other organics in 2001.

- CAC002422703 Jorge & Ana Rodriguez, 4938 Azusa Canyon Road; generated approximately 3.8 tons waste oil/mixed oil in 2001.

- CAC002607002 Refrigerant Exchange, 4900 Azusa Canyon Road; generated approximately 0.5 tons unspecified aqueous solution, 0.02 tons halogenated solvents (211), 0.8 other organic solids, all in 2006.

- CAD021083142 California Transmission, 4906 Azusa Canyon Road; generated approximately 1.9 tons waste oil/mixed oil in 1993.

- CAL000099216 Kent's Body Works, 4906 Azusa Canyon Road; no HWTS records were available.

- CAL000317375 Sierra Pallet, 4848 Azusa Canyon Road, Suite B; no HWTS records were available.

- CAL912424998 L Barrios & Associates, 4900 Azusa Canyon Road; generated approximately 0.4 tons aqueous solution, 1999.

An adjoining property (Malcolm Drilling, 4926 Azusa Canyon Road) included hazardous waste generator records between 1998 and 2013 for oil, waste oil, oil/water sludge, unspecified organics, aqueous solution, other organic solids, and unspecified/oxygenated solvents. The majority of the hazardous waste is listed as oil/waste oil.

4.2.6 South Coast Air Quality Management District

AMEC searched the website (http://www.aqmd.gov/webappl/fim/default.htm) and found the following records for the subject property included:

- 4906 Azusa Canyon: Blanca Inc., Spray Booth in 2001. (Note: location details for the spray booth were not available.)

- 4900 Azusa Canyon: Refrigerant Exchange, this property was listed on the website, however no records were shown.

The record listed for the adjoining property, 4926 Azusa Canyon: CMZ Co, Inc., showed a gasoline storage tank in 1991 and a diesel internal combustion engine (ICE) in 1990.

4.2.7 Public Health Investigation

AMEC submitted a request to the Public Health Investigation (PHI), Custodian of Records to review records for the subject property. A response is still pending.

5.0 HISTORICAL DOCUMENT REVIEW

AMEC reviewed historical aerial photographs, historical topographic maps, and a city directory abstract to identify the historical use of the subject property and adjacent properties. Sanborn maps were not available for the subject property or vicinity. The findings of our historical records review are discussed in the sections below.

5.1 REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS

AMEC reviewed aerial photographs of the site vicinity for the years 1928, 1938, 1949, 1956, 1960, 1968, 1976, 1989, 1994/1995, 2005, 2009, 2010, and 2012 from EDR (EDR, 2013b). Copies of the aerial photographs are included in Appendix E. A summary of the conditions observed on the photographs is presented in Table 1.

5.2 HISTORICAL TOPOGRAPHIC MAPS

Topographic maps were obtained from EDR for the years 1894, 1901, 1904, 1939, 1953, 1966, 1972, and 1981 (EDR, 2013c). In general, interpretations of topographic maps are consistent with interpretations drawn from the aerial photographs. A description of the observations from the topographic map review is presented in Table 1. The topographic map scales ranged from 1:24,000 (1 inch equals 2,000 feet) to 1:250,000 (1 inch equals 4 miles). Copies of the topographic maps are included in Appendix B.

5.3 CITY DIRECTORY ABSTRACT

AMEC reviewed a historical city directory abstract for the subject property and surrounding area obtained from EDR (2013d). Business directories including city and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2012. The report compiled information by geocoding the latitude and longitude of the subject property and gathering information about properties within 660 feet of the target property. The city directory abstract is included as Appendix F of this report.

Based on the EDR city directory abstract, the following information was listed for the subject property:

- 4832 Azusa Canyon Road: From 1957 to 2003, the address appears to be a private residence.
- 4838 Azusa Canyon Road: From 1957 to 1980, the address appears to be a private residence.
- 4848 Azusa Canyon Road: From 1995 to 2012, the address appears to have been occupied by a steel manufacturer (Mission Steel Corporation), a welding company

(Active Aircraft Welding Inc.), a tax business (JB Tax Service), a roofing supply company JB Roofing Supply), and a pallet company (Sierra Pallet).

- 4850 Azusa Canyon Road: From 1957 to 2003, the address appears to have been occupied by a private residence.

- 4854 Azusa Canyon Road: From 1957 to 1966, the address appears to have been occupied by a private residence; in 1985, the address is listed as a utility disposal company; and, in 2003, the address is listed as a private residence.

- 4858 Azusa Canyon Road: From 1975 to 2003, the address appears to have been occupied by a private residence.

- 4900 Azusa Canyon Road: In 1966, the address was listed to Soliz Jesus; in 1975, the address was listed as Barrios Leo & Sons Gardeners, Southwestern Landscaping, and 5th Ave Vending; and, from 1980 to 1995, the address was listed as Barrios Leo & Sons.

- 4906 Azusa Canyon Road: From 1957 to 1966, the address was listed to various individuals; from 1960 through 1985, the address was listed as Cal West Transmission Parts; in 1995, the address was listed as Green Gables Lamp Shade and The Frame Shop; and, in 2003, the address was listed to R&J Mouldings and Frank Schmoranger.

- 4910 Azusa Canyon Road: From 1957 to 1995, the address was listed to Harpeng Match Plate Co.

Based on the EDR city directory, the following listings were shown for adjacent properties:

- Various addresses on Anniston Avenue, located in an apparent residential neighborhood west of the Subject property, are listed as residences between 1975 and 2003.

- 4800 Azusa Canyon Road, located adjacent to the southern boundary of the Subject property, is listed as Mack R Trucking and Cwikray Inc. in 1995, Cwikray in 2003, and Huy Fong in 2012.

- 4811 Azusa Canyon Road, located southwest of the southern boundary of the subject property, is listed as a liquor store, a sandwich shop, and a market from 1975 to 2012.

- Addresses on Azusa Avenue, adjacent to the west side of the Subject property, are primarily residential listings or businesses associated with residential addresses.

- 4926 Azusa Canyon Road is listed as Croswell & Larson Contractors from 1957 to 1985.

5.4 SANBORN MAPS

Sanborn Fire Insurance maps were not available for review in the area of the subject property (EDR, 2013e). A copy of the Sanborn maps search results is presented in Appendix G.

6.0 SITE RECONNAISSANCE AND INTERVIEWS

Ms. Ellen Smith and Mr. Thet Naing of AMEC conducted a reconnaissance of the subject property and adjacent areas on July 22, 2013. Also present were the following personnel: Mr. Lonnie Nadal of SNRI; Ms. Lynn Knox of CBRE; and, Mr. Hector Aguirre of American Integrated Services, Inc. (AIS). A description of the subject property, as observed during the site reconnaissance, and information obtained from interviews conducted during the reconnaissance, is provided in the following sections. Photographs taken during the reconnaissance are included in Appendix H.

The subject property is approximately 7 acres in size and is occupied by residences, buildings, huts, sheds, freight storage containers, and undeveloped land used for storage of miscellaneous items. The surface is either paved with asphalt or concrete, or comprised of soil.

6.1 METHODOLOGY AND LIMITING CONDITIONS

The reconnaissance included observing existing conditions at the subject property and the general surrounding areas with respect to possible environmental concerns. No weather-related limitations were encountered at the time of our reconnaissance. There were a few freight containers and structures which were inaccessible at the time of the site reconnaissance.

6.2 OBSERVATIONS

The subject property consists of structures (residences, buildings, huts, and sheds) and undeveloped land used for storage of refrigerant and other substances (some known and some unknown), as well as pallets, as described below.

6.2.1 Subject Property

4832 Azusa Canyon Road:

This address is situated in the southwest corner of the subject property, and occupied by one single-story residential structure. No access was provided. Based on observations from the sidewalk, outside the existing fence, the structure appeared to be vacant and had a stucco finish.

4838 Azusa Canyon Road:

This address is situated adjacent to, and north of, 4832 Azusa Canyon Road, and is occupied by one single-story residential structure (Photos 1 and 2). Access to the property was provided through the entrance gate, however access was not provided to the building interior. Based on observations from outside the structure, the residence appeared to be vacant and in poor condition. At the time of the site reconnaissance, a leaking water pipe was observed on the exterior west side of the structure, indicating that the water is still operating at the address.

Property between 4838 and 4850 Azusa Canyon Road:

This property is located immediately north of 4838 and south of 4850 Azusa Canyon Road (Photos 3 and 4). It is generally unpaved and used for storage of vehicles and equipment. On the northern edge of this address is an east-west trending alley which connects to Azusa Canyon Road. The alley is paved with asphalt, and provides access to 4848 Azusa Canyon Road.

4848 Azusa Canyon Road:

This address is the largest address at the subject property, and is generally situated in the southeast, central, and northwest portions of the subject property. A large steel-framed warehouse with metal siding is located in the southeast corner of this address (Photo 5). The warehouse interior is paved with concrete and used for storage of parts and vehicles (Photo 6). Petroleum products or hazardous substances were not observed inside or adjacent to the warehouse. A minor surface stain was observed on concrete in the northeast corner of the building (Photo 7). Along the northern edge of the building interior is a chain link fenced area containing parts. According to Mr. Frank Smith, the property owner, this area housed a kiln that was used to make concrete blocks. Inside the central portion of the warehouse is a square cut concrete pad, lighter in color than surrounding pavement (Photo 8). The warehouse is not equipped with an HVAC system. The building is reportedly connected to a septic tank located on the north side of the structure. (Note: during the site visit, a metal round cover was observed just north of the warehouse. The cover was removed and a metal vault was observed which could be the septic tank, Photo 9). Also along the north side of the building there is a long storage area containing miscellaneous parts. A concrete- and asphalt-paved parking lot is located south and west of the warehouse. Square cuts were observed in two locations in the concrete parking area, along the southern property edge (Photos 10 and 11).

North of the warehouse is an open area covered by an awning containing an electrical box. East of this area and still north of the warehouse is a Quonset hut which appears to be empty

(Photo 12). An outhouse and septic tank are located southwest of the hut. Northeast of the hut is an open-sided structure of wood logs. This area is apparently used for cutting/assembling wood pallets (Photo 13).

Minor oil residue was observed in one location on soil/gravel in the yard near the wood pallet storage area. The residue appeared to have resulted from parked vehicles. The extent of oil residue appeared to be de minimis and did not appear to be widespread.

Northwest of the large warehouse is a single-story concrete block office building (Photo 14). An HVAC system is mounted on the roof and the building is connected to a septic tank which is reportedly located on the east side of the building. (Note: during the site visit two metal covers were observed in the concrete pad located east of the office building. The covers were removed during the site visit and a sewage odor was noted, Photos 15 and 16). Access was not provided to the office interior and blinds covered the windows.

4850 Azusa Canyon Road:

This address, south of 4854 Azusa Canyon Road, is occupied by a single-story residential structure with stucco finish (Photo 17). The residence is occupied by Mr. Smith, the site owner. Access to the residence was provided by Mr. Smith. The residence has central heating and air conditioning.

4854 Azusa Canyon Road:

This address is located between 4850 and 4858 Azusa Canyon Road, along the western edge of the site, and is occupied by a single-story structure and vehicle/equipment storage. Access was not provided.

4858 Azusa Canyon Road:

This address is located north of 4854 Azusa Canyon Road, along the western edge of the property, and is occupied by one single-story structure with stucco exterior. Access was not provided to this property.

4900 and 4910 Azusa Canyon Road:

Both addresses are located in the northwestern portion of the subject property, and are occupied by a storage yard used to store refrigerant and other substances in various containers (Photos 18 through 34). The yard is partially paved with asphalt and unmaintained vegetation is common throughout the lot. A Quonset hut and metal shed are present in the yard and various metal cylinders were observed in and around the structures. Totes are also

present in this area, some containing what appears to be refrigerant. Some of the containers in the yard are on pallets, some are in dumpsters or bins, while others are strewn about the yard. An area of darkened, moist soil was observed in the southwest corner of lot 4900, adjacent to the western edge of the subject property, and a low spot in the surface soil/asphalt was observed west of the Quonset hut.

4906 Azusa Canyon Road:

This address is located in the northwestern corner of the subject property, and is occupied by a long, narrow concrete block building (Photos 35 through 37). The building is divided into four units (A through D) equipped with bathrooms, an office, and warehouse area. At the time of the site visit, Units D and C (in the eastern portion of the building) were vacant, Unit B was not accessible due to the presence of guard dogs, and Unit A (the western-most unit) was fully occupied by miscellaneous clothing, household items, etc. A paved alley runs along the northern side of the building and connects with Azusa Canyon Road. The alley is secured with a locked chain-linked gate..

6.2.3 SURROUNDING AREAS

West of the subject property is a residential neighborhood (Photo 38). To the north of the subject property is a commercial business (Malcolm Drilling, Photo 39). East of the subject property is a railroad easement, 4th Street, and several commercial structures. South of the subject property is a commercial building.

6.3 RESPONSES TO QUESTIONNAIRE

On July 22, 2013, Ms. Smith conducted an interview with Mr. Frank Smith. The meeting took place in Mr. Smith's residence, at 4850 Azusa Canyon Road, Irwindale, California. Additionally, Mr. Smith's written responses to the questionnaire are included in Appendix I. The interview and questionnaire responses are summarized below:

- Mr. Smith began acquiring parcels (the subject property) in the 1970s. Current and historical addresses for the subject property include 4832, 4838, 4844, 4848, 4850, 4858, 4900, and 4906, 4910, and adjoining alleys. Residential and commercial structures existed on the subject property at the time of purchase. Residential structures included 4832, 4838, 4844, 4850, and 4858 Azusa Canyon Road.

- The commercial buildings included a kiln that was used by a concrete manufacturing company. Equipment was stored on site and inside several buildings which no longer exist on the subject property. Rabbit and chicken hutches were located in the southeast corner of the subject property. A metal building was constructed near the southern edge of the kiln and used for a steel manufacturing business. The building was eventually expanded east to the railroad tracks.

- Between 1986 and 1988, the steel company was sold and the building was leased to an ornamental iron company. It was then leased to Active Aircraft Welding until August or September, 2011.

- 4832 Azusa Canyon Road was a residential use property. Mr. Smith purchased it in early 1970 for approximately $8,000 to $10,000. 4838 Azusa Canyon Road was owned by the Mayor of Azusa and Mr. Smith purchased it in 1977 and demolished the structure. 4848 Azusa Canyon Road, a residential property, was purchased by Mr. Smith in 1977. 4850 Azusa Canyon Road, also residential, was purchased in the early 1980s and is currently occupied by Mr. Smith. 4858 Azusa Canyon Road, also residential, was purchased by Mr. Smith (year unknown).

- 4906 Azusa Canyon Road was a nursery and towing company. Mr. Smith does not remember the year the property was purchased.

- 4910 Azusa Canyon Road was purchased by Mr. Smith from previous owner who built plastic products.

- Mr. Smith recalled that one UST was removed from 4848 Azusa Canyon Road, in the area of the former kiln.

7.0 FINDINGS AND OPINIONS

The following are findings of AMEC's Phase I ESA update:

- The subject property, including addresses 4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906, and 4910 Azusa Canyon Road, and adjoining alleys/yards, in Irwindale, California, is approximately 7 acres in size. The subject property is occupied by residences, commercial buildings and a warehouse, huts and sheds, and land used for storage of miscellaneous items including pallets, equipment, and refrigerant/other chemicals in containers. Frank Smith, the property owner, occupies the residential property at 4850 Azusa Canyon Road. The surrounding land is a mixture of residential, light industrial, and commercial use.

- The ground surface elevation at the subject property is approximately 430 feet above msl in the southwestern portion of the property, and approximately 440 feet msl in the northeastern portion of the property. Depth to groundwater in the vicinity of the subject property is presumed to be between 155 and 200 feet bgs.

- The subject property lies within the San Gabriel Valley (Area 2) NPL, which is part of the Baldwin Park Operable Unit (BPOU). Area 2 is listed as an Area of Concern (AOC) for VOC contamination in groundwater with concentrations at or above the MCLs. The NPL site is listed in CERCLIS, US Engineering Controls, ROD, FINDS, and Potential Responsible Party (PRP) databases. Groundwater in the near vicinity of the subject property is impacted by VOCs (PCE, TCE and other VOCs), perchlorate and 1,4-dioxane. Based on groundwater plume maps presented in the 2012 Annual Performance Evaluation Report (AMEC and ERM, 2013), trace concentrations of VOCs, perchlorate and 1,4-dioxane may be present in the groundwater beneath the subject property. Regional groundwater is being monitored and treated with respect to VOCs. According to the USEPA website, the

subject property is not identified as one of the PRPs. Due to the close proximity of impacted groundwater with respect to the subject property, the NPL site (BPOU) represents an area of environmental concern for the subject property. The reported condition of groundwater beneath and near the subject property constitutes a REC for the site.

- Portions of the subject property (primarily 4900 and 4910 Azusa Canyon Road) contain drums, totes, cylinders, and other types of containers of hazardous materials being stored by Refrigerant Exchange, a refrigerant recycling company. Labels indicate the containers are used to store refrigerant oil, lithium bromide, chlorofluoromethane mixture and propane. Some of the containers are unlabeled. Numerous containers are stored haphazardly, leaks and staining were observed, and containers are bulging and damaged. The chemicals stored on the subject property and possible environmental impacts associated with these chemicals represent RECs for the subject property.

- Permits indicate the existence, or previous existence, of four USTs at 4846 Azusa Canyon Road (Note: the address listing of 4846 Azusa Canyon Road is believed to be incorrect, with the correct address being 4848 Azusa Canyon Road). The available permit drawings are not to scale and tank removal reports are not available. Based on this information, actual UST locations cannot be determined. Mr. Smith recalled the removal of a UST near the area of the former kiln. The lack of information (locations and environmental impacts, if any) with respect to the USTs represents an environmental concern for the subject property, and represents a REC.

- Residential structures appear to have been built in the 1940s or 1950s. Based on the age of these structures or other structures at the subject property, ACMs and LBPs may be present. Orswell & Kasman reported the potential for mold to be present in the structure at 4838 Azusa Canyon Road. The potential presence of ACM, LBP and/or mold represent PECs for the subject property.

- Septic tanks were reported at the subject property; however the actual locations of the septic tanks have not been documented. Observations of two metal covers housing two metal vaults just east of the presumed office were indicative of possible septic tanks. An additional metal cover, north of the previous kiln building, housed a metal vault-like feature, possibly indicating a septic tank. Based on this information, the septic tanks represent a PEC for the subject property.

- Rodriguez Trucking (also listed as J.G. Rodriguez Trucking), located at 4938 Azusa Canyon Road, approximately 225 feet north of the subject property (presumably upgradient) is listed on the LUST, Hist UST, WIP, and Los Angeles Co. HMS databases. According to the records, one 12,000 gallon gasoline tank and one 500 gallon waste oil tank are listed at the property. This property is also listed on Geotracker as a LUST Cleanup Site and Open Site Assessment, as of October 21, 2008. The most recent document found on Geotracker for this property is a letter from LADPW (June 26, 2013), indicating that they have reviewed a site assessment for the property dated August 30, 2001, and have referred this matter to the State Water Resources Control Board. As stated in the LADPW letter, “there is a significant amount of soil contamination at the site”. Due to the close proximity

of this facility and presumed upgradient location to the subject property, the open site assessment status, and lack of environmental information regarding vertical and lateral extent of contamination (in soil and groundwater), this business represents a PEC for the subject property.

- U.S. Rentals, located at 15402 Arrow Hwy East, is situated approximately 1700 feet north-northwest, and presumably upgradient, of the subject property. It is listed on Hist Cortese and LUST databases. EDR and Geotracker show this property as a LUST cleanup site with an open site assessment. Gasoline is listed as the potential contaminant of concern; however the potential media affected is still under investigation. The most recent document available on Geotracker indicates that the extent of contamination is unknown and groundwater has not been evaluated. Based on the distance of this property from the subject property, it is unlikely that groundwater beneath the subject property has been impacted by this property; however, due to the lack of environmental information and LUST cleanup/open site assessment status, this property represents a PEC for the subject property.

- Minor oil residue was observed on soil/gravel in the yard near the wood pallet storage area. The residue appeared to have resulted from parked vehicles. The extent of oil residue did not appear to be widespread; however the extent of environmental impacts is unknown. Based on the observations, the oil residue appears to be de minimis.

Based on the information gathered during this Phase I ESA update a number of RECs and PECs were identified in connection with the subject property or the adjacent properties. A summary of the RECs and PECs is provided below. If additional information is obtained regarding the data gaps described below in Section 8.0, the findings and opinions of this ESA update could potentially change.

The Phase I ESA update identified three RECs in connection with the subject property:

- The subject property lies within the San Gabriel Valley (Area 2) NPL site (BPOU), AOC. Groundwater in the near vicinity of the subject property is impacted with VOC (PCE, TCE and other VOCs), perchlorate and 1,4-dioxane. An active groundwater pump and treat system (and associated extraction wells) is located north of the subject property. According to the USEPA website, the subject property is not identified as one of the PRPs. Although no immediate action appears warranted at this time, future Site use planning should consider the presence impacted groundwater beneath and in the vicinity of the subject property.

- Portions of the subject property utilized by the refrigerant recycling company, Refrigerant Exchange (4900 and 4910 Azusa Canyon Road, and other areas of the subject property), contain drums, totes, cylinders, and other types of containers of hazardous materials. Labels indicate the containers are used to store refrigerant oil, lithium bromide, chlorofluoromethane mixture and propane. Some of the containers were unlabeled. Based on the condition of the container and observations made during the site visit, a release of hazardous materials may have occurred at the subject property, and the presence of these chemicals in soil should be considered during future site planning and redevelopment.

- Four USTs are believed to be located, or previously located, at 4848 Azusa Canyon Road. No records were available regarding the removal or assessment associated with these USTs. Environmental impacts, if any, associated with the USTs are unknown. If environmental impacts associated with the former USTs are encountered at the subject property, appropriate assessment, handling and remediation should be considered during future site planning and redevelopment.

Additionally, the following four PECs were identified in connection with the subject property:

- Residential structures appear to have been built in the 1940s or 1950s. Based on the age of the structures and other structures at the subject property, ACM and LBP may be present. In addition, mold may be present in the structure at 4838 Azusa Canyon Road, as indicated in the previous Phase I ESA, or other site structures. The potential for ACM, LBP, and/or mold at the subject property should be considered during future site planning and redevelopment.

- Septic tanks were reported at the subject property; however the actual locations and/or associated environmental impacts of the septic tanks are unknown. Based on this information, the septic tanks represent a PEC for the subject property. If environmental impacts associated with septic tanks are found to present on the subject property, appropriate assessment, handling and remediation should be considered during future site planning and redevelopment.

- Rodriguez Trucking is located at 4938 Azusa Canyon Road, approximately 225 feet north of the subject property (presumably upgradient). It is listed as a LUST Cleanup Site with an Open Site Assessment, as of October 21, 2008. There is reportedly a significant amount of soil contamination at this property, the extent of which has not been determined, and groundwater impacts, if any, have not been assessment. Based on anticipated depth of groundwater in the vicinity of this facility, it is unlikely that groundwater beneath this facility is impacted. However, groundwater impacts cannot be ruled out. Due to the close proximity of this address and presumed upgradient location to the subject property, the known soil contamination, the open site assessment status, and the lack of environmental information regarding vertical and lateral extent of soil contamination and groundwater impacts (if any), this business represents a PEC for the site. If environmental impacts from Rodriguez Trucking are found to be present at the subject property, appropriate assessment, handling and remediation should be considered during future site planning and redevelopment.

- U.S. Rentals, located at 15402 Arrow Hwy East, is situated approximately 1700 feet north-northwest, and presumably upgradient, of the subject property. Gasoline is listed as the potential contaminant of concern; however the potential media affected is still under investigation. The most recent document available on Geotracker indicates that the extent of contamination is unknown and groundwater has not been evaluated. Based on the distance of this property from the subject property, it is unlikely that groundwater beneath the subject property has been impacted by this property; however, due to the lack of environmental information and LUST cleanup/open site assessment status, this property represents a PEC for the subject property.

8.0 DATA GAPS

As defined by ASTM 1527-05, a data gap is “a lack of or inability to obtain information required by this practice despite good faith efforts by the Environmental Professional to gather such information.” Based on the results of our Phase I ESA update, one data gap was identified. The data gap is related to the pending response from PHI, which is pending as of the date of this report. Depending on the information available from this agency, the findings and opinions of this ESA update could potentially change.

9.0 CONCLUSIONS

AMEC has performed a Phase I ESA update in conformance with the scope and limitations of ASTM Practice E1527-05 for property located at 4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906, and 4910 Azusa Canyon Road, and adjoining alleys/yards, in Irwindale, California. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report. As described in Section 7, three RECs and four PECs were identified in connection with the subject property as described in Section 7.0.

10.0 ADDITIONAL SERVICES

No additional services were provided.

11.0 DEVIATIONS

No deviations or deletions from ASTM E1527-05 were made during preparation of this Phase I ESA update.

12.0 REFERENCES

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EDR, 2013b, EDR-Aerial Photograph Report, 4848 Azusa Canyon Road, Irwindale, California, July 26.

EDR, 2013c, EDR-Historical Topographic Map Report, 4848 Azusa Canyon Road, Irwindale, California, July 24.

EDR, 2013d, EDR-City Directory Abstract, 4848 Azusa Canyon Road, Irwindale, California, July 24.

EDR, 2013e, EDR-Sanborn Map Report, 4848 Azusa Canyon Road, Irwindale, California, July 24.

Orswell & Kasman, Inc., 2013, Phase I Environmental Site Assessment Report, Industrial and Residential Properties, 4832, 4838, 4850, 4858, 4900, and 4910 Azusa Canyon Road, Irwindale, CA, June 5.

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State of California Department of Oil, Gas, and Geothermal Resources (DOGGR) website, 2013, http://maps.conservation.ca.gov/doms/doms-app.html, August.

State of California Regional Water Quality Control Board website, 2013, http://geotracker.swrcb.ca.gov/, July.

USEPA Superfund website, 2013, http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/ViewByEPAID/CAD980818512, October.

13.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in section 312.10 of 40 Code of Federal Regulations (CFR) 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the site. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Ellen Smith
Technical Professional - Geology

Linda Conlan, PG
Principal Geologist

FIGURES

Path: Y:\IR13164320\esri\Site Location Map-Phase 1.mxd

N

0 500 1,000

Approximate Scale in Feet

Basemap modified from aerial photograph from
Eagle Aerial Imaging, Inc., dated February 28, 2011.

SITE LOCATION MAP
Phase I ESA
4832, 4838, 4848, 4850, 4854, 4858,
4900, 4906, and 4910 Azusa Canyon Road
Irwindale, California

By: pah	Date: October 9, 2013	Project No. IR13164320
amec		Figure 1

Path: Y:\IR13164320\esri\Site Plan-Phase 1.mxd

Explanation

Parcel boundary within the site

NA No address

N

0 100 200

Approximate Scale in Feet

Basemap modified from aerial photograph from
Eagle Aerial Imaging, Inc., dated Febuary 28, 2011.

SITE MAP
Phase I ESA
4832, 4838, 4848, 4850, 4854, 4858,
4900, 4906, and 4910 Azusa Canyon Road
Irwindale, California

By: pah	Date: October 9, 2013	Project No. IR13164320
amec		Figure 2

TABLE

TABLE 1

SUMMARY OF HISTORICAL AERIAL PHOTOGRAPH AND TOPOGRAPHIC MAP REVIEW
4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906,
and 4910 Azusa Canyon Road,
and Adjoining Alleys/Yards
Irwindale, California

Date	Location	Observation	Source
1894 to 1939	Site and vicinity	Due to the scale of the maps and/or limited recognizable roads/landmarks, the site is not discernible.	Topographic Maps (Scale = 1:24,000 to 1:250,000)
1928 and 1938	Site and vicinity	The site appears to be undeveloped. The site is bounded on the west by a road and a railroad track on the east. Land immediately north appears to be occupied by structures. In general, land to the north and south appears to be a mixture of undeveloped and agricultural use; land to the west appears to be graded or undeveloped; and, land to the southeast and east appears to be used as an open pit mining operation. There appears to be a series of tracks with freight cars in the open pit mining operation area.	Aerial Photograph (Scale1 inch = 500 feet)
1949	Site and vicinity	Numerous significant changes at the site and in the surrounding area are observed in the 1949 photograph compared to the two previous photographs, described above. There are approximately eight small structures, believed to be residences, along the western portion of the site, with access roads/alleys from the road along the western side of the site (presumably Azusa Canyon Road). Larger structures are apparent in the north-central and eastern portions of the site. The eastern half of the site appears to be used as outdoor storage. The stored material is unrecognizable. The mining operation to the east and southeast appears to have expanded north, and an additional mining operation is observed southwest of the site. A conveyor connecting both mining operations is apparent south of the site. Roads and structures have been added to the north and west of the site.	Aerial Photograph (Scale 1 inch = 500 feet)

TABLE 1

SUMMARY OF HISTORICAL AERIAL PHOTOGRAPH AND TOPOGRAPHIC MAP REVIEW
4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906,
and 4910 Azusa Canyon Road,
and Adjoining Alleys/Yards
Irwindale, California

Date	Location	Observation	Source
1953	Site and vicinity	The site appears to be occupied by buildings along the western border. Contour lines show the site elevation is between 435 and 440 feet above mean sea level (msl), and topography slopes gently to the southwest. Azusa Canyon Road runs along the western border of the property, occasional structures and minor agricultural land are observed to the north, Pacific Electric Railway tracks trending north-south lie to the east of the site. Land to the south appears to be occupied by a conveyor connecting two gravel pits: one gravel pit lies southwest of the site, at the southwestern intersection of Olive Street and Azusa Canyon Road, and one gravel pit is located northeast of the site, at the southwestern intersection of Arrow Highway and Irwindale Avenue. North of the site and north of Arrow Highway is the Santa Fe Dam and Flood Control Basin.	Topographic Map – Series 7.5 (Scale 1:24,000)
1956	Site and vicinity	The site continues to undergo development and modifications. A long, narrow building is located in the southeastern quadrant of the site, oriented east-west, with outdoor storage of unknown materials to the north and south of the building. Northeast of the building is another smaller building with possible vehicle parking adjacent to the building and a graded area to the east. In the eastern-central portion of the site there is another building. The outside storage area has expanded to the northeast corner of the site. Driving paths appear to exist between the buildings and storage areas and an alley or driveway is apparent along the northern perimeter of the site, connecting Azusa Canyon Road with the north-central portion of the site. The land adjacent to the northern site boundary appears to have been graded; a residential neighborhood has been constructed west of the site, on the western side of Azusa Canyon Road; the mining operation appears to have expanded to the northeast and southwest of the site; and land immediately south of the site and north of the conveyor connecting the mining operations appears to have been graded.	Aerial Photograph (Scale 1 inch = 500 feet)

TABLE 1

SUMMARY OF HISTORICAL AERIAL PHOTOGRAPH AND TOPOGRAPHIC MAP REVIEW
4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906,
and 4910 Azusa Canyon Road,
and Adjoining Alleys/Yards
Irwindale, California

Date	Location	Observation	Source
1960	Site and vicinity	The site appears similar in the 1960 photograph compared to the previous 1956 photograph. The land immediately to the north appears to be occupied by several structures and vehicles. Additional commercial buildings are apparent to the north and south of the site; residential neighborhoods continue to expand to the west of the site. The mining operation to the northeast appears similar; however the mining operation to the southwest appears to be a graded area with several paths traversing the property.	Aerial Photograph (Scale 1 inch = 500 feet)
1966	Site and vicinity	In the 1966 topographic map, the site and surrounding area appear similar to the 1953 map, described above.	Topographic Map – Series 7.5 (Scale 1:24,000)
1968	Site and vicinity	In the 1968 photograph, the site structures appear to be similar, however the outdoor storage areas appear to have been cleared of materials. The areas surrounding the site appear to be similar to the 1960 photograph.	Aerial Photograph (Scale 1 inch = 500 feet)
1972	Site and vicinity	In the 1972 topographic map, the site and surrounding area appear similar to the 1966 map, as described above.	Topographic Map – Series 7.5 (Scale 1:24,000)
1976	Site and vicinity	In the 1976 photograph, there appears to be an additional large building in the southeast portion of the site, adjacent to the southern edge of the long, narrow building discussed in previous photographs. There also appears to be an additional large building in the northwestern portion of the site. Land immediately south of the site appears to be used for vehicle parking; the mining operations located northeast, east, southeast, and southwest of the site do not appear to be active; the conveyor connecting the mining operations as well as the railway tracks associated with the operations appear to have been removed.	Aerial Photograph (Scale 1 inch = 500 feet)
1981	Site and vicinity	The 1981 topographic map shows four additional buildings located in the northwestern and southeastern portions of the site.	Topographic Map – Series 7.5 (Scale 1:24,000)

TABLE 1

SUMMARY OF HISTORICAL AERIAL PHOTOGRAPH AND TOPOGRAPHIC MAP REVIEW
4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906,
and 4910 Azusa Canyon Road,
and Adjoining Alleys/Yards
Irwindale, California

Date	Location	Observation	Source
1989	Site and Vicinity	This photograph is listed in the report outline however it was not included in the EDR data package.	Aerial Photograph (Scale 1 inch = 500 feet)
1994,1995	Site and Vicinity	This photograph is of poor quality. The structures at the site appear to be similar to the 1976 photograph; however there are some additional structure-like features on the site, particularly to the north and west of the buildings in the southeast portion of the site. There appears to be some scattered containers in the north-central portion of the site, and there is an access point observed along the northern property which connects to the business immediately to the north.	Aerial Photograph (Scale 1 inch = 500 feet)
2005	Site and Vicinity	Site structures appear similar to the previous photograph. The north-eastern storage yard contains unknown items; the storage yard in the northern-central portion of the site appears to contain approximately 8 long, narrow storage containers. The area to the east, previously occupied by mining operations, is now occupied by large commercial buildings surrounded by asphalt.	Aerial Photograph (Scale 1 inch = 500 feet)
2009	Site and Vicinity	The central and western-central portions of the site appear to be occupied either by additional structures or various storage containers of different sizes. The northeast storage yard appears to be occupied by wood products. The business immediately to the north of the site appears to contain more vehicles and/or unknown items in the yard.	Aerial Photograph (Scale 1 inch = 500 feet)
2010 and 2012	Site and Vicinity	The northeast portion of the site appears to be used as a storage yard. There appears to be a path/road joining the site and the business to the north.	Aerial Photograph (Scale 1 inch = 500 feet)

APPENDIX A

Orswell & Kasman Phase I Environmental
Site Assessment, June 2013

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

SUBJECT PROPERTY: INDUSTRIAL AND RESIDENTIAL PROPERTIES
4832, 4838, 4848, 4850, 4858, 4900, 4906 AND
4910 AZUSA CANYON ROAD
IRWINDALE, CALIFORNIA 91706

REPORT DATE: JUNE 5, 2013

CLIENT: MR. HOWARD M. EHRENBERG, TRUSTEE FOR FRANK SMITH
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MARTIN A. KASMAN
ASTM ENVIRONMENTAL PROFESSIONAL P13153

This report was prepared in conformance to meet or exceed the scope and limitations as set forth by the American Society for Testing & Materials (ASTM) Standard Practice E 1527-05. It is for the express use of the client, and its contents are considered to be privileged and confidential. Acceptance of this report constitutes an agreement by the client to assume full liability for information contained herein. This report is for the sole use and interpretation of the client, and it is not to be reproduced or distributed to outside parties. The information in this report is furnished in good faith and was obtained from sources and databases considered to be reliable; however, the accuracy of the information cannot be guaranteed.

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ORSWELL & KASMAN, INC.
PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

INDUSTRIAL AND RESIDENTIAL PROPERTIES
4832, 4838, 4848, 4850, 4858, 4900, 4906 AND 4910
AZUSA CANYON ROAD
IRWINDALE, CALIFORNIA 91706

1.0 SUMMARY

Based on a review of regulatory records, historical site information, and a visual inspection of the subject property and surrounding area, this assessment has revealed no *recognized environmental conditions* or *historical recognized environmental conditions* in connection with the Property, except as follows:

1) A review of the building permit records determined that four underground storage tanks have been installed on the 4846 Azusa Canyon Road property. Although the addresses on the permits are for 4846 Azusa Canyon Road, the property is currently identified as 4848 Azusa Canyon Road. In 1949, a 500-gallon gasoline tank was installed on the property. In 1960, a 6,000-gallon underground tank was installed on the site. In 1972, a 10,000-gallon tank and a 5,000-gallon tank were installed on the site. There are no building permits on file indicating that the tanks have been removed from the site. In addition, there are no records on file with the Los Angeles County Department of Public Works concerning the installation of the tanks. There are also no reports indicating that the tanks were removed and there were no reports indicating that the soil was tested to determine if the tanks had leaked;

2) The 4900 Azusa Canyon Road property and a portion of the 4910 Azusa Canyon Road property are occupied by Refrigerant Exchange, a refrigerant recycling business. The business operates a nearby recycling facility and the subject property is used to temporarily store containers of spent refrigerant. Hundreds of drums and compressed gas cylinders are stored on the site, and the labels indicate the containers are used to store refrigerant oil, lithium bromide solution, chlorofluoromethane mixture and propane. Some of the containers are damaged and bulging, and the asphalt ground surface has staining. Containers of propane, Freon and compressed gas cylinders are carelessly stockpiled on the ground west of the Quonset hut building. Some of the drums containing lithium bromide solution are leaking onto the ground surface;

3) The 4838 Azusa Canyon Road property is occupied by a single-family residence. The building is boarded up, vacant and unoccupied. The residence has severe water damage and there is evidence of extensive mold growth. The interior ceilings are sprayed white with an acoustical material. The ceilings have collapsed in several locations and the sprayed acoustical material is delaminating from the ceiling; and

4) Five offsite locations have been identified as potential risks or threats to the subject property. According to the data, three of the sites are not located in the near vicinity, and there is no indication that contaminants from these sites have migrated onto the subject property.

   The Consolidated Rock Products Dump site, 15700 Arrow Highway, (#2 on map), is located east of the subject property, and the site is identified by the Los Angeles County Department of Public Works Waste Management Division (DPW/WMD) as a closed, Class III (inert materials) landfill. The property is currently developed as a retail shopping center and an industrial park, and the property was previously a large quarry. It is not likely that the closed landfill will have an adverse effect on the subject property.

   The Rodriquez Trucking site (#3 on map), 4938 North Azusa Canyon Road, is located approximately 165 feet north of the subject property, and the site is identified by the State of California Regional Water Quality Control Board (RWQCB) as a Leaking Underground Storage Tank (LUST) Cleanup site that is currently undergoing a site assessment. According to the records, in August 2001, one 12,000-gallon diesel underground storage tank and one 2,000-gallon underground waste oil tank were removed from the site. Soil sampling beneath the excavated areas revealed elevated levels of TRPH (2,360 mg/kg). The case was referred to the RWQCB in October 2008. According to the records, the site is identified as an open LUST Cleanup Site that is currently undergoing a site assessment and the lead agency responsible for overseeing the cleanup activities is the Los Angeles County Department of Public Works. No additional information has been reported to the RWQCB.

Based on our review of regulatory and historical records, a visual inspection of the site and surrounding area, and interviews with the property owner and a tenant, Orswell & Kasman, Inc. makes the following recommendations:

1) Additional studies are recommended to determine if there are currently any underground storage tanks on the 4846-4848 Azusa Canyon Road property and to determine if the underground tanks have leaked and impacted the subject property. A geophysical survey of the property is recommended to determine if there are currently any underground tanks on the site. A soil gas survey of the property is recommended to determine if there is any evidence of hydrocarbon impact from the underground storage tanks. Since the building permit records only identify the location of two of the tanks, the entire parcel of land should be evaluated;

2) The drums and containers of hazardous materials currently being stored by the Refrigerant Exchange business should be properly stored and managed. The drums containing lithium bromide solution that are bulging and leaking should be repackaged and/or removed from the site. The soil impacted by the spilled material should be tested and removed from the site in an appropriate manner. Lithium bromide solution is toxic when ingested, however, it easily dissolves in water and it is not considered a significant

threat to the environment. The spent lithium bromide solution is a waste product that already contains water, and since rainwater would have diluted the spilled material even more, it is unlikely that the spills will impact the groundwater beneath the site; and

3) An asbestos survey and a mold survey should be conducted inside the 4838 Azusa Canyon Road residence. Should asbestos and/or mold be detected, a licensed abatement contractor should be hired to mitigate the hazardous conditions.

2.0 INTRODUCTION

2.1 Purpose

The purpose of this Phase I Environmental Site Assessment is to determine if any *recognized environmental conditions* or *historical recognized environmental conditions* exist on or near the subject property. As defined by ASTM Standard Practice E 1527-05, a *recognized environmental condition* is the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release 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.

The ASTM Standard defines a *historical recognized environmental condition* as a condition which in the past would have been considered a *recognized environmental condition*, but which may or may not be considered a *recognized environmental condition* currently. If a past release of any hazardous substance or petroleum products has occurred in connection with the property and has been remediated, with such remediation accepted by the responsible regulatory agency, this condition shall be considered a *historical recognized environmental condition.*

The ASTM Standard Practice E 1527-05 requires all obvious uses of the Property shall be identified at five year intervals from the present, back to the Property's first developed use, or back to 1940, whichever is earlier, using standard historical sources. Developed use includes agricultural uses or placement of fill dirt. Data failure occurs when these objectives are not met. Our review of standard historical sources include aerial photographs, fire insurance maps, local street directories, and building department or assessor's property records. Our experience in performing Phase I Environmental Site Assessments since 1990 has determined that the other standard historical sources identified in the ASTM Standard Practice E 1527-05 are not reasonably obtainable or likely to be sufficiently useful, accurate, or complete in terms of satisfying the objectives.

2.2 Detailed Scope of Services

This report is based on a preliminary study into the past and current uses of the subject property and the surrounding area. The report includes a visual inspection of the property and adjacent sites, and a review of regulatory agency records, aerial photographs, and other historic record sources. Also included in this report are maps, diagrams, and photographs pertaining to this site.

2.3 Significant Assumptions

The information in this report is furnished in good faith and was obtained from sources and databases considered to be reliable; however, nothing in this report should be construed as a promise or guarantee that the subject property is free of environmental hazards. In many instances, this report relies on regulatory database information provided by federal, state and local governmental agencies. Although the database information used in this report consists of the most recently released records, it may not reflect the actual current status of the case.

2.4 Limitations and Exceptions

This report was prepared in conformance to meet or exceed the scope and practice as set forth by the American Society for Testing & Materials (ASTM) Standard Practice E 1527-05, "Standard Practice of Environmental Site Assessments: Phase I Environmental Site Assessment Process." No tests were conducted, and no samples of air, water, soil or building materials were taken.

This report is limited in nature and should not be construed to be a characterization of environmental regulatory compliance or of any conditions above or below grade. The evaluations in this report are based on information provided by interviews, readily accessible regulatory and historical records and observations made during the site inspection. No independent verification of the information was obtained or performed by Orswell & Kasman, Inc.

Orswell & Kasman, Inc. prepared this report in a competent and professional manner in accordance with sound industry standards, practices and procedures. No warranty is provided regarding the actual site conditions described in this report beyond matters amenable to visual confirmation. We make no representation or warranty regarding the accuracy or reliability of information or documents provided by others and contained within this report.

2.5 Special Terms and Conditions

No special terms or conditions have been incorporated into the preparation of this report. There were also no limiting physical conditions such as rain or lack of electrical power, that had a limiting effect on the site inspection.

2.6 User Reliance

This report is prepared for the express use of the client, and its contents are considered to be privileged and confidential. Acceptance of this report constitutes an agreement by the client to assume full liability for information contained herein. This report is for the sole use and interpretation of the client and it is not be reproduced or distributed to outside parties.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The subject property, 4832, 4838, 4848, 4850, 4858, 4900, 4906 and 4910 Azusa Canyon Road, Irwindale, California, is located on the east side of Azusa Canyon Road, north of Olive Street. The property is described as Los Angeles County Tax Assessor's Parcel Numbers (APNs) 8417-026-005, 8417-026-008, 8417-026-015, 8417-026-018, 8417-026-019, 8417-026-020, 8417-026-022, 8417-026-023, 8417-026-024 and 8417-026-025.

3.2 Site and Vicinity General Characteristics

The site consists of four residences, eight industrial buildings, paved parking lots and partially paved storage yards, located in a mixed industrial and residential area of Irwindale, California (see site plan).

3.3 Current Use of Property

The subject property is occupied by the following tenants:

4832 Azusa Canyon Road – Vacant residence

4838 Azusa Canyon Road – Vacant residence

Assessor Parcel Number 8417-026-005 – No Address – MJ Roofing, a roofing contractor, and Julio Machado, a construction contractor.

East side of 4832 and 4838 Azusa Canyon Road and Assessor Parcel Number 8417-026-005 - Montalvo Concrete, a concrete paving contractor.

4848 Azusa Canyon Road – S&J Plastering, a storage yard for scaffolding equipment, Sierra Pallets, a pallet manufacturer, Fraijo Brothers, a contractor's storage yard, and Utility Partners of America, a business that exchanges gas meters.

4850 Azusa Canyon Road – Frank Smith residence.

4858 Azusa Canyon Road – Hugo Commacho residence

4900 Azusa Canyon Road – Refrigerant Exchange, a refrigerant recycling business.

4906 Azusa Canyon Road – Corky's Place & Coffee Shop, a warehouse for restaurant equipment, catering equipment and party supplies, and Winpak, a warehouse for packaging materials.

Assessor Parcel Number 8417-026-005 – No Address - The property is a driveway easement which provides access to the 4910 Azusa Canyon Road property.

4910 Azusa Canyon Road – Oscco Landscaping, a landscaping contractor, and Refrigerant Exchange.

3.4 Descriptions of Structures, Roads, Other Improvements On Site

The subject property consists of ten parcels of land. The site and surrounding area are fairly level, and the property is connected to the municipal water system. Some of the properties are connected to the municipal sewer system and some of the structures are connected to private septic systems. The property improvements are described as follows:

4832 Azusa Canyon Road – The west side of the property is occupied by a single-story, wood frame with a stucco finish residence. There is no heating, ventilation and air conditioning (HVAC) system in the building.

4838 Azusa Canyon Road – The west side of the property is occupied by a single-story, wood frame with a stucco finish residence. The residence has a central heating and air conditioning system.

Assessor Parcel Number 8417-026-005 – No Address – The property is an unpaved storage yard.

4848 Azusa Canyon Road – The property is mostly paved and unpaved storage yards. The largest storage yard is located on the east side of the property. On the south side of the large storage yard is a concrete block office building. The building is connected to a septic tank which is located on the north side of the building. On the east side of the storage yard are the remains of a burned out concrete block building which is currently being used as a mill. Southwest of the mill area is a corrugated steel Quonset hut. An outhouse is located adjacent to the southwest corner of the building, and there is a septic tank located south of the outhouse. East of the residence at 4850 Azusa Canyon Road property is a single-story, brick office building. The HVAC system is located on the roof of the building. The building is connected to a septic tank which is located on the east side of the building. Outside, there are paved parking lots on the east and west sides of the building. Southeast of the office building is a large, steel frame with corrugated steel siding warehouse building. Attached to the north side of the warehouse, is a long narrow concrete block storage building. There is no HVAC system in the building. The building

is connected to a septic tank which is located in a small storage yard on the north side of the building. There is a parking lot on the south and west sides of the building.

4850 Azusa Canyon Road – The west side of the property is occupied by a single-story, wood frame with a stucco finish residence. The residence has a central heating and air conditioning system.

4858 Azusa Canyon Road – The property is occupied by a single-story, wood frame with a stucco finish residence. The residence has wall-mounted air-conditioning units.

4900 Azusa Canyon Road – The property is a partially paved open storage yard.

4906 Azusa Canyon Road – On the south side of the property is a single-story, concrete block industrial building, which is divided into four units. Each unit has an office area and a warehouse area. The HVAC system appears to be located on the roof of the building. Outside, on the north side of the building, is a paved parking lot.

Assessor Parcel Number 8417-026-005 – No Address – The property is a driveway easement which provides access to the 4910 Azusa Canyon Road property.

4910 Azusa Canyon Road – A single-story, steel frame with corrugated steel siding storage building is located in the center of the property. There is no HAVC system in the building. The building is connected to a septic tank which is located on the north side of the building. Outside, on the east side of the building is an unpaved storage yard. South of the storage building is a Quonset hut. A partially paved storage yard is located on the east, south and west sides of the hut.

3.5 Current Uses of the Adjoining Properties

North of the subject property is an industrial building with an open storage yard which is occupied by Malcolm Drilling. To the east is a railroad right-of-way, and further east is an unidentified industrial building and an industrial building which is occupied by Tri-Mountain. A large multi-tenant industrial building is south of the site. Azusa Canyon Road is to the west, and further west is a residential neighborhood.

4.0 USER PROVIDED INFORMATION

4.1 Title Records

No recorded land title records were provided by the client for review.

4.2 Environmental Liens or Activity and Use Limitations

The client has not provided any information concerning environmental liens or activity and use limitations.

4.3 Specialized Knowledge

No specialized knowledge of *recognized environmental conditions* or *historical recognized environmental conditions* in connection with the subject property has been provided by the client.

4.4 Commonly Known or Reasonably Ascertainable Information

The client has not provided any commonly known or reasonably ascertainable information within the local community about the subject property that is material to *recognized environmental conditions* in connection with the site.

4.5 Valuation Reduction for Environmental Issues

No information has been provided by the client which indicates the subject property is being sold or purchased at a significantly reduced price due to outstanding environmental issues.

4.6 Owner, Property Manager, and Occupant Information

Information provided by the owner, property manager, and/or occupants of the site are included in this report under Section 7.0, Interviews.

4.7 Reasons for Performing Phase I Environmental Site Assessment

The reasons for performing this Phase I Environmental Site Assessment are to satisfy commercial real estate lending requirements or provide due diligence information concerning the historical uses and current condition of the site.

4.8 Other User Provided Information

No other information concerning the subject property has been provided by the client.

5.0 RECORDS REVIEW

5.1 Standard Environmental Records Sources

FEDERAL AGENCY RECORDS

United States Environmental Protection Agency (USEPA)
National Priorities List

The National Priorities List (NPL) identifies abandoned or uncontrolled hazardous waste sites which have been identified as possibly representing a long-term threat to the public health or environment. These sites have been identified as being highly contaminated with hazardous substances and represent the USEPA's target enforcement and cleanup efforts. Studies of individual sites are conducted by the USEPA to determine level of contamination, and the sites are then compared and ranked to other sites on the NPL.

A review of the USEPA National Priorities List dated December 2012 indicates there are no proposed, final or delisted sites within one mile of the subject property. The San Gabriel Valley Ground Water Basin, which extends underneath the subject property, is listed on the NPL, as the groundwater is contaminated with several solvents and chemicals. Efforts are underway to control the problem, which has closed many drinking water wells in the area. The subject property is not identified as a Potentially Responsible Party (PRP) for the groundwater contamination area. The client may wish to review the enclosed Bond Expenditure Plan on this problem.

United States Environmental Protection Agency (USEPA)
Federal Superfund Liens List

The USEPA maintains a list of Superfund Lien sites that have been issued on properties throughout the United States. These sites have been remediated through the expenditures of Superfund monies; the purpose of the lien is to prevent the property owner from gaining a financial benefit from the federal government's cleanup and restoration activities.

A review of the July 2011 Federal Superfund List revealed there are no Superfund Liens on or adjacent to the site.

United States Environmental Protection Agency (USEPA)
Comprehensive Environmental Response, Compensation
and Liability Information System (CERCLIS)

The USEPA has developed a database known as CERCLIS which contains information on potential hazardous waste sites located throughout the United States. There are over 33,000 sites on the CERCLIS inventory. All sites are subjected to a preliminary assessment and thereafter

are either placed on the National Priority List (NPL) or are placed in a category for those sites requiring no further Federal Superfund action.

A review of the December 2012 CERCLIS report indicates there is one CERCLIS site within a ½ mile radius of the subject property:

Baxter Healthcare Corp. Site (#1 on map)
4401 Foxdale Avenue
Irwindale, CA 91706

This site was first discovered in June 1989, and a preliminary assessment was completed in June 1991. According to the records, no further remedial action has been reported for this site.

There are no listed "No Further Required Action Planned" (NFRAP) sites within a ½ mile radius.

United States Environmental Protection Agency (USEPA)
Resource Conservation and Recovery Act (RCRA)
Treatment, Storage or Disposal Facilities (TSDF)

The USEPA maintains a list of facilities which have been authorized to receive hazardous waste. These facilities have permits to treat, store, or dispose of the waste, as determined by the RCRA regulations. In addition, the USEPA publishes a list of those facilities that are subject to a corrective action, based on the facilities' waste handling and storage procedures. The facilities which are subject to a corrective action are identified as CORRACTS sites.

A review of the December 2012 RCRA TSDF list determined there are no known CORRACTS facilities within a one mile radius of the subject property. In addition, there are no non-CORRACTS TSD facilities listed within a ½ mile radius.

United States Environmental Protection Agency (USEPA)
Resource Conservation and Recovery Act (RCRA)
Hazardous Waste Generators

The USEPA maintains a list of facilities which are identified as generators of large and small quantities of hazardous waste. These facilities have permits to generate, store and dispose of the waste, as determined by the RCRA regulations.

A review of the December 2012 RCRA Hazardous Waste Generators list determined the subject property is not identified as a large or small quantity hazardous waste generator. There are records of a small quantity hazardous waste generator identified on the adjacent property to the north (Malcolm Drilling Co. Inc., 4926 North Azusa Canyon Road).

United States Environmental Protection Agency (USEPA)
Institutional Control / Engineering Control Registries

The USEPA maintains a list of institutional and engineering controls for the purpose of tracking sites that may contain residual contamination or have activity and use limitations. Engineering controls are engineering measures designed to minimize the potential for human exposure to contamination by either limiting direct contact with contaminated areas or controlling migration of contaminants. Institutional controls are non-engineering controls used to restrict land use or land access in order to protect people and the environment from exposure to hazardous substances remaining at the site or facility.

A review of the September 2006 USEPA Institutional Control / Engineering Control Registry did not identify the subject property as having institutional or engineering controls.

United States Environmental Protection Agency (USEPA)
Office of Emergency and Remedial Response
Emergency Response Notification System (ERNS)

The USEPA maintains a list of locations which have reported a release of oil or hazardous substances to the federal government. Most of the data in this system is based on information that was received during the initial notification.

A review of the ERNS list for 1999 determined there are no reported incidents on the subject property.

United States Department of Homeland Security
United States Coast Guard
National Response Center (NRC)

The NRC is the national point of contact for reporting all oil, chemical, radiological, biological and etiological discharges into the environment anywhere in the United States and its territories. In addition to gathering and distributing spill data for Federal On-Scene Coordinators and serving as the communications and operations center for the National Response Team, the NRC maintains agreements with a variety of federal entities to make additional notifications regarding incidents meeting established trigger criteria.

A review of the NRC list for 2013 determined there are no reported incidents on the subject property.

STATE AGENCY RECORDS

State of California
Environmental Protection Agency (CAL-EPA)
Department of Toxic Substances Control (DTSC)

CAL-EPA is responsible for the regulation and enforcement of environmental health laws within the state of California, as set forth by the California Health and Safety Code. CAL-EPA is also designated by the USEPA to assist in enforcing federal environmental laws. CAL-EPA regulates companies involved in the generation, transportation, storage and disposal of hazardous substances. CAL-EPA records include the "CalSites" database, which is a listing of 7,800 known active, inactive and abandoned hazardous waste sites. These sites have previously been reported in the Abandoned Site Program Information System (ASPIS), Bond Expenditure Plan (BEP), and Cortese databases. CAL-EPA records also include a listing of the California Integrated Waste Management Board's "Active" and "Closed and Inactive" landfills database.

A review of the January 2012 CAL-EPA records determined there are no listed "CalSite" facilities within one mile of the subject property.

Baldwin Park (San Gabriel Valley Superfund Site, Area 2), currently on the USEPA National Priorities List, is also listed in the "Calsite" database. This area was placed in "Active" status in May 2010. According to the records, the groundwater and soil are contaminated with perchlorate, tetrachloroethylene (PCE), trichloroethylene (TCE), and other chemicals. A site investigation or remediation of the area is currently in progress.

There is one landfill site within a ½ mile radius of the subject property:

Irwindale (Conrock) D.S. (#2 on map)
4827 North Irwindale Avenue
Irwindale, CA 91707

This site is identified as a closed solid waste disposal site.

State of California
Environmental Protection Agency (CAL-EPA)
Department of Toxic Substances Control (DTSC)
Land Use Covenants

CAL-EPA/DTSC utilizes Land Use Covenants (LUCs) to protect the public from unsafe exposures to residual contamination that is left in place after site remediation activities have been completed. The LUC imposes limitations on land use when hazardous materials, wastes, or substances remain on the property at levels which are not suitable for unrestricted use of the land. The LUC includes easements, servitudes, covenants, and restrictions which run with the land and continue into perpetuity unless modified or terminated in accordance with applicable

law. All LUCs are signed by the DTSC and the landowner, and recorded in the county where the land is located.

A review of the January 2012 DTSC database records did not identify any deed restrictions on the subject property.

State of California
Water Resources Control Board
Regional Water Quality Control Board (RWQCB)
Land Use Covenants

RWQCB utilizes Land Use Covenants (LUCs) to protect the public from unsafe exposures to residual contamination that is left in place after site remediation activities have been completed. The LUC imposes limitations on land use when hazardous materials, wastes, or substances remain on the property at levels which are not suitable for unrestricted use of the land. The LUC includes easements, servitudes, covenants, and restrictions which run with the land and continue into perpetuity unless modified or terminated in accordance with applicable law. All LUCs are signed by the RWQCB and the landowner, and recorded in the county where the land is located.

A review of the March 2013 RWQCB database records did not identify any deed restrictions on the subject property.

State of California
Water Resources Control Board
Regional Water Quality Control Board (RWQCB)

The RWQCB is responsible for monitoring the quality and flow of groundwater, and they address other potential threats to the groundwater from surface spills and leaks. The RWQCB monitors the contamination problem, the investigation and any remedial action. Their database information includes active and closed Cleanup Program Sites, Land Disposal Sites, Leaking Underground Storage Tank (LUST) Sites, Military Cleanup Sites, Military Privatized Sites, Military Underground Storage Tank Sites and registered underground storage tank sites (RWQCB sites) within the State of California.

A review of the March 2013 RWQCB records determined the subject property is not listed as a known RWQCB site. According to the records, there are two known open RWQCB LUST sites within a ½ mile radius of the subject property:

Rodriquez Trucking (#3 on map)
4938 North Azusa Canyon Road
Irwindale, CA 91706

According to the records, in August 2001, one 12,000-gallon diesel underground storage tank and one 2,000-gallon waste oil tank were removed from the site. Soil sampling beneath the excavated areas revealed elevated levels of TRPH (2,360 mg/kg). The case was referred to the RWQCB in October 2008. According to the records, the site is identified as an open LUST Cleanup Site that is currently undergoing a site assessment and the lead agency responsible for overseeing the cleanup activities is the Los Angeles County Department of Public Works. No additional information has been reported to the RWQCB.

US Rentals Incorporated (#4 on map)
15402 East Arrow Highway
Baldwin Park, CA 91706

This case was opened in August 2002. According to the records, the site is identified as an open LUST Cleanup Site that is undergoing a site assessment.

According to the records, there are no active non-LUST RWQCB Cleanup sites adjacent to the subject property. There are no records of registered underground storage tanks on the subject property, however, there are records of underground storage tanks on the adjacent property to the north (Malcolm Drilling Co. Inc., 4926 Azusa Canyon Road).

5.2 Additional Environmental Record Sources

State of California
Department of Conservation
Division of Mines and Geology (CDMG)

The CDMG conducts studies, publishes maps, and provides information concerning the geological formations throughout the state of California. CDMG research information is combined with information from the United States Geological Survey and the ensuing geologic maps of the state are prepared. These geologic maps also illustrate the approximate locations of known earthquake faults.

A review of the area map published by CDMG indicates the geologic area surrounding the subject property consists of Quaternary Holocene Fan deposits. The client may wish to refer to the enclosed geologic map.

State of California
Department of Oil
Gas and Geothermal Resources (DOGGR)

The DOGGR regulates the drilling, operation and abandonment of gas and oil wells throughout the state of California. If an active, idle or abandoned well is located on or adjacent to a proposed construction site, DOGGR requires a site plan review prior to issuing a building permit. Abandoned oil wells must meet standards established in 1984.

A review of the area map published by DOGGR indicates there are no producing, idle or abandoned oil wells on or adjacent to the subject property. The client may wish to review the enclosed map.

South Coast Air Quality
Management District (AQMD)

The AQMD is responsible for the development and enforcement of regulations concerning air emissions and airborne hazards from stationary sources in the South Coast Air Basin. AQMD maintains a "Hot Spot" list of facilities whose air emissions pose as a risk to the surrounding community. In addition, the AQMD Facility INformation Detail (FIND) database provides public information about facilities in the AQMD basin.

A review of the AQMD records determined there are no "Hot Spot" facilities identified on or adjacent to the subject property. A review of the FIND database determined the subject property (Blanca Inc., 4906 Azusa Canyon Road) was issued a permit to operate a paint spray booth in 2001.

Los Angeles County
Department of Public Works
Waste Management Division (DPW/WMD)

DPW/WMD maintains maps showing the locations of active, inactive or future solid waste landfill sites in Los Angeles County.

A review of DPW's major waste systems map determined there are two landfill sites within a ½ mile radius of the subject property:

Consolidated Rock Products (#2 on map)
15700 Arrow Highway
Irwindale, CA 91706

This site is identified as a closed, Class III (inert materials) landfill.

Azusa Canyon Road Dump (#5 on map)
Southeast Corner of Azusa Canyon Road and Cypress Street
Irwindale, CA 91706

This site is identified as a closed, unknown class landfill.

Los Angeles County
Department of Public Works
Hydraulic/Water Conservation Division (DPW/HWC)

DPW/HWC maintains contour maps and data of the groundwater levels in the Los Angeles County area. The map shows the depth to the aquifer, as well as the approximate flow direction.

A review of this data revealed the site is located at an elevation of approximately 430 feet above sea level. According to well data, the groundwater level in the area is approximately 275 feet above sea level, or about 155 feet below the ground surface. The groundwater contour lines in the area of the subject property indicate the groundwater flows in a southerly direction. The client may wish to review the enclosed map.

Los Angeles County
Fire Department (LACOFD)
Health Hazardous Materials Division

LACOFD maintains inspection and inventory records of companies involved in the storage and use of hazardous materials, petrochemicals, or hazardous waste. LACOFD attempts to maintain a current record of the types of hazardous substances that are utilized or stored at a particular site, and conducts periodic inspections for safety and compliance. In addition, LACOFD maintains records concerning hazardous material sites in Los Angeles County, which are reported to LACOFD by various regulatory agencies. Upon receiving the report, LACOFD monitors the cleanup process on the contaminated site.

According to the LACOFD files, there are records of a hazardous material handler on the subject property (Active Aircraft Welding Inc., 4848 North Azusa Canyon Road). The adjacent property to the north (Malcolm Drilling Inc., 4926 North Azusa Canyon Road) is identified as a hazardous materials handler, a hazardous waste generator and as having records of a registered underground storage tank. A review of the Active Mitigation Complaint Control Logs determined there are no listed sites on or adjacent to the subject property.

Los Angeles County
Department of Public Works (DPW)
Environmental Programs Division (EPD)

DPW/EPD maintains records and permits on businesses which store hazardous materials in underground tanks, and issues permits to remove abandoned underground tanks.

A review of the DPW records determined there are no registered underground storage tanks on the subject property. There are records of registered underground storage tanks on the adjacent property to the north (CMZ Co. and Malcolm Drilling Co., Inc., 4926 North Azusa Canyon Road).

5.3 Physical Setting Sources

A United States Geological Survey (USGS) 7.5 Minute Topographical map of the subject property and surrounding area is included in the appendices of the report. The map shows the locations of the identified offsite environmental risks or threats described in the report.

5.4 Historical Use Information on the Property

City of Irwindale
Building and Safety Department

A review of the building records for the subject property located the following records:

Date	Activity	Owner
	4838 Azusa Canyon Road	
12/53	Construct carport	C.V. Plummer
	4842-4844 Azusa Canyon Road	
11/74	Demolish two buildings and clear lot	Frank J. Smith
	4846 Azusa Canyon Road	
10/50	Add toilet and washroom to existing building	O'Kelley-Eccles
12/50	Relocate building	O'Kelley-Eccles Co.
12/51	Construct concrete block kiln for curing concrete blocks	O'Kelley-Eccles Co.
01/52	Construct cement storage repair shed	O'Kelley-Eccles
07/52	Construct office and reception room	O'Kelley-Eccles
03/54	Office addition to building	O'Kelley-Eccles
02/60	Add 6,000-gallon underground storage tank and pump	O'Kelley-Eccles
04/72	Relocate storage buildings	Mead House Wreckin Co.
04/72	Install two underground gasoline and diesel fuel tanks (one 10,000-gallon tank and one 5,000-gallon tank)	Mead Equipment Rentals
07/74	Construct new welding shed	Frank Smith
07/80	Add storage building	Frank Smith
	946 Azusa Canyon Road aka 4846 Azusa Canyon Road	
12/48	Relocate building	O'Kelley-Eccles Co.
02/49	Install 550-gallon underground gasoline tank	O'Kelley-Eccles
07/49	Building addition for bulk cement storage	O'Kelley-Eccles Co.
08/49	Install bucket elevator	O'Kelley-Eccles

Date	Activity	Owner
	4850 Azusa Canyon Road	
03/81	Renovate house	Frank J. Smith
	4854 Azusa Canyon Road	
09/53	Add additional living quarters	William Milligan
10/90	Construct carport	Sal Hernandez
03/92	Construct partial covered carport	Sal Hernandez
	4900 Azusa Canyon Road	
02/76	Construct storage building (plan check expired)	Michael Walsh
11/06	Demolish building	Frank and Maxine Smith Family Trust
	4906 Azusa Canyon Road	
08/77	Construct new industrial building / demolition permit	F. Schmoranzer
	4910 Azusa Canyon Road	
10/47	Construct mold shop	Robert C. Harpeng
12/53	Construct Quonset building for plaster storage	R.C. Harpeng

There were no other building permits on file for the subject property.

Historical Aerial Photographs

A review of historical aerial photographs of the subject property determined the following information:

Date of Photo	Description
June 1938	The subject property is vacant land with no buildings or structures on the site.
July 1948	There are now several residences along the west side of the subject property.
July 1952	There are still several residences along the west side of the subject property. The existing kiln building, mill building, office building and Quonset hut are on the 4848 Azusa Canyon Road property. The existing Quonset hut and storage building are on the 4910 Azusa Canyon Road property.

Date of Photo	Description
August 1965	There are still several residences along the west side of the subject property. The existing kiln building, mill building, office building and Quonset hut are on the 4848 Azusa Canyon Road property. The existing Quonset hut and storage building are on the 4910 Azusa Canyon Road property.
October 1972	The subject property appears to be about the same as the 1965 photograph.
October 1980	The existing residences and industrial buildings are now on the subject property.
September 1990	The subject property appears to be about the same as the 1980 photograph.
June 1994	The subject property appears to be about the same as the 1990 photograph.
May 2002	The existing residences and industrial buildings are on the subject property.
March 2011	The subject property appears to be about the same as the 2002 photograph.

Historic Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps provide information on commercial and industrial properties, based on risk data gathered for the fire insurance companies. The maps show the number of buildings located on the property, and the type of construction. The maps also describe the various businesses located nearby, and show the locations of tanks, boilers, and other potential hazards.

A review of the Sanborn Fire Insurance Map collections from 1867-1970, did not locate any maps for the subject property.

Historic City Directory Search

City Directories provide information on residential, commercial and industrial properties, and list the business name and address. A review of the historic directories provides an overview of the current and previous occupants of the site.

A search of the Haines Criss Cross City Directories, dated 1972-2009, determined the subject property has previously been occupied by residences (1972-1992), Pitchford Trucking (1972), Harpeng Match Plate (1972-2002), Mission Steel Corporation (1977-1997), Leo Barrios & Sons (1977-1992), Southwestern Landscaping (1977), C.A. Transmissions (1981-1992), Jim's Roofing Material (1992-1997), Active Aircraft Welding (1997-2002), Certified Metal Service (1997), Chuck's Electric (1997), Budget Towing (1997), Jorge's Auto (1997), Dunlap Body & Paint

(1997), Mission Steel Division (2002), Timely Processed Steel (2002), and R & J Moldings (2002).

A review of historical aerial photographs, historic city directories and building permits determined the subject property was developed over 65 years ago. Sometime between 1938 and 1948, residences were constructed on the lots along the west side of the subject property. In 1947, the Quonset hut on the 4910 Azusa Canyon Road property was constructed, and the property was occupied by a mold shop. Around 1948, O'Kelley-Eccles Co. occupied the 4848 Azusa Canyon Road property and the business constructed a kiln building on the site. Additional buildings were constructed on the site during the 1950s, 1970s and 1980s. The large warehouse building on the south side of the 4848 Azusa Canyon Road property was constructed in 1974. Today, the property is occupied by residences and businesses that use the property for storage.

5.5 Historical Use Information on the Adjoining Properties

Historical Aerial Photographs

A review of historical aerial photographs of the adjoining properties determined the following information:

Date of Photo	Description
June 1938	North and south of the subject property is vacant land. To the east is a railroad right-of-way, and further east is a quarry. Azusa Canyon Road is to the west, and further west is vacant land.
July 1948	North and south of the subject property is still vacant land. To the east is a railroad right-of-way, and further east is still a quarry. Azusa Canyon Road is to the west, and further west is vacant land.
July 1952	The area surrounding the subject property appears to be about the same as the 1948 photograph.
August 1964	North of the subject property are several commercial buildings with an open storage yard. To the east is a railroad right-of-way, and further east is a quarry. An industrial building is to the south. Azusa Canyon Road is to the west, and further west is a residential neighborhood.
October 1972	North of the subject property are several commercial buildings with an open storage yard. To the east is a railroad right-of-way, and further east is a quarry. An industrial building with an open storage yard are to the south. Azusa Canyon Road is to the west, and further west is a residential neighborhood.

Date of Photo	Description
October 1980	The area surrounding the subject property appears to be about the same as the 1972 photograph.
September 1990	North of the subject property is a commercial building with an open storage yard. To the east is a railroad right-of-way, and further east is graded vacant land. An industrial building and an open storage yard are to the south. Azusa Canyon Road is to the west, and further west is a residential neighborhood.
June 1994	North of the subject property is an industrial building with an open storage yard. To the east is a railroad right-of-way, and further east is graded vacant land. An industrial building and an open storage yard are to the south. Azusa Canyon Road is to the west, and further west is a residential neighborhood.
May 2002	North of the subject property is an industrial building with an open storage yard. To the east is a railroad right-of-way, and further east are two industrial buildings. An industrial building and an open storage yard are to the south. Azusa Canyon Road is to the west, and further west is a residential neighborhood.
March 2011	North of the subject property is an industrial building with an open storage yard. To the east is a railroad right-of-way, and further east are two industrial buildings. A new industrial building is to the south. Azusa Canyon Road is to the west, and further west is a residential neighborhood.

Historic Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps provide information on commercial and industrial properties, based on risk data gathered for the fire insurance companies. The maps show the number of buildings located on the property, and the type of construction. The maps also describe the various businesses located nearby, and show the locations of tanks, boilers, and other potential hazards.

A review of the Sanborn Fire Insurance Map collections from 1867-1970, did not locate any maps for the area surrounding the subject property.

Historic City Directory Search

City Directories provide information on residential, commercial and industrial properties, and list the business name and address. A review of the historic directories provides an overview of the current and previous occupants of the adjoining properties.

A search of the Haines Criss Cross City Directories, dated 1972-2009, determined the adjacent property to the north has been occupied by Crowell & Larson (1977-1981), Selman's Machinery Service (1977-1981), C.M.Z. Company Incorporated (1992-1997), Zonver Drilling Co. (1992-1997), Malcolm Drilling Company Incorporated (2002), and V.G.Z. Enterprises (2002). No listings have been identified for the adjacent properties to the east. The adjacent property to the south has been occupied by Cwikray Incorporated (1992-2002), and Davalos M.F. Trucking (1992-1997). The adjacent properties to the west have been occupied by residences (1972-2002).

A review of historical aerial photographs and historic city directories determined the industrial building to the north was constructed in the early 1990s, and the property was previously occupied by several commercial buildings. The industrial buildings to the east were constructed in the late 1990s, and the properties were previously part of a quarry. The industrial building to the south was constructed in 2011, and the property was previously occupied by another industrial building. The residences west of Azusa Canyon Road were constructed between 1952 and 1964, and the properties were previously vacant land.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

The site reconnaissance consisted of a walk through the entire property, and visually observing the structures, storage areas, and parking lots. No inspection was conducted under floors, above ceilings, or behind walls.

6.2 General Site Setting

The site consists of four residences, eight industrial buildings, paved parking lots and partially paved storage yards, located in a mixed industrial and residential area of Irwindale, California (see site plan).

6.3 Subject Property Observations

On May 28, 2013, an inspection of the subject property and surrounding area was conducted by ASTM Environmental Professional Marty Kasman. The subject property consists of ten adjoining parcels of land, which are occupied by the following businesses:

4832 Azusa Canyon Road

The west side of the property is occupied by a single-story, wood frame with a stucco finish residence (see photo #1). The residence is boarded up, vacant and unoccupied. The residence has two bedrooms, three bathrooms (see photo #2), a kitchen and a living room. The interior ceilings are sprayed white with an acoustical material, which is painted and appears to be in fair

condition, and the concrete slab floor is partially carpeted. There is no heating, ventilation and air conditioning (HVAC) system in the building.

4838 Azusa Canyon Road

The west side of the property is occupied by a single-story, wood frame with a stucco finish residence (see photo #3). The residence is boarded up, vacant and unoccupied. The residence has six bedrooms, one bathroom, a kitchen and a living room (see photo #4). The interior ceilings are sprayed white with an acoustical material, and the floors are covered with vinyl tile or carpeting. The residence has severe water damage and evidence of extensive mold growth. The ceilings have collapsed in several locations and the sprayed acoustical materials is delaminating from the ceiling (see photo #5). The residence has a central heating and air conditioning system.

Assessor Parcel Number 8417-026-005 – No Address

The property is an unpaved storage yard. The north side of the property is a driveway which provides access to the properties located on the east side of the subject property (see photo #6). The west side of the property is occupied by MJ Roofing, a roofing contractor, and Julio Machado, a construction contractor (see photo #7).

East side of 4832 and 4838 Azusa Canyon Road and Assessor Parcel Number 8417-026-005

The east side of the three parcels of land is an open storage yard which is occupied by Montalvo Concrete, a concrete paving contractor (see photo #8).

4848 Azusa Canyon Road

The property has been subdivided and is leased to the following tenants:

Vacant Lot – The north side of the property is an unpaved vacant lot (see photo #9).

S&J Plastering – The property in the northeast corner of the site is an unpaved storage yard (see photo #10), and the business uses the property to store scaffolding equipment.

Sierra Pallets – The business leases the partially paved storage yard on the east side of the property, and the business manufactures wooden pallets on the site (see photos #11 and #12). On the south side of the storage yard is a concrete block office building (see photo #13). The office ceiling is smooth painted drywall, and the floors are covered with vinyl tile (see photo #14). The building is connected to a septic tank which is located on the north side of the building.

On the east side of the storage yard are the remains of a burned out concrete block building (see photo #15). The business operates a mill inside the remaining building walls. Southwest of the mill area is a corrugated steel Quonset hut (see photo #16). Inside, the ceilings are insulated and

floors are covered with wood flooring. The building is used to store supplies (see photo #17). There is no HVAC system in the building. An outhouse is located adjacent to the southwest corner of the building, and there is a septic tank located south of the outhouse.

Fraijo Brothers – West of Sierra Pallets is an unpaved contractor's storage yard (see photo #18), and the business uses the property to store building materials.

Utility Partners of America (UPA) – The business occupies the southern portion of the property, and the company is a contractor for the Southern California Gas Company. East of the residence at 4850 Azusa Canyon Road property is a single-story, brick office building (see photos #19 and #20). The office ceilings are covered with suspended-grid acoustical tile or they are sprayed white with an acoustical material. The sprayed acoustical material is painted and appears to be in good condition. The floors are carpeted. The HVAC system is located on the roof of the building. The building is connected to a septic tank which is located on the east side of the building. Outside, there are paved parking lots on the east (see photo #21) and west (see photo #22) sides of the building. The western parking lot is actually located on the 4850 Azusa Canyon Road property.

Southeast of the office building is a large, steel frame with corrugated steel siding warehouse building (see photo #23). Inside, the warehouse has an open steel beam ceiling and an exposed concrete floor (see photo #24). Attached to the north side of the warehouse, is a long narrow concrete block storage building (see photo #25). The west side of the building is used bySierra Pallets as offices. There is no HVAC system in the building. The company exchanges gas meters for the Gas Company, and the building is used for warehousing and distribution of the meters. No manufacturing or repairs are conducted on the site. The building is connected to a septic tank which is located in a small storage yard on the north side of the building. There is a parking lot on the south (see photo #26) and west (see photo #27) sides of the building.

4850 Azusa Canyon Road

The west side of the property is occupied by a single-story, wood frame with a stucco finish residence (see photo #28). The current owner of the subject property, Frank Smith, resides and manages the property in the residence. The residence has three bedrooms (see photo #29), one bathroom, a kitchen and a living room. The interior ceilings are sprayed white with an acoustical material, which is painted and appears to be in fair condition, and the floors are carpeted. The residence has a central heating and air conditioning system.

4854 Azusa Canyon Road – Not A Part of the Subject Property

Between the residence on the 4850 Azusa Canyon Road property and the residence on the 4858 Azusa Canyon Road property is another single-family residence (see photo #30). This parcel of land is not included in the subject property.

4858 Azusa Canyon Road

The property is occupied by a single-story, wood frame with a stucco finish residence (see photo #31). The residence is occupied by Hugo Commacho. The residence has three bedrooms, one bathroom, a kitchen and a living room. The interior ceilings are smooth painted drywall or they are sprayed white with an acoustical material, which is painted and appears to be in fair condition. The floors are covered with vinyl tile or carpeting. The residence has wall-mounted air-conditioning units.

4900 Azusa Canyon Road

The property is a partially paved open storage yard which is currently occupied by Refrigerant Exchange, a refrigerant recycling business (see photo #32). The business operates a nearby recycling facility and the subject property is used to temporarily store containers of spent refrigerant. Hundreds of drums and compressed gas cylinders (see photos #33, #34, #35, #36 and #37) are stored on the site, and the labels indicate the containers are used to store refrigerant oil, lithium bromide solution, chlorofluoromethane mixture and propane. Some of the containers are damaged and bulging (see photo #38), and the asphalt ground surface is stained from repeated spills (see photos #39 and #40).

4906 Azusa Canyon Road

On the south side of the property is a single-story, concrete block industrial building (see photo #41). The building is divided into four units, and each unit has an office area and a warehouse area. The office ceilings are smooth painted drywall and the floors are carpeted. The warehouses have open wood beam ceilings and exposed concrete floors. The west side of the building (Units #A and #B) are occupied by Corky's Place & Coffee Shop. The business uses the units for the storage of restaurant equipment, catering equipment and party supplies (see photos #42 and #43). The east side of the building (Units #C and #D) are occupied by Winpak. The business uses the units for the storage of packaging materials (see photo #44). The HVAC system appears to be located on the roof of the building. Outside, on the north side of the building, is a paved parking lot (see photo #45).

Assessor Parcel Number 8417-026-005 – No Address

The property is a driveway easement which provides access to the 4910 Azusa Canyon Road property (see photo #46).

4910 Azusa Canyon Road

The single-story, steel frame with corrugated steel siding industrial building (see photo #47) in the center of the property is occupied by Oscco Landscaping, a landscaping contractor. The business uses the building to store gardening tools and equipment (see photo #48). The building has an open wood beam ceiling and an exposed concrete floor. There is no HVAC system in the

building. The building is connected to a septic tank which is located on the north side of the building. Outside, on the east side of the building is an unpaved storage yard.

The north and south sides of the Oscco Landscaping business are occupied by Refrigerant Exchange. The north side of the property is used to store empty aboveground storage tanks (see photo #49). South of the Oscco Landscaping building is a Quonset hut (see photo #50), and Refrigerant Exchange uses the building to store compressed gas cylinders (see photo #51). A partially paved storage yard is located on the east, south and west sides of the hut. Hundreds of drums and compressed gas cylinders (see photo #52) are stored on the site, and the labels indicate the containers are used to store refrigerant oil, lithium bromide solution, chlorofluoromethane mixture and propane. Containers of propane, Freon and compressed gas cylinders are carelessly stockpiled on the ground west of the Quonset hut (see photos #53 and #54). Some of the drums containing lithium bromide solution are leaking onto the ground surface (see photos #55, #56, #57 and #58).

The electrical power in the area is supplied by overhead utility lines, and there were no indications of polychlorinated bi-phenyls (PCBs) on the nearby transformers. Commercial trash bins are located at the site, and no signs of improper disposal of hazardous waste were observed. No underground storage tanks, wastewater clarifiers, sumps, pits or wells were observed on the site. No signs of illegal dumping or distressed vegetation were observed on the property, and there was no other indication of obvious contamination on the site.

6.4 Adjoining Property Observations

Northern Border

North of the subject property is an industrial building and open storage yard which are occupied by Malcolm Drilling (see photo #59). There were no visible signs of spills or contamination on the adjacent property.

Eastern Border

East of the subject property is a railroad right-of-way (see photo #60), and further east is an unidentified industrial building and an industrial building which is occupied by Tri-Mountain. There were no visible signs of spills or contamination on the adjacent properties.

Southern Border

South of the subject property is a large multi-tenant industrial building (see photo #61). There were no visible signs of spills or contamination on the adjacent property.

Western Border

West of the subject property is Azusa Canyon Road, and further west is a residential neighborhood (see photo #62). There were no visible signs of spills or contamination on the adjacent properties.

7.0 INTERVIEWS

7.1 Interview with Owner

Frank Smith, the current property owner and site manager, advised he purchased the subject property in stages over the past 41 years. According to Mr. Smith, he purchased the 4832 Azusa Canyon Road property in 1972. He said the building has always been used as a residence and the building has been vacant for the past four years.

Mr. Smith stated he purchased the 4848 Azusa Canyon Road property in 1972. He said the property was originally occupied by a concrete block manufacturer, and the existing long concrete block building on the site was used as a drying kiln. When he purchased the property, the property was a storage yard for a furniture business. Mr. Smith stated he operated Mission Steel Corp., a steel fabrication business, on the site from 1972 to the early 1990s. He constructed the existing large warehouse building in 1973 and the building was expanded in 1975. Mr. Smith said he sold the business in the early 1990s and the name was changed to Active Aircraft. Active Aircraft continued operating the steel fabrication business until 2011. The property was vacant from 2011 until March 2013 when United Partners of America leased the building. He said the property is also currently leased to Sierra Pallets and Fraijo Brothers. Mr. Smith said an underground fuel tank was removed from the north side of the kiln building around 1975. He said he does not know if the tank was removed under permit or supervision of a regulatory agency. Mr. Smith said a Phase II Environmental Site Assessment report was prepared on the site in September 2012. He said the purpose of the assessment was to locate the former underground tanks. Mr. Smith said he did not contract for the assessment and the results of that study are not available to him.

Mr. Smith stated he purchased the 4844 Azusa Canyon Road property in 1974 or 1975. He said the property was occupied by a residence when he bought the property. He said the residence was demolished in 1974 or 1975, and the property has been used as contractor's storage yard for the past 35 years.

Mr. Smith advised he purchased the 4900 Azusa Canyon Road property in the early 1980s. At the time he purchased the building, the west side of the property was occupied by a towing company and the east side of the site was occupied by a landscaping business. He said both businesses continued to operate on the property until the mid-1980s. From 1999 to the present, he has leased the property to Refrigerant Exchange. Mr. Smith said the business operates a nearby refrigerant recycling business and the company uses the subject property to store empty tanks and drums. He said no hazardous materials are stored or used on the premises.

Mr. Smith stated he has owned and occupied the 4850 Azusa Canyon Road property since 1988. He said the building has always been used as a residence.

Mr. Smith stated he purchased the 4838 Azusa Canyon Road property in 1995. He said the building has always been used as a residence and he previously occupied the house. He said the residence has been vacant since 1988.

Mr. Smith said he bought the 4910 Azusa Canyon Road property in 2000. He does not know when the existing storage buildings were constructed. He said the property was occupied by a plastics manufacturing business when he bought the property and the property is currently occupied by Oscco Landscaping and Refrigerant Exchange.

Mr. Smith stated he purchased the 4906 Azusa Canyon Road property and the adjacent fire lane property in 2002. He does not know when the existing four-unit building was constructed. He said the building has been occupied by a redwood lumber supplier, a cabinet shop, a warehouse for packaging materials and a warehouse for restaurant equipment.

Mr. Smith stated he purchased the 4858 Azusa Canyon Road property in 2008. He said the building has always been used as a residence.

Mr. Smith said to the best of his knowledge there are currently no underground storage tanks, wastewater clarifiers, or wells on the property, and he is not aware of any chemical spills or contamination problems with the site. He said no hazardous materials are stored or used on the subject property and no hazardous waste is generated by the business activities.

7.2 Interview with Site Manager

Frank Smith is the property manager.

7.3 Interviews with Occupants

Dennis O'Meara, the owner of Refrigerant Exchange, advised he has occupied the subject property for the past 7 or 8 years. According to Mr. O'Meara, the property was previously occupied by an ambulance service and a truck repair business. Mr. O'Meara stated he operates a nearby refrigerant recycling business. He said empty drums and compressed gas cylinders are stored on the subject property until they are recycled. He said spent lithium bromide solution is brought from the customer to the subject property for storage. He said the lithium bromide is stored onsite for about two to three weeks before being transported to the main facility. Mr. O'Meara said lithium bromide is not hazardous and not a regulated hazardous material. He said the stains observed on the ground surface are rust from machinery that used to be located on the site. Mr. O'Meara said there are no underground storage tanks on the property and he is not aware of any chemical spills or contamination problems with the site.

7.4 Interviews with Local Government Officials

No interviews with local government officials were conducted.

7.5 Interview with Others

No interviews with other people were conducted.

8.0 FINDINGS

8.1 Recognized Environmental Conditions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E 1527-05 on the industrial and residential properties located at 4832, 4838, 4848, 4850, 4858, 4900, 4906 and 4910 Azusa Canyon Road, Irwindale, California, the Property. Any exceptions to, or deletions from the Standard Practice are described in Section 2.4 of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the Property, except as follows:

1) A review of the building permit records determined that four underground storage tanks have been installed on the 4846 Azusa Canyon Road property. Although the addresses on the permits are for 4846 Azusa Canyon Road, the property is currently identified as 4848 Azusa Canyon Road. In 1949, a 500-gallon gasoline tank was installed on the property. In 1960, a 6,000-gallon underground tank was installed on the site. In 1972, a 10,000-gallon tank and a 5,000-gallon tank were installed on the site. There are no building permits on file indicating that the tanks have been removed from the site. In addition, there are no records on file with the Los Angeles County Department of Public Works concerning the installation of the tanks. There are also no reports indicating that the tanks were removed and there were no reports indicating that the soil was tested to determine if the tanks had leaked;

2) The 4900 Azusa Canyon Road property and a portion of the 4910 Azusa Canyon Road property are occupied by Refrigerant Exchange, a refrigerant recycling business. The business operates a nearby recycling facility and the subject property is used to temporarily store containers of spent refrigerant. Hundreds of drums and compressed gas cylinders are stored on the site, and the labels indicate the containers are used to store refrigerant oil, lithium bromide solution, chlorofluoromethane mixture and propane. Some of the containers are damaged and bulging, and the asphalt ground surface has staining. Containers of propane, Freon and compressed gas cylinders are carelessly stockpiled on the ground west of the Quonset hut building. Some of the drums containing lithium bromide solution are leaking onto the ground surface;

3) The 4838 Azusa Canyon Road property is occupied by a single-family residence. The building is boarded up, vacant and unoccupied. The residence has severe water damage

and there is evidence of extensive mold growth. The interior ceilings are sprayed white with an acoustical material. The ceilings have collapsed in several locations and the sprayed acoustical material is delaminating from the ceiling; and

4) Five offsite locations have been identified as potential risks or threats to the subject property. According to the data, three of the sites are not located in the near vicinity, and there is no indication that contaminants from these sites have migrated onto the subject property.

   The Consolidated Rock Products Dump site, 15700 Arrow Highway, (#2 on map), is located east of the subject property, and the site is identified by the Los Angeles County Department of Public Works Waste Management Division (DPW/WMD) as a closed, Class III (inert materials) landfill. The property is currently developed as a retail shopping center and an industrial park, and the property was previously a large quarry. It is not likely that the closed landfill will have an adverse effect on the subject property.

   The Rodriquez Trucking site (#3 on map), 4938 North Azusa Canyon Road, is located approximately 165 feet north of the subject property, and the site is identified by the State of California Regional Water Quality Control Board (RWQCB) as a Leaking Underground Storage Tank (LUST) Cleanup site that is currently undergoing a site assessment. According to the records, in August 2001, one 12,000-gallon diesel underground storage tank and one 2,000-gallon underground waste oil tank were removed from the site. Soil sampling beneath the excavated areas revealed elevated levels of TRPH (2,360 mg/kg). The case was referred to the RWQCB in October 2008. According to the records, the site is identified as an open LUST Cleanup Site that is currently undergoing a site assessment and the lead agency responsible for overseeing the cleanup activities is the Los Angeles County Department of Public Works. No additional information has been reported to the RWQCB.

8.2 Historical Recognized Environmental Conditions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E 1527-05 on the industrial and residential properties located at 4832, 4838, 4848, 4850, 4858, 4900, 4906 and 4910 Azusa Canyon Road, Irwindale, California, the Property. Any exceptions to, or deletions from the Standard Practice are described in Section 2.4 of this report. This assessment has revealed no evidence of *historical recognized environmental conditions* in connection with the Property.

9.0 OPINION

Four underground storage tanks have previously been installed on the 4848 Azusa Canyon Road property. It is unknown if there are currently any underground storage tanks remaining on the site. Additional studies are necessary to determine if there are any underground tanks on the site and to determine if the tanks had leaked and impacted the subject property.

The Refrigerant Exchange business is storing drums and containers of waste refrigerant on the site. Some of the drums are bulging and some of the drums are leaking. Although waste lithium bromide solution readily dissolves in water and is not considered a significant threat to the environment, the business should takes immediate steps to prevent the containers from leaking and all of the spilled materials and impacted soil should be properly cleaned up and properly disposed of.

The 4838 Azusa Canyon Road residence has severe water damage. It appears that mold is growing in the building. In addition, the water damage has caused the sprayed acoustical ceiling to collapse and delaminate. An asbestos survey and a mold survey should be conducted inside the residence. Should asbestos and/or mold be detected, a licensed abatement contractor should be hired to mitigate the hazardous conditions.

10.0 CONCLUSIONS

Based on our review of regulatory and historical records, a visual inspection of the site and surrounding area, and interviews with the property owner and a tenant, Orswell & Kasman, Inc. makes the following recommendations:

1) Additional studies are recommended to determine if there are currently any underground storage tanks on the 4846-4848 Azusa Canyon Road property and to determine if the underground tanks have leaked and impacted the subject property. A geophysical survey of the property is recommended to determine if there are currently any underground tanks on the site. A soil gas survey of the property is recommended to determine if there is any evidence of hydrocarbon impact from the underground storage tanks. Since the building permit records only identify the location of two of the tanks, the entire parcel of land should be evaluated;

2) The drums and containers of hazardous materials currently being stored by the Refrigerant Exchange business should be properly stored and managed. The drums containing lithium bromide solution that are buldging and leaking should be repackaged and/or removed from the site. The soil impacted by the spilled material should be tested and removed from the site in an appropriate manner. Lithium bromide solution is toxic when ingested, however, it easily dissolves in water and it is not considered a significant threat to the environment. The spent lithium bromide solution is a waste product that already contains water, and since rainwater would have diluted the spilled material even more, it is unlikely that the spills will impact the groundwater beneath the site; and

3) An asbestos survey and a mold survey should be conducted inside the 4838 Azusa Canyon Road residence. Should asbestos and/or mold be detected, a licensed abatement contractor should be hired to mitigate the hazardous conditions.

11.0 DEVIATIONS

This report was prepared in conformance to meet or exceed the scope and practice as set forth by the American Society for Testing & Materials (ASTM) Standard Practice E 1527-05, "Standard Practice of Environmental Site Assessments: Phase I Environmental Site Assessment Process." No significant deviations, deletions, or client-imposed constraints were made from this practice.

12.0 ADDITIONAL SERVICES

No additional services including a broader scope of services, liability/risk evaluations, or remedial activities are included in this report.

13.0 REFERENCES

All government records and maps were obtained directly from the regulatory agencies identified in this report. The fire insurance map information was obtained from Digital Sanborn Maps, 1867-1970, Ann Arbor, Michigan. The aerial photographs were obtained from BBL Consultants, Solana Beach, California; the United States Geological Survey, Menlo Park, California; Google Earth or the United States Department of Agriculture, Salt Lake City, Utah. The city directory search information was obtained from Sherman Library and Gardens, Corona Del Mar, California.

14.0 STATEMENT OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professionals* as defined in §312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312. The individual qualifications of these professionals are included in the appendices of this report.

15.0 APPENDICES

15.1 Site and Vicinity Map

A United States Geological Survey (USGS) 7.5 Minute Topographical map of the subject property and surrounding area is included in the appendices of the report. The map shows the locations of the identified offsite environmental risks or threats described in the report.

15.2 Site Plan

A site plan of the subject property is included in the appendices of the report. The site plan shows the general location of the structures on the property, and other items of interest which were identified in the description of the site.

15.3 Site and Vicinity Photographs

Photographs of the subject property and surrounding neighborhood are attached to this report. These photographs were taken at the time of the site inspection.

15.4 Historical Research Documentation

Building permit records were obtained directly from the regulatory agency identified in this report. The aerial photographs summarized in this report were obtained from BBL Consultants, Solana Beach, California; the United States Geological Survey, Menlo Park, California; Google Earth or the United States Department of Agriculture, Salt Lake City, Utah. The Sanborn Fire Insurance Map information was obtained from Digital Sanborn Maps, 1867-1970, Ann Arbor, Michigan. The city directory search information was obtained from Sherman Library and Gardens, Corona Del Mar, California.

15.5 Regulatory Records Documentation

All government records were obtained directly from the regulatory agencies identified in this report.

15.6 Interview and Research Documentation

All of the field notes and supporting information obtained from interviews and research concerning the subject property are maintained in the report file at the offices of Orswell & Kasman, Inc.

15.7 Special Contractual Conditions between User and Environmental Professional

No special contractual conditions or agreements exist between the client and any of the employees of Orswell & Kasman, Inc., and Orswell & Kasman, Inc. does not have any financial interest in the subject property.

15.8 Qualifications of the Environmental Professionals

Attached to this report are the résumés of Jack Orswell and Marty Kasman, who conducted the site inspection, the records review, and prepared the report.

APPENDIX

JACK ORSWELL

Jack Orswell, a principal of the company, is a Registered Environmental Assessor (#1263) and a licensed Private Investigator (#PI 14366) with the State of California. He is also a USEPA/AHERA accredited Asbestos Management Planner and California Certified Asbestos Consultant (#92-0869). He received his Bachelor of Science degree in Business Administration from the University of Southern California, and spent 15 years as a Special Agent with the Federal Bureau of Investigation in the Denver, San Francisco and Los Angeles offices. Mr. Orswell received specialized training from the United States Environmental Protection Agency (EPA), and he was one of the first FBI Agents to work with the EPA in investigating federal environmental crimes.

While with the FBI, Mr. Orswell worked with the EPA's National Enforcement Investigations Center (NEIC) in Denver, Colorado, and helped establish evidence control procedures for their laboratory personnel. As coordinator of environmental investigations for the FBI's Los Angeles office, Mr. Orswell gained extensive training and experience working with the California Department of Health Services and the Los Angeles County Sheriff's Department.

Since 1987, Mr. Orswell has been in private industry, conducting environmental assessments for several financial institutions, real estate companies and law firms. Mr. Orswell has also conducted environmental investigations throughout the United States, locating and interviewing witnesses to determine how hazardous materials were handled in various manufacturing operations, and documenting the long term effects of improper disposal.

Mr. Orswell's extensive background in criminal environmental enforcement and civil litigation support make him uniquely qualified as an environmental assessor and investigator. He is a member of the California Hazardous Materials Investigators Association, the Society of Former Special Agents of the Federal Bureau of Investigation, the Environmental Assessment Association, the National Association of Government Guarantee Lenders, and ASTM, International.

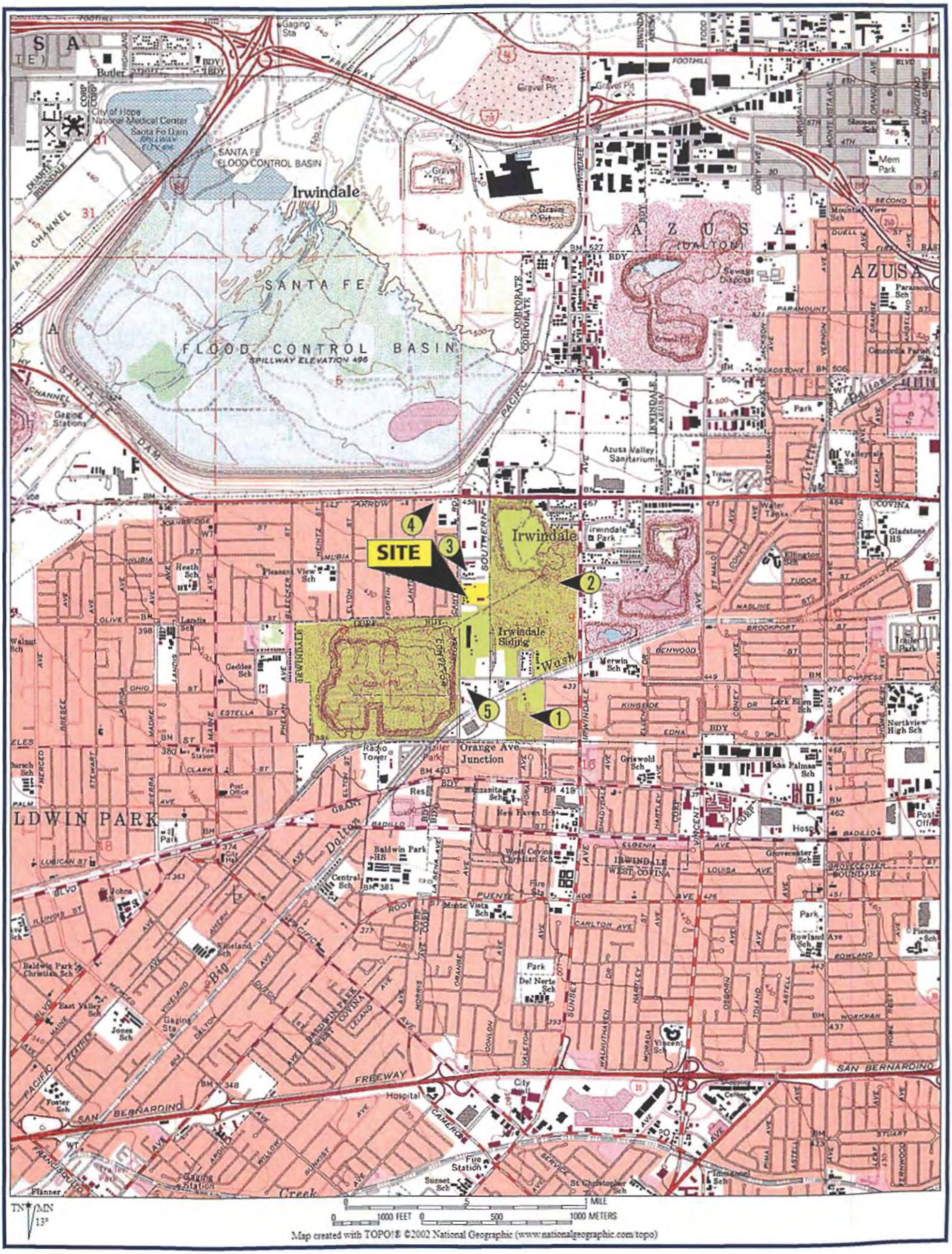
MARTY KASMAN

Marty Kasman, a principal of the company, is a Registered Environmental Health Specialist (#4927) and a Registered Environmental Assessor (#4022) with the State of California. He is also a USEPA/AHERA accredited Asbestos Management Planner and California Certified Asbestos Consultant (#99-2553). He received his Bachelor of Science and Master of Science degrees in Environmental and Occupational Health Science from California State University at Northridge. He also has a Certificate in Hazardous Materials Management from the University of California at Los Angeles (UCLA). In addition, Mr. Kasman also received specialized hazardous materials training at the Federal Law Enforcement Training Center in Georgia.

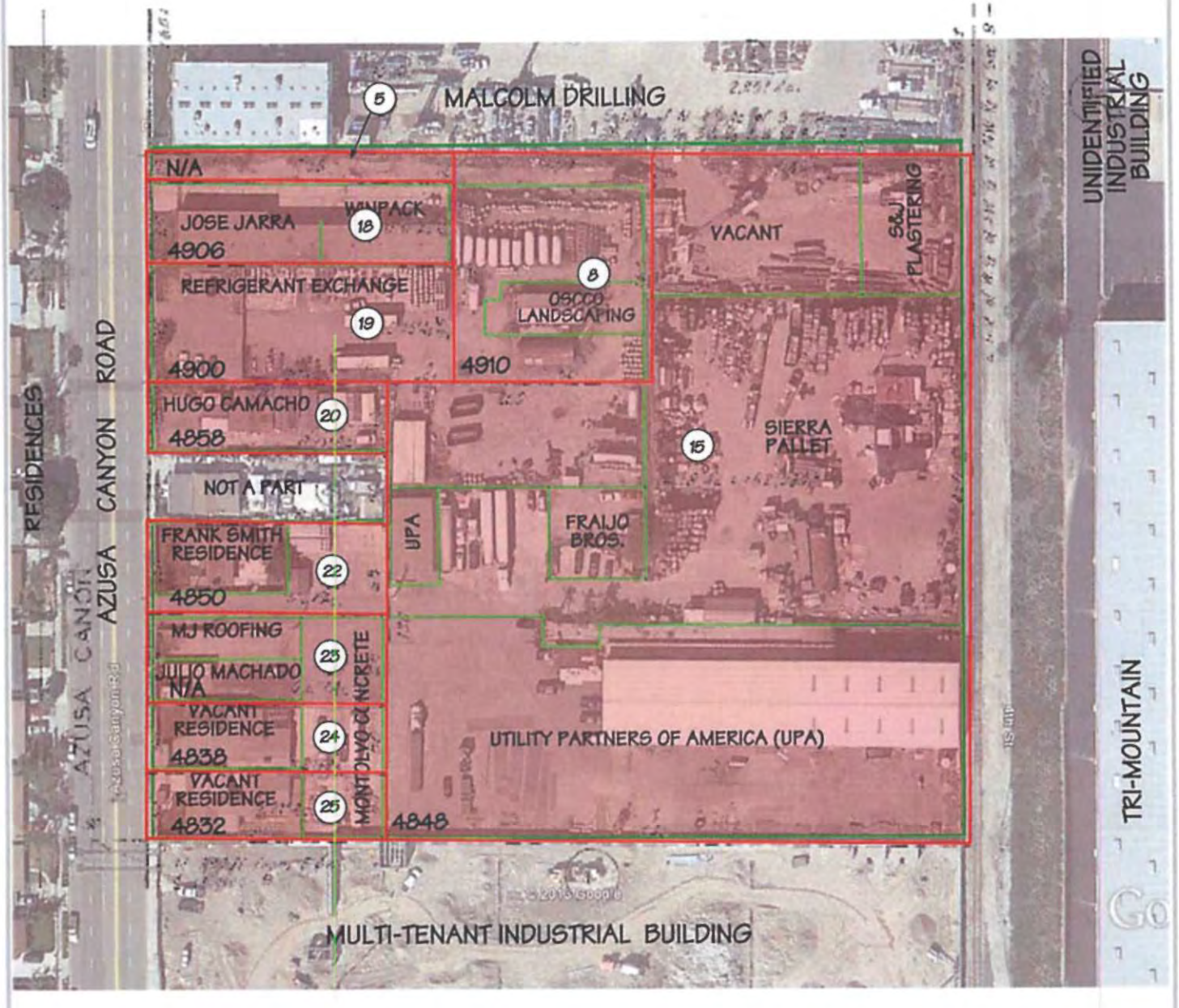
Mr. Kasman served fourteen years with the Los Angeles County Fire Department, as a Supervising Hazardous Material Specialist and Deputy Health Officer. For a majority of his Fire Department career, Mr. Kasman worked in the Criminal Investigations Unit, and he was assigned to the Los Angeles County District Attorney's Environmental crimes Task Force. His responsibilities included field and laboratory work in hazardous materials management, conducting inspections of industrial plant operations, and monitoring cleanup activities. In addition, Mr. Kasman has investigated hundreds of abandoned waste sites and other cases involving the illegal dumping of hazardous materials throughout Los Angeles County.

Mr. Kasman currently serves as an environmental consultant to industry management in the proper handling of hazardous materials and waste. He has taught courses in hazardous materials regulatory compliance and waste management at UCLA, California State University at Northridge, and the California Specialized Training Institute at San Luis Obispo. Mr. Kasman served on the State of California Local Unified Program Implementation Committee (LUPIC) to develop a standardized hazardous materials contingency plan.

Mr. Kasman's extensive education, training, and experience in hazardous materials management make him fully qualified to conduct environmental assessments and investigations. He is the former president, director, and a life-time member of the California Hazardous Materials Investigators Association. He is also a former director of the Local Environmental Enforcement Officers Association, and the Los Angeles County Association of Environmental Health Specialists. He is a member of California and National Environmental Health Associations, and the National Association of Government Guarantee Lenders.



Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)



AERIAL PHOTOGRAPH SOURCE GOOGLE MARCH 2011

LOS ANGELES COUNTY ASSESSOR PARCEL MAP BOOK 8417 PAGE 26
RED LINES REPRESENT ASSESSOR PARCEL BOUNDARIES

GREEN LINES REPRESENT BUSINESS OPERATION BOUNDARIES

ORSWELL & KASMAN, INC.

Environmental Assessments & Consulting

SUBJECT PROPERTY LOCATION:

4832-4910 AZUSA CANYON ROAD
IRWINDALE, CA 91706

NOT TO SCALE - FOR ORIENTATION PURPOSES ONLY

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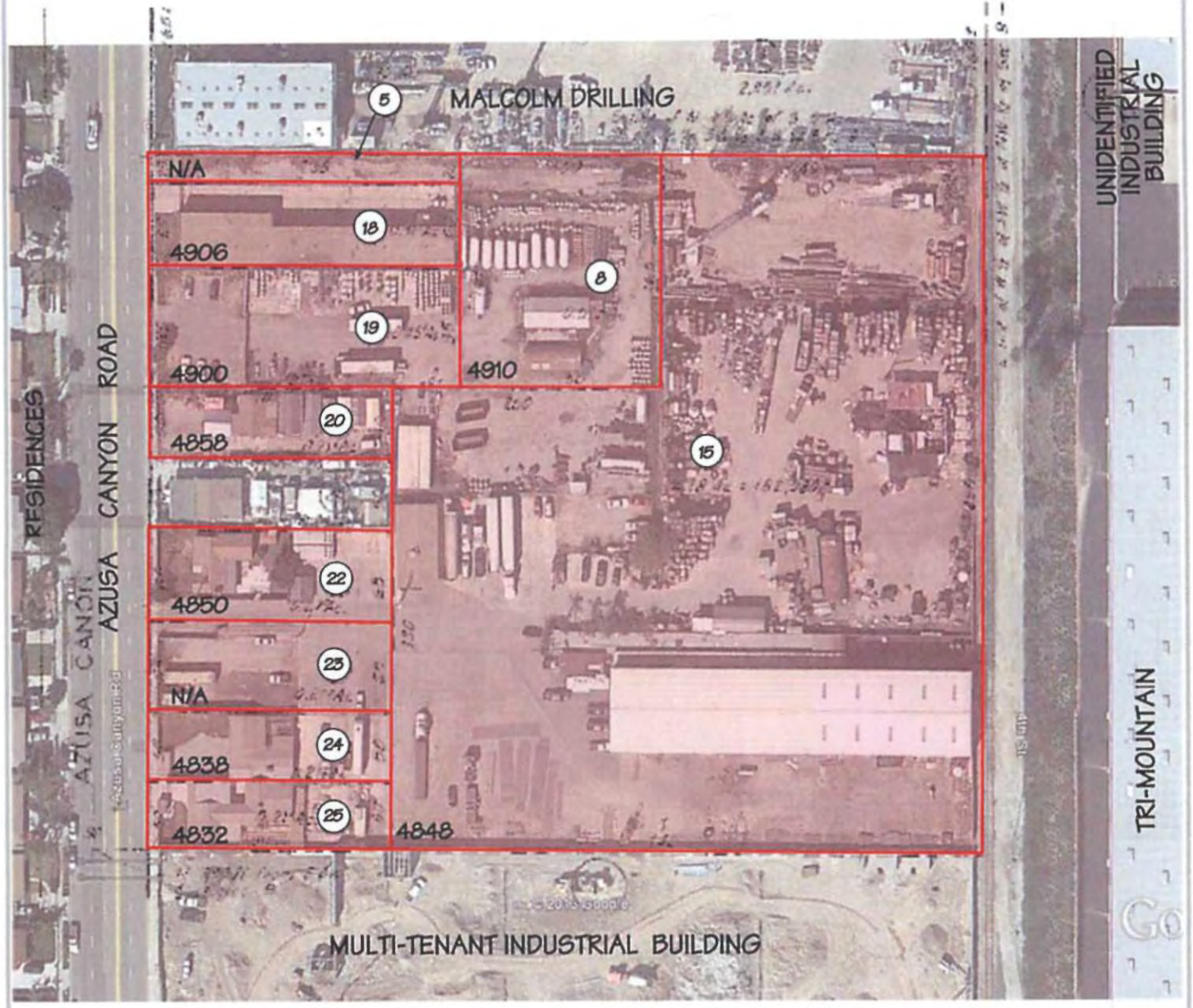

AERIAL PHOTOGRAPH SOURCE GOOGLE MARCH 2011

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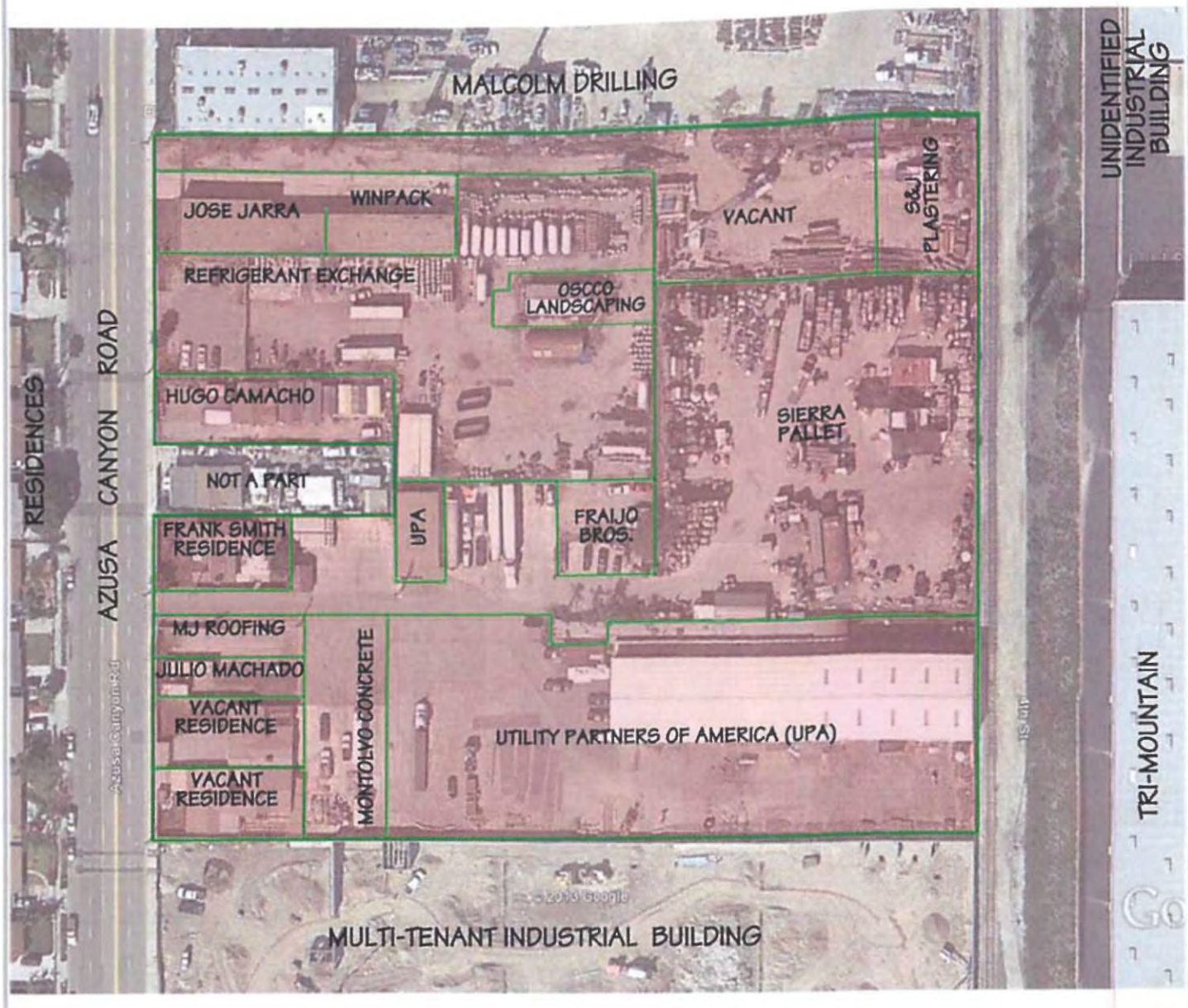

AERIAL PHOTOGRAPH SOURCE GOOGLE MARCH 2011

GREEN LINES REPRESENT BUSINESS OPERATION BOUNDARIES

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Photo #1

Photo #2

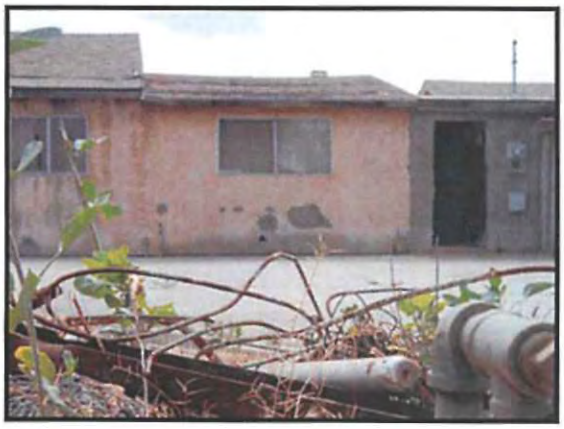

Photo #3

Photo #4

Photo #5

Photo #6

Photo #7

Photo #8

Photo #9

Photo #10

Photo #11

Photo #12

Photo #13

Photo #14

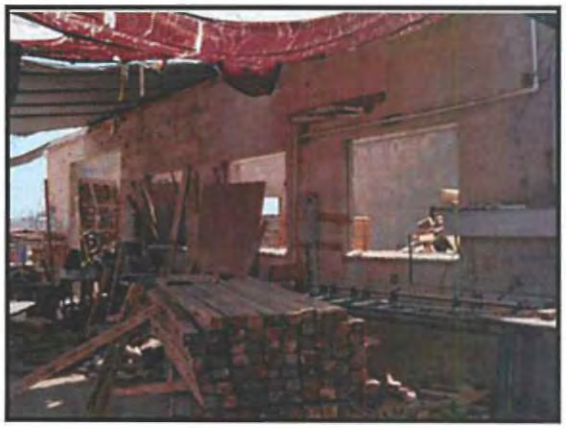

Photo #15

Photo #16

Photo #17

Photo #18

Photo #19

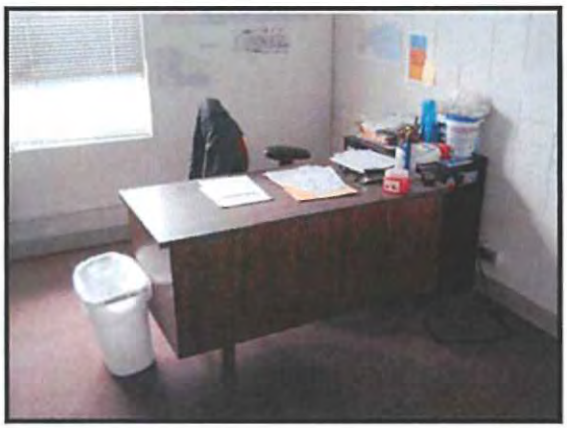

Photo #20

Photo #21

Photo #22

Photo #23

Photo #24

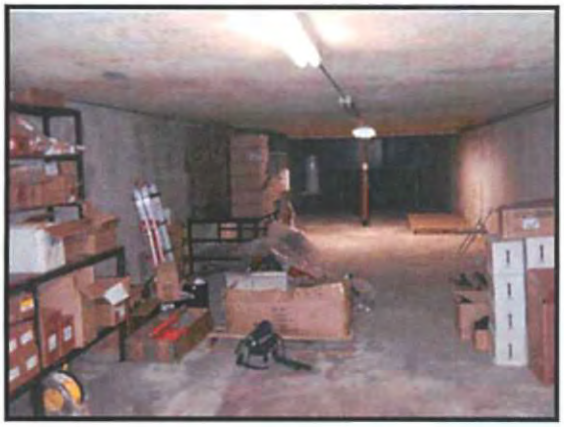

Photo #25

Photo #26

Photo #27

Photo #28

Photo #29

Photo #30

Photo #31

Photo #32

Photo #33

Photo #34

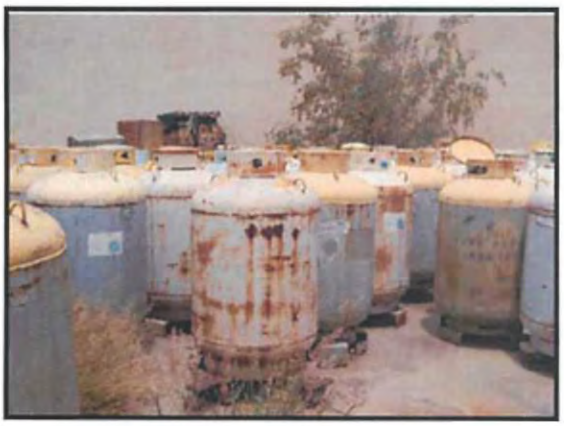

Photo #35

Photo #36

Photo # 37

Photo #38

Photo #39

Photo #40

Photo #41

Photo #42

Photo #43

Photo #44

Photo #45

Photo #46

Photo #47

Photo #48

Photo #49

Photo #50

Photo #51

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Photo #56

Photo #57

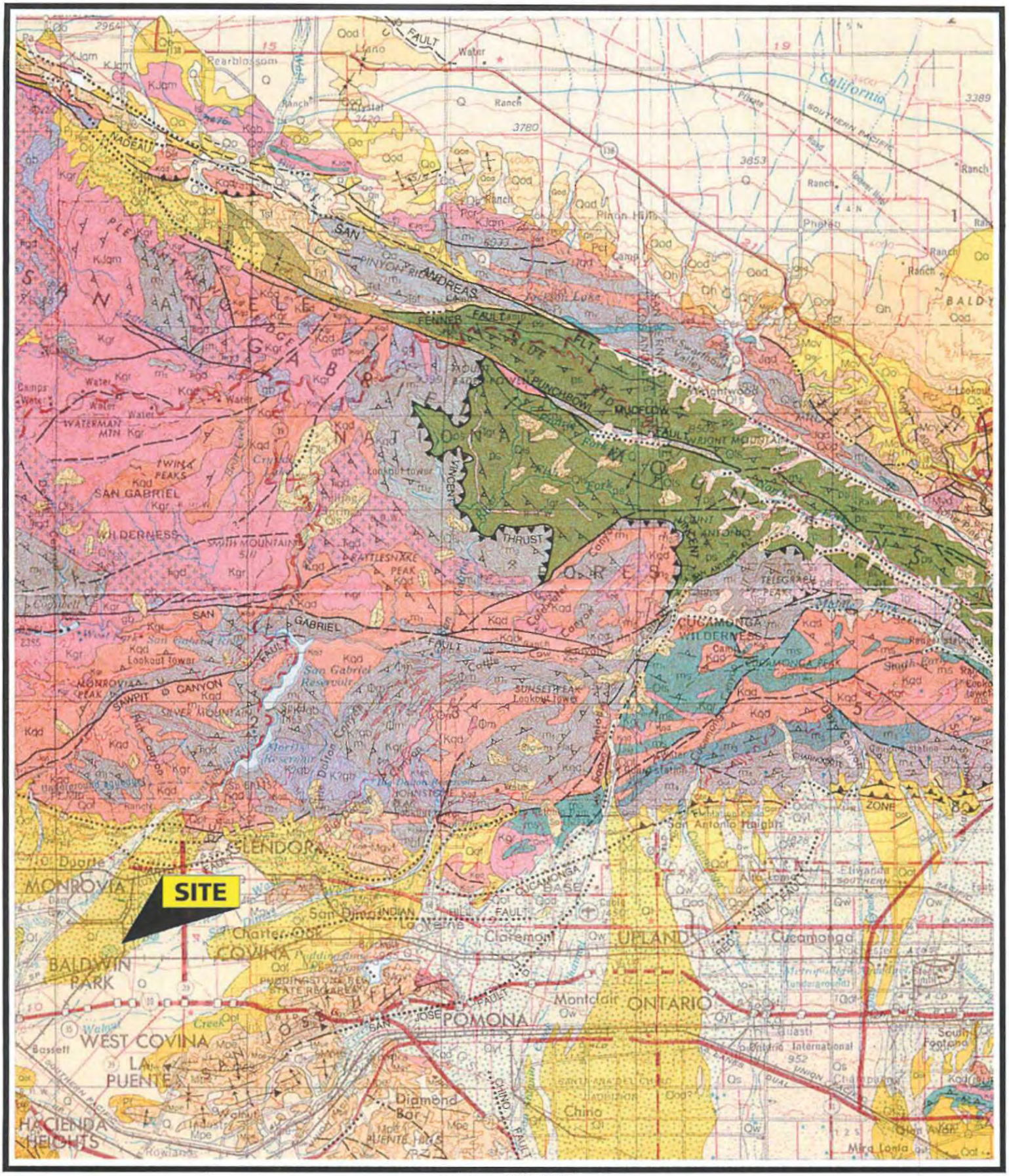
Photo #58

Photo #59

Photo #60

Photo #61

Photo #62



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5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS

GEOLOGIC MAP OF CALIFORNIA

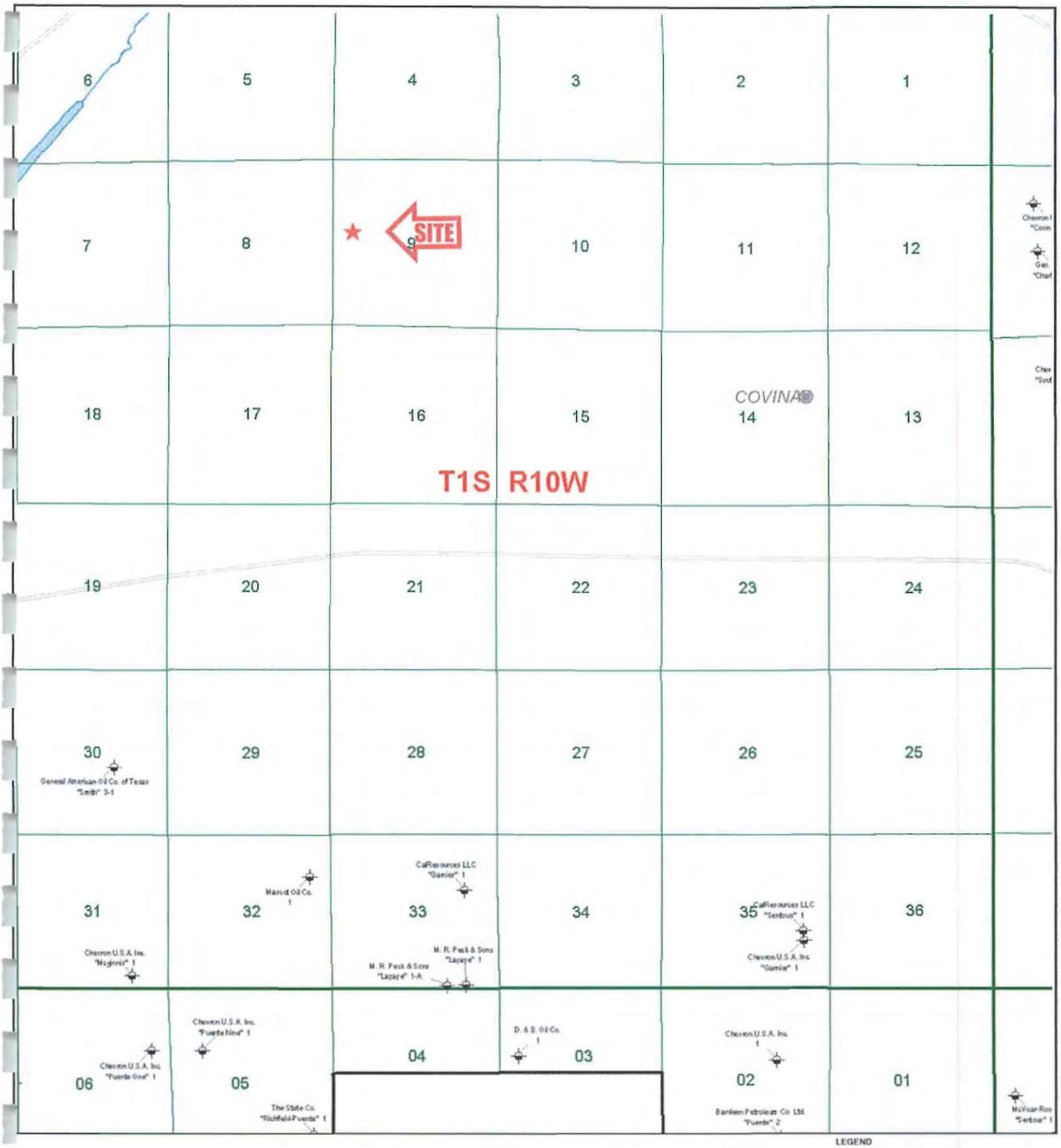
EXPLANATION

SEDIMENTARY AND METASEDIMENTARY ROCKS

- **CENOZOIC**
  - **QUATERNARY**
    - *Recent*
      - Qs — Dune sand
      - Qal — Alluvium
      - Qsc — Stream channel deposits (GREAT VALLEY)
      - Qf — Fan deposits (GREAT VALLEY)
      - Qb — Basin deposits (GREAT VALLEY)
      - Qst — Salt deposits
      - Ql — Quaternary lake deposits
      - Qg — Glacial deposits
    - *Pleistocene*
      - Qt — Quaternary nonmarine terrace deposits
      - Qm — Pleistocene marine and marine terrace deposits
      - Qc — Pleistocene nonmarine
      - QP — Plio-Pleistocene nonmarine
  - **TERTIARY**
    - *Pliocene*
      - Pc — Undivided Pliocene nonmarine
      - Puc — Upper Pliocene nonmarine
      - Pu — Upper Pliocene marine
      - Pmlc — Middle and/or lower Pliocene nonmarine
      - Pml — Middle and/or lower Pliocene marine
    - *Miocene*
      - Mc — Undivided Miocene nonmarine
      - Muc — Upper Miocene nonmarine
      - Mu — Upper Miocene marine
      - Mmc — Middle Miocene nonmarine
      - Mm — Middle Miocene marine
      - Ml — Lower Miocene marine
    - *Oligocene*
      - Φc — Oligocene nonmarine
      - Φ — Oligocene marine
    - *Eocene*
      - Ec — Eocene nonmarine
      - E — Eocene marine
    - *Paleocene*
      - Epc — Paleocene nonmarine
      - Ep — Paleocene marine

IGNEOUS AND META-IGNEOUS ROCKS

- Qrv — Recent volcanic: Q_{rv}^{r} —rhyolite; Q_{rv}^{a} —andesite; Q_{rv}^{b} —basalt; Q_{rv}^{p} —pyroclastic rocks
- Qpv — Pleistocene volcanic: Q_{pv}^{r} —rhyolite; Q_{pv}^{a} —andesite; Q_{pv}^{b} —basalt; Q_{pv}^{p} —pyroclastic rocks
- Quaternary and/or Pliocene cinder cones
- Pv — Pliocene volcanic: P_{v}^{r} —rhyolite; P_{v}^{a} —andesite; P_{v}^{b} —basalt; P_{v}^{p} —pyroclastic rocks
- Mv — Miocene volcanic: M_{v}^{r} —rhyolite; M_{v}^{a} —andesite; M_{v}^{b} —basalt; M_{v}^{p} —pyroclastic rocks
- Φv — Oligocene volcanic: Φ_{v}^{r} —rhyolite; Φ_{v}^{a} —andesite; Φ_{v}^{b} —basalt; Φ_{v}^{p} —pyroclastic rocks
- Ev — Eocene volcanic: E_{v}^{r} —rhyolite; E_{v}^{a} —andesite; E_{v}^{b} —basalt; E_{v}^{p} —pyroclastic rocks



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Feet

REGIONAL WILDCAT MAP

SHOWING WELLS NOT ON DIVISION FIELD MAPS

State of California - Department of Conservation

Division of Oil, Gas, and Geothermal Resources

NOTE: Wells with directional surveys on file with the division are indicated with a short line under the well symbol.
Current well status should be confirmed at the appropriate division office.

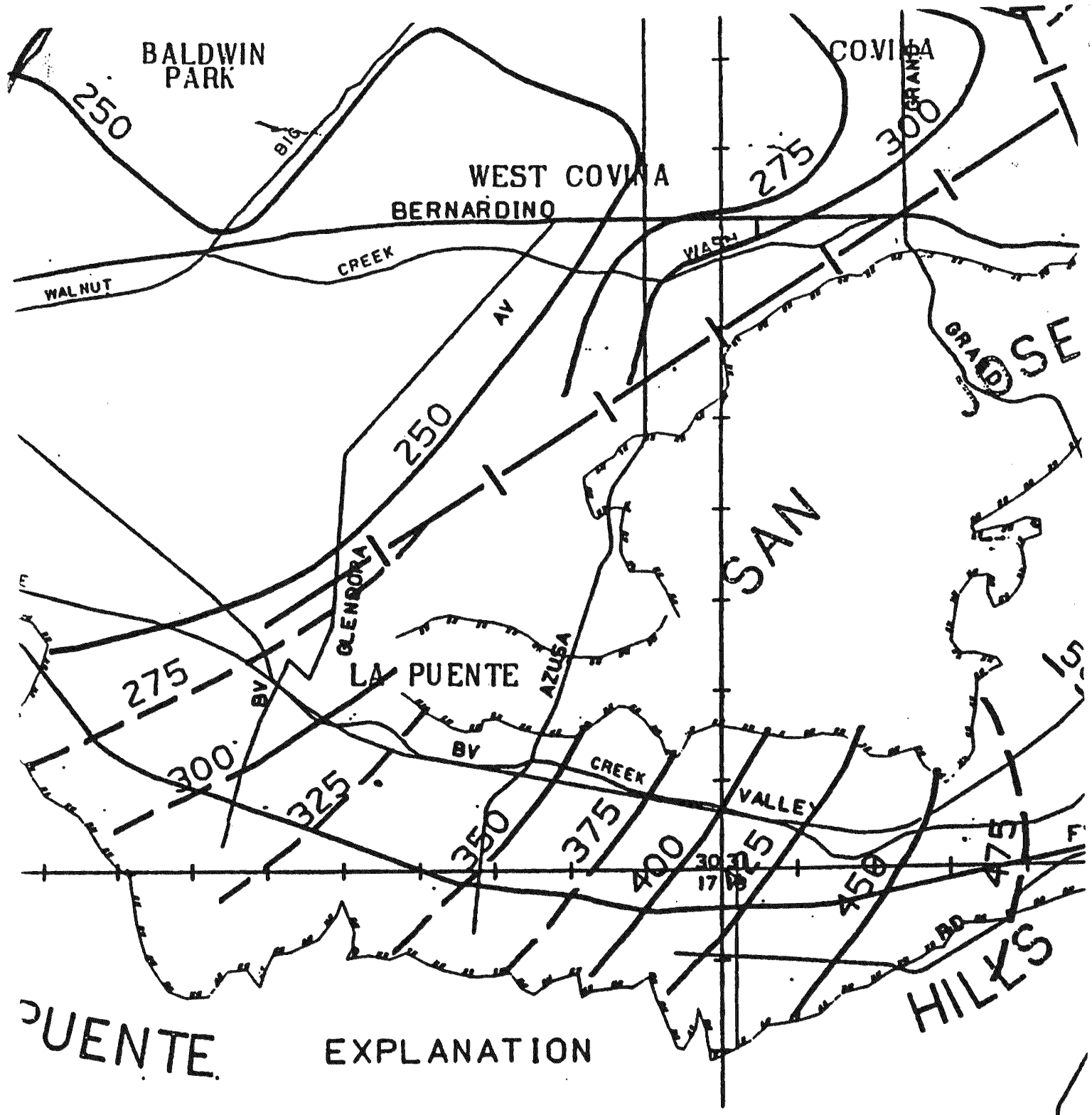
The Department of Conservation makes no warranties as to the suitability of this product for any particular purpose.

June 29, 2005

LEGEND

Drilling
Drilling - idle
Plugged and abandoned - dry hole
Completed - oil
Idle - oil
Plugged and abandoned - oil
Completed - gas
Idle - gas
Plugged and abandoned - gas
Completed - water disposal
Completed - waterflood
Idle - observation
Oil - converted to water disposal
Completed - gas injection
Buried pipe
Abandoned - conductor
Gas injection
Gas - open to oil zone
Water source
Plugged & abandoned - oil & gas
Gas storage
Observation
Gas - converted to gas storage
Abandoned oil - converted to water disposal
Oil - converted to air storage
Plugged and abandoned - waterflood
Plugged and abandoned - oil to waterflood
Idle - dual completion - producing oil and disposal

Field map boundary
Field boundary
Productive Limit boundary



EXPLANATION

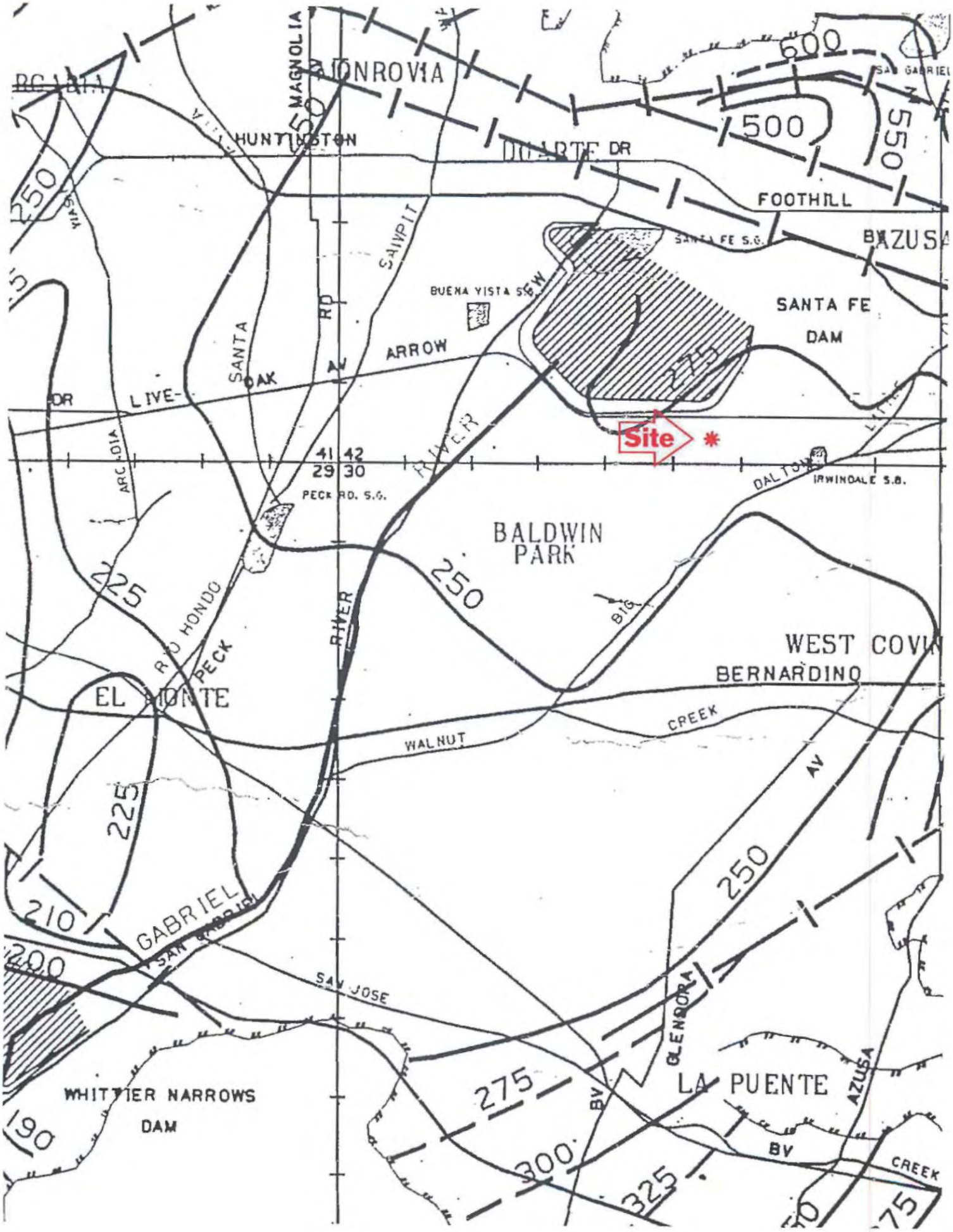
LINES OF EQUAL STATIC GROUNDWATER LEVELS. (INTERPOLATED BETWEEN WELLS.)

SAME AS ABOVE. (LOCATION APPROXIMATE.)

RESTRICTION AND OR BARRIERS TO GROUNDWATER MOVEMENT, GEOLOGIC AND HYDRAULIC.

GROUND SURFACE CONTOURS.

SPREADING GROUNDS


MONROVIA
MAGNOLIA
HUNTINGTON
DUARTE DR
FOOTHILL
AZUSA
SANTA FE S.G.
BUENA VISTA S.G.
SANTA FE
DAM
ARROW
SANTA
OAK
AV
RD
SAWPIT
LIVE-
RIVER
Site
41 42
29 30
PECK RD. S.G.
DALTON
IRWINDALE S.B.
BALDWIN
PARK
ARCADIA
RD HONDO
PECK
RIVER
BIG
WEST COVIN
BERNARDINO
EL MONTE
CREEK
WALNUT
AV
GABRIEL
SAN GABRIEL
SAN JOSE
GLENDORA
LA PUENTE
AZUSA
BV
CREEK
WHITTIER NARROWS
DAM
600
500
550
250
225
210
200
190
275
300
325
75

NPL SITE CLEANUP WORKPLAN

SAN GABRIEL GROUND WATER BASIN 2

Site Information

Location and Type of Site
Baldwin Park Area
Baldwin Park, CA 91706
Los Angeles

The San Gabriel Ground Water Basin (SGGWB) is in an area of approximately 195 square miles, occupying most of the northeastern quadrant of Los Angeles County. Its boundaries are the Whittier Narrows on the southwest within the Cities of Pico Rivera, Montebello, Monterey Park, La Puente, and Hacienda Heights; the Raymond fault on the northwest within the Cities of Arcadia, Monrovia, and San Marino; the line of contact between the alluvium and the bedrock of the San Gabriel Mountains on the north, north of the Cities of Duarte, Azusa, and Glendora; and the San Jose Hills on the east within the cities of San Dimas, LaVerne, and Pomona. The Basin is divided into four areas delineated by the locations of the major contaminated ground water plumes. Each individual area is listed on the EPA National Priority List (NPL) or Superfund list. The groundwater migrates at a rate of about 50 to 1000 feet per year. The actual area may have been extended from those delineated. The SGGWB is a drinking water source for an estimated 700,000 - 1,000,000 residents of about 34 incorporated cities and unincorporated areas. In SGGWB 2, the contaminated ground water plume is approximately 7.5 miles long and 1.5 miles wide. It parallels the San Gabriel River to the west, from the southern part of Azusa to La Puente. This plume lies primarily beneath the Cities of Baldwin Park and Irwindale. The ground water in the Area has been contaminated with trichloroethylene (TCE), perchloroethylene (PCE) and carbon tetrachloride (CTC).

Description of Hazardous Wastes
There are 275 public water supply wells in the San Gabriel Valley Basin. To date, 70 of these wells have been contaminated with TCE, PCE, and/or CTC at levels which exceed federal maximum contaminant levels (MCLs) and State action levels.

Threat to Public Health and Environment
The ground water represents over 90 percent of the water supply in the San Gabriel Valley Basin. Migration of contaminants through ground water presents a possible exposure pathway. In addition, vapors from ground water pose a potential inhalation pathway. Wells which have shown contaminants above State or federal drinking water standards have been closed. There is no known exposure above the State or federal drinking water standards for operating wells at this time.

Site Status

Status of Site Activity
A cooperative agreement between EPA and the Upper San Gabriel Municipal Water District covering technical assistance and community relations activity during the RI/FS was signed in September 1985. A treatment system is proposed to be implemented at the Suburban Water System's Bartolo Well Field, north of Whittier. The contamination at the Bartolo Well Field is contributed to by the migration of contaminated ground water from SGGWB 1, 2, and 4.

Proposed Revenue Sources
This site is included on the NPL; therefore, federal funding will be available to cover 100 percent of the RI/FS costs and 90 percent of the cost of final cleanup. The State's share is approximately $2,500,000 for the San Gabriel Ground Water Basin Area 2.

Project Budget and Cash Flow Estimates

The cost estimates shown below reflect only the State's share (ten percent) of site cleanup costs. All activities will be funded from Bond sale proceeds to the extent that federal Superfund or responsible party funding is not available.

Task Group	Projected State Costs	Estimated Completion
Site Characterization		
Enforcement Order		N/A
Remedial Investigation/ Feasibility Study		Dec. 1996
Remedial Action Plan/ Record of Decision		Jan 1999
Remedial Action	$ 2,500,000	
Design		Aug. 2003
Implementation		Feb. 2008
Certification		Feb. 2010
Cost Recovery and/or Operation and Maintenance		
Cost Recovery		Jan. 2008
Operation and Maintenance		20+ years
TOTAL PROJECT COSTS	$ 2,500,000	

THE DEGREE OF HEALTH HAZARD POSED CHEMICAL CONTAMINATION OF A SITE DEPENDS ON THE CONCENTRATION OF THE MATERIAL PRESENT AND THE DURATION OF EXPOSURE. DHS POLICY IS TO EVALUATE ALL LISTED HAZARDOUS SUBSTANCE RELEASE SITES FOR THE NEED TO TAKE ACTION TO ABATE ANY ACUTE PUBLIC HEALTH OR ENVIRONMENTAL THREATS POSED BY A SITE. THEREFORE, THE THREATS DESCRIBED IN THIS DOCUMENT GENERALLY REPRESENTS THE POTENTIAL IMPACT OF LONG-TERM EXPOSURE TO SPECIFIC HAZARDOUS SUBSTANCES IF: 1) THE SITE IS NOT ABATED, 2) THE SUBSTANCES MIGRATE OFFSITE, AND 3) THE SUBSTANCES AT SOME POINT COME INTO CONTACT WITH HUMAN OR ENVIRONMENTAL RECEPTORS.

PARTMENT OF BUILDING AND SAFETY
COUNTY OF LOS ANGELES
WM. J. FOX, CHIEF ENGINEER

APPLICATION FOR PERMIT
BUILDING

1

FOR APPLICANT TO FILL IN

BUILDING ADDRESS: 946 Azusa Canyon Rd.
LOCALITY: Baldwin Park
NEAREST CROSS ST.:
OWNER: D'Hallot - Ross Co.
MAIL ADDRESS: 946 Azusa Canyon Rd
CITY: TEL. NO.:
ARCHITECT OR ENGINEER: TEL. NO.:
ADDRESS:
CONTRACTOR: OWNER TEL. NO.:
ADDRESS:
LEGAL DESCRIPTION: LOT NO.: BLOCK:
TRACT: EXISTING
SIZE OF LOT: NO. OF BLDGS. NOW ON LOT:
USE OF EXISTING BLDG.: NO. OF FAMILIES: NO. OF ROOMS:

DESCRIPTION OF WORK

NEW: ALTERATION: ADDITION:
REPAIR: MOVING: DEMOLISH:
SQ. FT. SIZE: NO. OF ROOMS: STORIES:
WALL COVERING: ROOF COVERING:
USE OF NEW BUILDING: 550 GAL GAS TANK UNDERGROUND.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION.

SIGNATURE OF PERMITTEE: [signature]
AUTHORIZED AGT.:

DBS-3 50M SETS 1-48 $ 100
VALUATION

P. C. $
FEE
$ 1.00
FEE

FOR OFFICE USE ONLY

DISTRICT NO.	PLAN CK. NO.	PERMIT NO.
10-SD	—	38010
RECEIVED BY	DATE OF APPL.	DATE ISSUED
RMS.	—	12-21-48

BUILDING ADDRESS: 946 X Azusa Canyon Rd
LOCALITY: Baldwin Park
NEAREST CROSS ST.: —
FIRE ZONE: — NO. OF PLANS: — TYPE: IV GROUP: J
BLDG. SETBACK LINE: 50' A-1-20 NC. ORD. NO.:
APPROVED BY: DATE: 12/21/48
USE ZONE: M-2 APPROVED BY: RMS DATE:

CORRECTIONS

2/23 Contact OK [illegible]

ORIGINAL

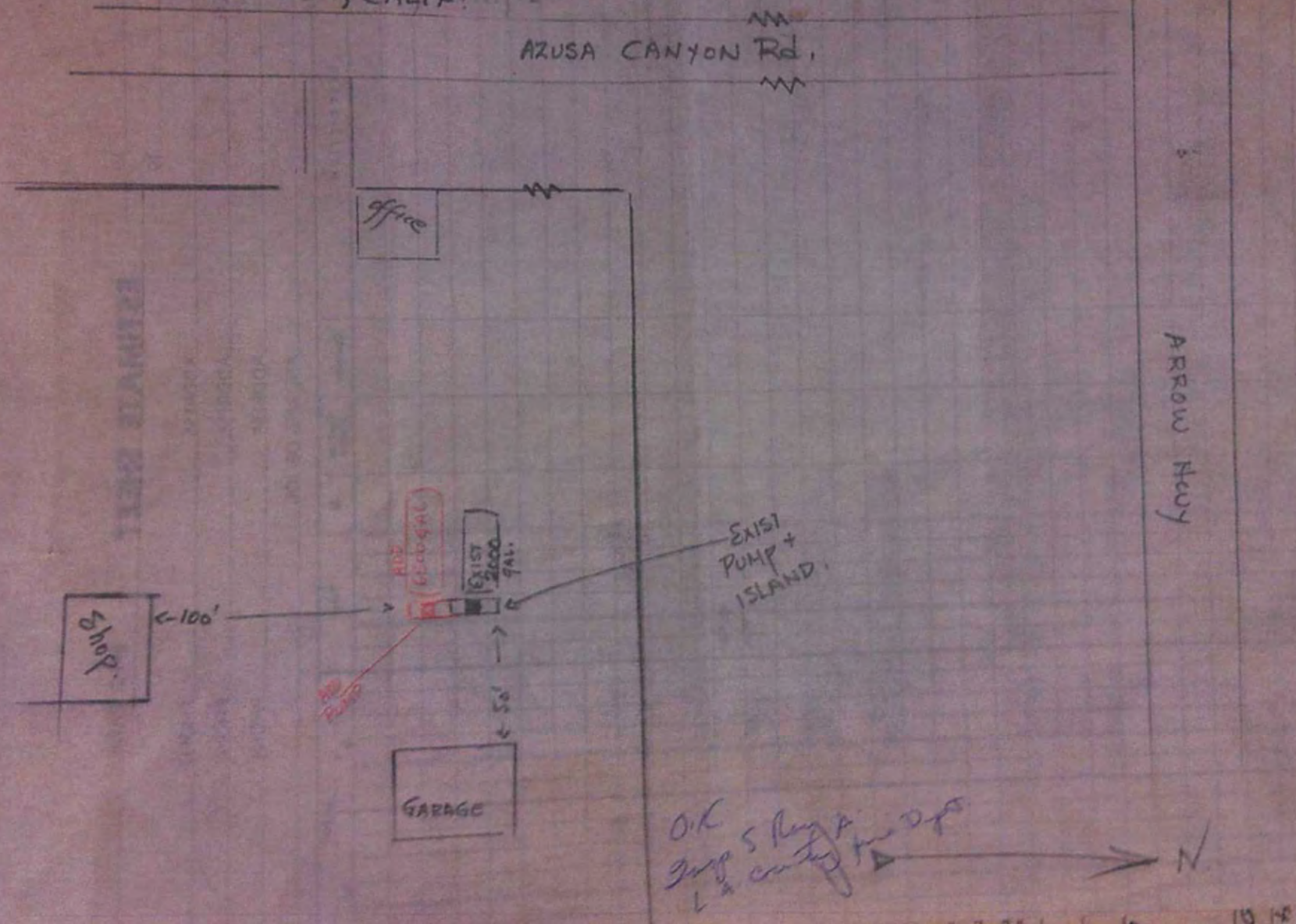
APPROVALS

FOUNDATION: LOCATION FORMS, MATERIALS	INSPECTOR	DATE
FRAME: FIRE STOPS, BRACING, BOLTS		
LATH, INT.:		
LATH, EXT.:		
PLASTER, INT.		
PLASTER, EXT.		
FINAL	[illegible]	2-23-49

Carlos Alvarado
Carlos Alvarado,
Agency Engineer

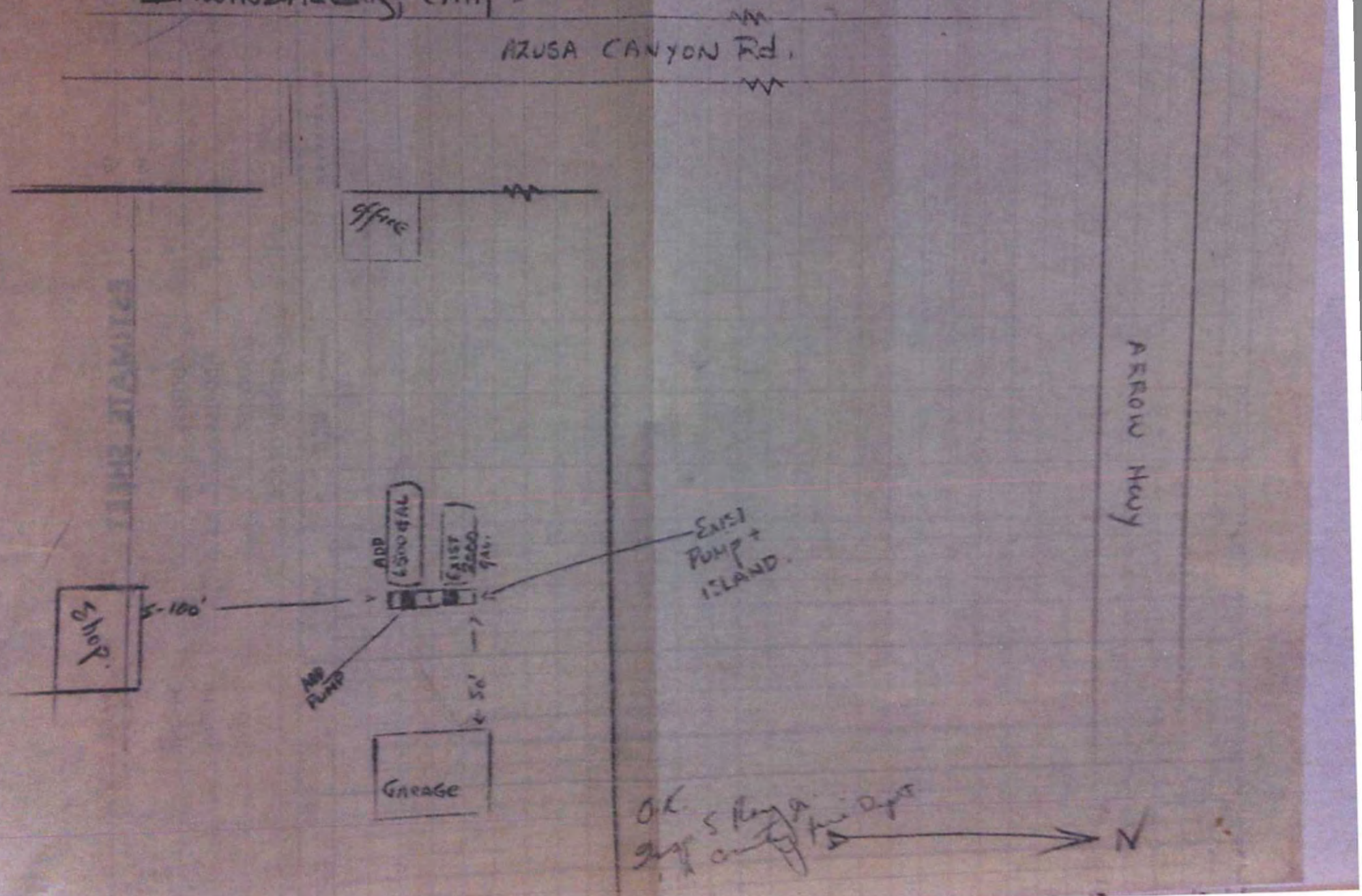
CA:vgm

O'Kelley · Eccles Co
4846 N. AZUSA CANYON Rd
IRWINDALE, CALIF.



O.K

O'Kelley Eccles Co
4846 N Azusa Canyon Rd
Irwindale, Calif.



1048

CITY OF IRWINDALE

TEARSOA CE Form 11-57

APPLICATION FOR BUILDING PERMIT

1

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
BUILDING AND SAFETY DIVISION
JOHN A. LAMBIE, COUNTY ENGINEER
CASSATT D. GRIFFIN, SUPT OF BUILDING

BUILDING ADDRESS 4846 NO AZUSA CAN
LOCALITY IRWINDALE
NEAREST CROSS ST. EXPRESS

DISTRICT NO.	GROUP	TYPE CONST.	SEWER	MAP BK	PG
506	F				

STATISTICAL CLASSIFICATION
CLASS. NO 9 DWELL. UNITS 0

MAP NUMBER
STATE HWY. YES NO

USE ZONE A-1 B-1 M-D
SPECIAL CONDITIONS PLOT PLAN APP BY F/DEPT.

BUILDING SETBACK	YARD	HWY	STREET NAME	EXIST. WIDTH
FRONT P. L.	MORE THAN 200'			
SIDE P. L.				

FOR APPLICANT TO FILL IN

BUILDING ADDRESS 4846 N. AZUSA CANYON.
LOT NO. BLOCK
TRACT
SIZE OF LOT NO. OF BLDGS. NOW ON LOT
USE OF EXISTING BLDG. CEMENT BLOCK MFG.
OWNER O'Kelley Eccles Co.
MAIL ADDRESS 4846 N. AZUSA CANYON Rd.
CITY IRWINDALE - CAL. TEL. NO.
ARCHITECT OR ENGINEER TEL. NO.
ADDRESS
CONTRACTOR A. J. DILONY & SONS INC. TEL. NO. PL 87541
ADDRESS 8212 S. MAIN - LA.

DESCRIPTION OF WORK

NEW ADD X ALTER REPAIR DEMOLISH
SQ. FT. SIZE NO. OF STORIES NO. OF FAMILIES
USE OF STRUCTURE
Add 1 - 6000 gal. U.G. Storage tank & pump.
SIGNATURE OF APPLICANT W. F. Nelson
ADDRESS 8212 S. Main LA

$ 600. VALUATION
P. C. FEE $
FEE $ 5.00

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION.
SIGNATURE OF PERMITTEE O'Kelley Eccles Inc. By W. F. Nelson
ADDRESS 8212 S. MAIN - LA.

INSPECTION RECORD

APPROVALS

	DATE	INSPECTOR'S SIGNATURE
FOUNDATION: LOCATION FORMS, MATERIALS		
FRAME: FIRE STOPS, BRACING, BOLTS		
FURNACE: LOCATION, GAS VENT, DUCTS		
LATH, INT.		
LATH, EXT.		
HOUSE NUMBER CORRECT AND POSTED		
FINAL	7/15/60	[illegible]

CLYDE N. DIRLAM, PRINCIPAL STRUCTURAL ENGINEER

PLAN CHECK VALIDATION CK. M.O. CASH
PERMIT VALIDATION CK. M.O. CASH

LAC 8177 JUL23 1 5.00

[illegible]

75A596A CE #803 12/70

CITY OF IRWINDALE
APPLICATION FOR BUILDING PERMIT

1

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
BUILDING AND SAFETY DIVISION
JOHN A. LAMBIE, COUNTY ENGINEER
COLEMAN W. JENKINS, SUP'T OF BUILDING

ASSESSOR MAP BOOK	PAGE / PARCEL
BUILDING ADDRESS	4846 AZUSA CANYON
LOCALITY	IRWINDALE
NEAREST CROSS ST.	CYPRESS
DISTRICT NO.	5106
GROUP	under grnd Tanks
TYPE CONST.	
PROCESSED BY	CUSTER
STATISTICAL CLASSIFICATION	CLASS NO. 20 DWELL. UNITS —
SEWER MAP	BK PG
USE ZONE	M-1
MAP NO.	2407
SPECIAL CONDITIONS	

FOR APPLICANT TO FILL IN
(Print or type only)

BUILDING ADDRESS	4846 AZUSA CYN. ROAD.
LOT NO.	BLOCK
TRACT	Legal in file
SIZE OF LOT	NO. OF BLDGS. NOW ON LOT 5
USE OF EXISTING BLDG.	OFFICE.
OWNER	MEAD EQUIP. RNTL'S TEL. NO. 960-1017
ADDRESS	4846 AZUSA CYN. ROAD.
CITY	IRWINDALE
ARCHITECT OR ENGINEER	TEL. NO.
ADDRESS	
CONTRACTOR	MEAD EQUIP. RNTL TEL. NO. 960-1017
ADDRESS	4846 AZUSA CYN RD. LIC. NO. 13370
CITY	IRWINDALE LIC. CLASS C-21
CONSTRUCTION LENDER NAME AND BRANCH	
ADDRESS	
SQ. FT. SIZE / NO. OF STORIES / NO. OF FAMILIES	NEW ☒
USE OF STRUCTURE	2 Underground Tanks — ADD ☒
	Gas & Pump 1 1000 gal 1 5000 — ALTER ☐
	REPAIR ☐
SIGNATURE OF APPLICANT	M.K. MEAD By C. J. Barong — DEMOL ☐
VALUATION $	6000

BLDG. SETBACK FROM FRONT PROP. LINE OF ____ (STREET)	TYPE OF HIGHWAY / EXISTING WIDTH / SETBACK FROM C.L. / HIGHWAY + YARD = TOTAL
BLDG. SETBACK FROM SIDE PROP. LINE OF ____ (STREET)	TYPE OF HIGHWAY / EXISTING WIDTH / SETBACK FROM C.L. / HIGHWAY + YARD = TOTAL
CORNER CUTOFF	YES ☐ NO ☐

SEE REVERSE SIDE FOR SPECIAL APPROVALS

APPROVALS	DATE	INSPECTOR'S SIGNATURE
FOUNDATION: LOCATION FORMS, MATERIALS		
FRAME: FIRE STOPS, BRACING, BOLTS		
FURNACE: LOCATION, GAS VENT, DUCTS		
LATH, INT.		
LATH, EXT.		
HOUSE NUMBER CORRECT AND POSTED		
FINAL		

P.C. FEE $	
PMT. FEE $	10.00

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL ORDINANCES AND LAWS REGULATING BUILDING CONSTRUCTION. I CERTIFY THAT IN DOING THE WORK AUTHORIZED HEREBY I WILL NOT EMPLOY ANY PERSON IN VIOLATION OF THE LABOR CODE OF THE STATE OF CALIFORNIA IN RELATING TO WORKMEN'S COMPENSATION INSURANCE.

SIGNATURE OF PERMITTEE M.K. MEAD - By C. J. Barong.
ADDRESS 4846 AZUSA CYN. RD.

INSPECTOR COPY

PLAN CHECK VALIDATION CK. M.O. CASH

JOHN F. LEWIS, PRINCIPAL STRUCTURAL ENGINEER

PERMIT VALIDATION CK. M.O. CASH

LAC 3227 APR 28 1 10.00 n

ORSWELL & KASMAN, INC.

ENVIRONMENTAL RECORDS RESEARCH REPORT

Property Information:

Industrial and Residential Properties
4832, 4838, 4848, 4850, 4858, 4900,
4906 and 4910 Azusa Canyon Road
Irwindale, CA 91706

OKI Report #:

P13153

Report Date:

June 5, 2013

Prepared For:

Howard M. Ehrenberg
Trustee for Frank Smith

Prepared by:

Orswell & Kasman, Inc.
316 West Foothill Boulevard
Monrovia, CA 91016
(626) 932 - 1800 * FAX (626) 932 - 1807
www.orswell-kasman.com

The information provided herein is based upon research of public records listed on the "Reference to the Regulatory Agency Database" page of this report and not on a physical inspection of the property. By requesting this report, the client accepts the terms and conditions described on the "Response Notification Sheet" of this report. The client may want to obtain detailed subject property information from a qualified consultant or specialist to determine if any potential hazards exist on the property.

RESPONSE NOTIFICATION SHEET

This report is in conformance with the ASTM standard for a Phase I Environmental Site Assessment governernment records check

	No Sites Within Specified Radius	Property & Adjacent	¼ Mile Radius	½ Mile Radius	1 Mile Radius
National Priority List (NPL)	✓				
RCRA CORRACTS Facilities	✓				
CALSITES		✓			
CERCLIS				✓	
CERCLIS NFRAP	✓				
LUSTIS			✓		
Active / Inactive Landfills				✓	
Treatment, Storage & Disposal (TSD)	✓				
Institutional Controls / Engineering Controls	✓				
RWQCB Sites	✓				
Closed RWQCB Sites	✓				
Registered Underground Storage Tanks		✓			
Federal Hazardous Waste Generators		✓			
ERNS / NRC	✓				
Superfund Liens	✓				
Local Agency Records	✓				

Sites reported as "Case Closed" or "No Further Action" may not be listed in this report

OKI Report #: **P13153**
Completion Date: **6/5/13**

Property Information:

Industrial and Residential Properties
4832, 4838, 4848, 4850, 4858, 4900,
4906 and 4910 Azusa Canyon Road
Irwindale, CA 91706

Martin Kasman

Martin A. Kasman
ASTM Environmental Professional

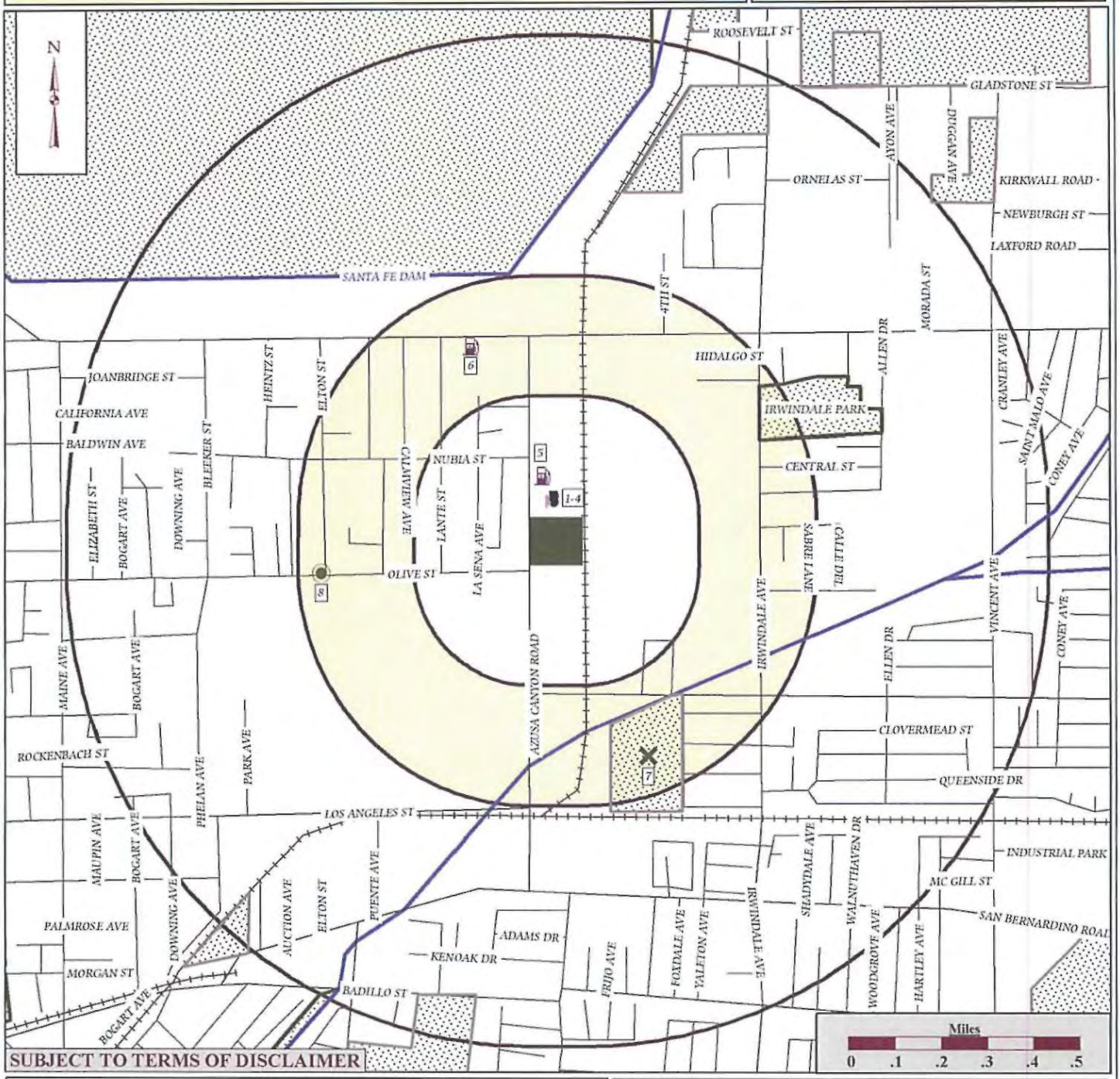
The information contained in this report is obtained from federal, state and other public sources. Orswell & Kasman, Inc. (OKI) does not make any guarantees, warranties or representations, whether expressed or implied, regarding the accuracy of such information, and shall not be held responsible in the event that any such inaccuracies are present. All liability for damages of any nature arising from any inaccuracy in the facts stated herein must be assumed by the client. OKI also advises the client that this report and information contained herein is intended solely for the use of the client or assignee with whom OKI has a contractual relationship. OKI makes no other warranty, express or implied, as to the conclusions and professional advice included in this report, and is not responsible for the independent conclusions, opinions or recommendations made by any other party or entity based whole or in part on the information provided in this records review.

Orswell & Kasman, Inc.
316 West Foothill Boulevard
Monrovia, CA 91016
(626) 932 - 1800 * Fax (626) 932 - 1807
www.orswell-kasman.com

Orswell & Kasman, Inc.

Environmental Assessments & Consulting

Subject Property Location:
4832, 4838, 4848, 4850, 4858, 4900, 4906 and 4910 Azusa Canyon Road
Irwindale, CA 91706



SUBJECT TO TERMS OF DISCLAIMER

MAP LEGEND

- Areas of Contamination
- One Mile Radius
- Half Mile Radius
- Quarter Mile Radius
- Subject Property
- Military Installation
- Parks
- Water
- Railroads
- Roads
- Freeways

HAZARDOUS SITE SYMBOLS

- National Priority List
- RCRA Corrective Action
- CERCLIS
- CalSites
- Leaking Underground Storage Tanks
- Active / Inactive Landfills
- Treatment, Storage, & Disposal Facilities
- RWQCB Sites
- Closed RWQCB Sites
- Registered Underground Tanks
- Generators
- Emergency Response Notification System
- Superfund Liens
- CERCLIS - No Further Remedial Action Planned
- Oil Wells

For more information please contact us at (626) 932-1800 or www.orswell-kasman.com

Site Summary List

Please note that certain sites may appear on multiple databases
For more information on these sites, please see the accompanying pages

Subject Property Information:
Industrial and Residential Properties
4832, 4838, 4848, 4850, 4858, 4900, 4906 and 4910 Azusa Canyon Road
Irwindale, CA 91706

Site #	Case #	Source Database
miles from the subject property	60001336 Site **Baldwin Park (San Gabriel Valley Superfund Site)** **Covers portions of cities of Azusa, Irwindale, Baldwin Park and Baldwin Park, CA 91706**	**CALST** [ ]
Site # *miles from the subject property*	19990006 Site **SAN GABRIEL GROUNDWATER BASIN (1-4)*** **10-20 MI E OF L.A. ON HWY 10 IN AZUSA +ZIPS 91333, 91770** **EL MONTE, CA 91732** AREA	Source Database **CALST** AREA [JO]
Site # 1 *0.083 miles from the subject property*	CAD983598962 Site **MALCOLM DRILLING CO INC** **4926 N AZUSA CANYON RD** **IRWINDALE, CA 91706**	Source Database **GEN** [ ]
Site # 2 *0.0855 miles from the subject property*	26668 Site **MALCOLM DRILLING CO INC** **4926 AZUSA CANYON RD** **BALDWIN PARK, CA 91706**	Source Database **UTANK** [ ]
Site # 3 *0.0857 miles from the subject property*	26668~0 Site **MALCOLM DRILLING CO INC** **4926 AZUSA CANYON RD** **BALDWIN PARK, CA 91706**	Source Database **UTANK** [ ]
Site # 4 *0.0916 miles from the subject property*	2741 Site **MALCOLM DRILLING CO INC** **4926 AZUSA CANYON RD** **BALDWIN PARK, CA 91706**	Source Database **UTANK** [ ]
Site # 5 *0.1378 miles from the subject property*	T10000000418 Site **RODRIQUEZ TRUCKING** **4938 N AZUSA CANYON RD** **IRWINDALE, CA 91706** 8417-026-003	Source Database **LUSTIS** 598 E3 [ZM]
Site # 6 *0.4453 miles from the subject property*	T0603792260 Site **US RENTALS INC** **15402 E ARROW HWY.** **BALDWIN PARK, CA 91706** 8413-001-018	Source Database **LUSTIS** 598 E2 [MJ]
Site # 7 *0.4891 miles from the subject property*	CAD000628099 Site **BAXTER HEALTHCARE CORP. SITE** **4401 FOXDALE AVE** **IRWINDALE, CA 91706**	Source Database **CERCLIS** 598 E/F4 [JO]
Site # 8 *0.5125 miles from the subject property*	19-AA-0024 Site **Irwindale (Conrock) D.S.** **4827 N. Irwindale Ave.** **Irwindale, 91707**	Source Database **SWIS** [ ]

CalSites

California Sites - Formerly Bond Expenditure Plan (BEP) & Abandoned Site Program Information System (ASPIS)

Case Number: **60001336**

Site: **Baldwin Park (San Gabriel Valley Superfund Site)**
Covers portions of cities of Azusa, Irwindale, Baldwin Park
Baldwin Park, CA 91706

On NPL? YES 6400 Acres

Lead Agency: US EPA

Agencies Involved: SMBRP, RWQCB 4 - Los Angeles, US EPA

Funding: Joint State/Federal-Funded

Past Uses: AEROSPACE MANUFACTURING/MAINTENANCE, AEROSPACE ROCKET TESTING/LAUNCH, DISTRIBUTOR - CHEMICAL, LANDFILL - DOMESTIC, MANUFACTURING - CHEMICALS, MANUFACTURING - ELECTRONIC, MANUFACTURING - METAL, MANUFACTURING - OTHER, TRANSPORTATION - WAREHOUSING, WASTE -

Status: **Active** Date: **2010-05-25**

Site Type State Response or NPL-Federal Superfund

Special Program

Potential Media Affected: AQUI, OTH, WELL

Confirmed COCs: 30017,30022,30246,30116,30027,30423

Potential COCs: 30017, 30022, 30027, 30116, 30246, 30423

Is Use Restricted?: NO

Site Management NONE SPECIFIED

Site # *miles from the Subject Property*

Case Number: **19990006**

Site: **SAN GABRIEL GROUNDWATER BASIN (1-4)***
10-20 MI E OF L.A. ON HWY 10 IN AZUSA +ZIPS 91333, 917
EL MONTE, CA 91732 AREA JO

On NPL? YES 72320 Acres

Lead Agency: US EPA

Agencies Involved: SMBRP, RWQCB 4 - Los Angeles, US EPA

Funding: Joint State/Federal-Funded

Past Uses: AEROSPACE MANUFACTURING/MAINTENANCE, AEROSPACE ROCKET TESTING/LAUNCH, BATTERY STORAGE, DEGREASING FACILITY, DRY CLEANING, ELECTRIC GENERATION/SUBSTATION, ENGINE TESTING/REPAIR, FIRING RANGE - SMALL ARMS ETC..., FOUNDRY, FUEL - VEHICLE STORAGE/ REFUELING,

Status: **Active** Date: **2010-05-25**

Site Type State Response or NPL-Federal Superfund

Special Program EPA - Multi-Site Cooperative Agreement

Potential Media Affected: AQUI, OTH, SOIL, WELL

Confirmed COCs: 30017,30022,30027,30246

Potential COCs: 30017, 30022, 30027, 30246

Is Use Restricted?: NO

Site Management NONE SPECIFIED

Site # *miles from the Subject Property*

GENERATORS

Case Number: **CAD983598962**

Site: **MALCOLM DRILLING CO INC**
4926 N AZUSA CANYON RD
IRWINDALE CA 91706

Site # 1 *0.083 miles from the Subject Property*

Generator Type SQG
Small Quantity Hazardous Waste Generator

Handler IS NOT a Transporter

Underground Storage Tanks

Case Number: **26668**

Site: **MALCOLM DRILLING CO INC**
4926 AZUSA CANYON RD
BALDWIN PARK CA 91706

Status: **Current**

Site # 2 *0.0855 miles from the Subject Property*

Case Number: **26668**

Site: **MALCOLM DRILLING CO INC**
4926 AZUSA CANYON RD
BALDWIN PARK CA 91706

Status: **Current**

Site # 2 *0.0855 miles from the Subject Property*

Case Number: **26668~0**

Site:

Status: **Historical**

Site # 3 *0.0857 miles from the Subject Property*

Case Number: **2741**

Site: **MALCOLM DRILLING CO INC**
4926 AZUSA CANYON RD
BALDWIN PARK CA 91706

Status: **Historical**

Site # 4 *0.0916 miles from the Subject Property*

LUSTIS

Regional Water Quality Control Board Program Leaking Underground Storage Tank Sites

Case Number: **T10000000418**

Site Name: **RODRIQUEZ TRUCKING**
4938 N AZUSA CANYON RD
IRWINDALE CA 91706

598 E3 8417-026-003

Local Case #: 015531-016981

Regional Board #

Case Type: **LUST Cleanup Site**
Current Status: **Open - Site Assessment**
Status Date: **2008-10-21**

Lead Agency: LOS ANGELES COUNTY
Local Agency: LOS ANGELES COUNTY
File Location:

Potential Media Affected:

Potential Contaminants

Status History:

Date	Status
2008-10-21	Open - Site Assessment
2008-10-21	Open - Case Begin Date

Regulatory Action History:

SITE HISTORY:

Site # 5 0.1378 miles from the Subject Property

Case Number: **T0603792260**

Site Name: **US RENTALS INC**
15402 E ARROW HWY.
BALDWIN PARK CA 91706

598 E2 8413-001-018

Local Case #: 011251-011270

Regional Board # I-11270A

Case Type: **LUST Cleanup Site**
Current Status: **Open - Site Assessment**
Status Date: **2009-07-16**

Lead Agency: LOS ANGELES RWQCB (REGION 4)
Local Agency: LOS ANGELES COUNTY
File Location: Regional Board

Potential Media Affected: Under Investigation

Potential Contaminants Gasoline

Status History:

Date	Status
2002-08-04	Open - Case Begin Date
2005-06-15	Open - Site Assessment
2009-04-23	Open - Referred
2009-07-16	Open - Site Assessment

Regulatory Action History:

Date	Action Type	Action
Unknown	Other	Leak Reported
Unknown	Other	Leak Discovery
2009-04-27	ENFORCEMENT	Referral to Regional Board - #c607469
2009-07-16	ENFORCEMENT	Staff Letter
2009-08-17	RESPONSE	Other Report / Document

SITE HISTORY:

Site # 6 0.4453 miles from the Subject Property

CERCLIS

Comprehensive Environmental Response, Compensation and Liability Information System

Case Number: **CAD000628099**

Site: **BAXTER HEALTHCARE CORP. SITE**
4401 FOXDALE AVE
IRWINDALE, CA 91706

598 E/F4 JO

NPL Status: Site is Part of NPL Site

Federal Facility? **N**

Site # 7 0.4891 miles from the Subject Property

Actions

DISCOVERY **Start Date:** **Completion Date: 6/21/1989 00**

The process by which a potential hazardous waste site is brought to the attention of the EPA. The process can occur through the use of several mechanisms such as a phone call or referral by another government agency.

PRELIMINARY ASSESSMENT **Start Date:** **Completion Date: 6/7/1991 00:**

Collection of diverse existing information about the source and nature of the site hazard. It is EPA policy to complete the preliminary assessment within one year of site discovery.

SWIS

Solid Waste Information System - Active / Inactive Landfills

Case Number: **19-AA-0024**

Site: **Irwindale (Conrock) D.S.**
4827 N. Irwindale Ave.
Irwindale, 91707

Site # 8 *0.5125 miles from the Subject Property*

OWNER INFORMATION (213) 258-2777

Cal Mat Co. 3200 San Fernando
Los Angeles, CA 900065

Unit #: 01
Category: Disposal
Activity: Solid Waste Disposal Site
Regulatory Status Unpermitted
Operational Status: Closed
Inspection Frequency: Annual
Program Type:

Closure Date:
Closure Type:

Acerage: 0.00
Disposal Acerage: 0.00
Throughput:
Capacity:
Remaining Capacity:
Accepted Waste:

REFERENCE GUIDE TO THE REGULATORY AGENCY DATABASES

SOURCE	DESCRIPTION
NPL: *1 mile search radius* *Date: December 2012*	The Naional Priority List (NPL) identifies abandoned or uncontrolled hazardous waste sites, which have been identified as possibly representing a long-term threat to the public health or environment. These sites have been identified as being highly contaminated with hazardous substances and represent the USEPA's target enforcement and cleanup efforts. Studies of individual sites are conducted by the USEPA to determine the level of contamination, and the sites are then compared and ranked to other sites on the NPL.
CORRACTS: *1 mile search radius* *Date: December 2012*	The USEPA maintains a list of facilities which have been authorized to receive hazardous waste. These facilities have permits to treat, store or dispose of the waste as determined by the RCRA regulations. In addition, the USEPA publishes a list of those facilities who are subject to a corrective action based on the facilities waste handling and storage procedures. The facilities, which are subject to a corrective action, are identified as CORRACTS sites.
CERCLIS: *½ mile search radius* *Date: December 2012*	The USEPA has developed a database known as the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), which contains information on potential hazardous waste sites located throughout the United States. There are over 33,000 sites on the CERCLIS inventory. All sites are subjected to a preliminary assessment and thereafter are either placed on the National Priority List (NPL) or are placed in a category for those sites requiring no further Federal Superfund action.
CALST: *½ mile search radius* *Date: January 2012*	The State of California Environmental Protection Agency maintains the "CalSite" database, which is a listing of 7,800 known active, inactive and abandoned hazardous sites. These sites have previously been reported in the Abandoned Site Program Information System (ASPIS), Bond Ependiture Plan (BEP) and Cortese database.
RWQCB: *½ mile search radius* *Date: January 2012*	The State of California Water Resources Control Board is responsible for monitoring the quality of flow of the groundwater and compiles lists of known leaking undergound storage tanks. The list is maintained as the Leaking Underground Storage Tank Information System (LUSTIS). The local Regional Water Quality Control Board (RWQCB) monitors the contamination problem, the investigation and any remedial activities.
SWIS: *½ mile search radius* *Date: January 2013*	The State of California Integrated Waste Management Board maintains a list of active and inactive landfill sites within California and provides information concerning the ownership and types of wastes brought to the landfills.
TSD: *½ mile search radius* *Date: December 2012*	Treatment, Storage or Disposal Facilities (TSDF) is a federal listing of facilities, which have been authorized to receive hazardous waste. These facilities have permits to treat, store or dispose of waste as determined by the RCRA regulations.
ERNS: *Property & adjacent* *Date: January 2004*	The Emergency Response Notification System (ERNS) is a list of locations which have reported a release of oil or hazardous substances to the USEPA Office of Emergency and Remedial Response. Most of the data in this system is based on information that was received during the initial notification.
HWG: *Property & adjacent* *Date: December 2012*	The United States Environmental Protection Agency maintains a list of known hazardous waste generators in the nation. A company on the list generates reportable quantities of hazardous waste, and the disposal and transportation of the waste is monitored through the use of a hazardous waste manifest.
UTANK: *Property & adjacent* *Date: January 2012*	The location and identy of registered underground tanks is maintained by the State of California Water Resources Control Board in the Hazardous Substance Storage Container Database. The list was compiled in 1991 and there are currently no plans to update the database at the present time.
SFL: *Property & adjacent* *Date: July 2011*	The USEPA maintains a list of Superfund Leins that have been issued on properties throughout the United States. These sites have been remediated through the expenditures of Superfund monies. The purpose of the lein is to prevent the property owner from gaining a financial benefit from the federal government's cleanup and restoration activities.

APPENDIX B

Historical Topographical Maps

4848 Azusa Canyon Road
4848 Azusa Canyon Road
Baldwin Park, CA 91706

Inquiry Number: 3674352.4
July 24, 2013

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
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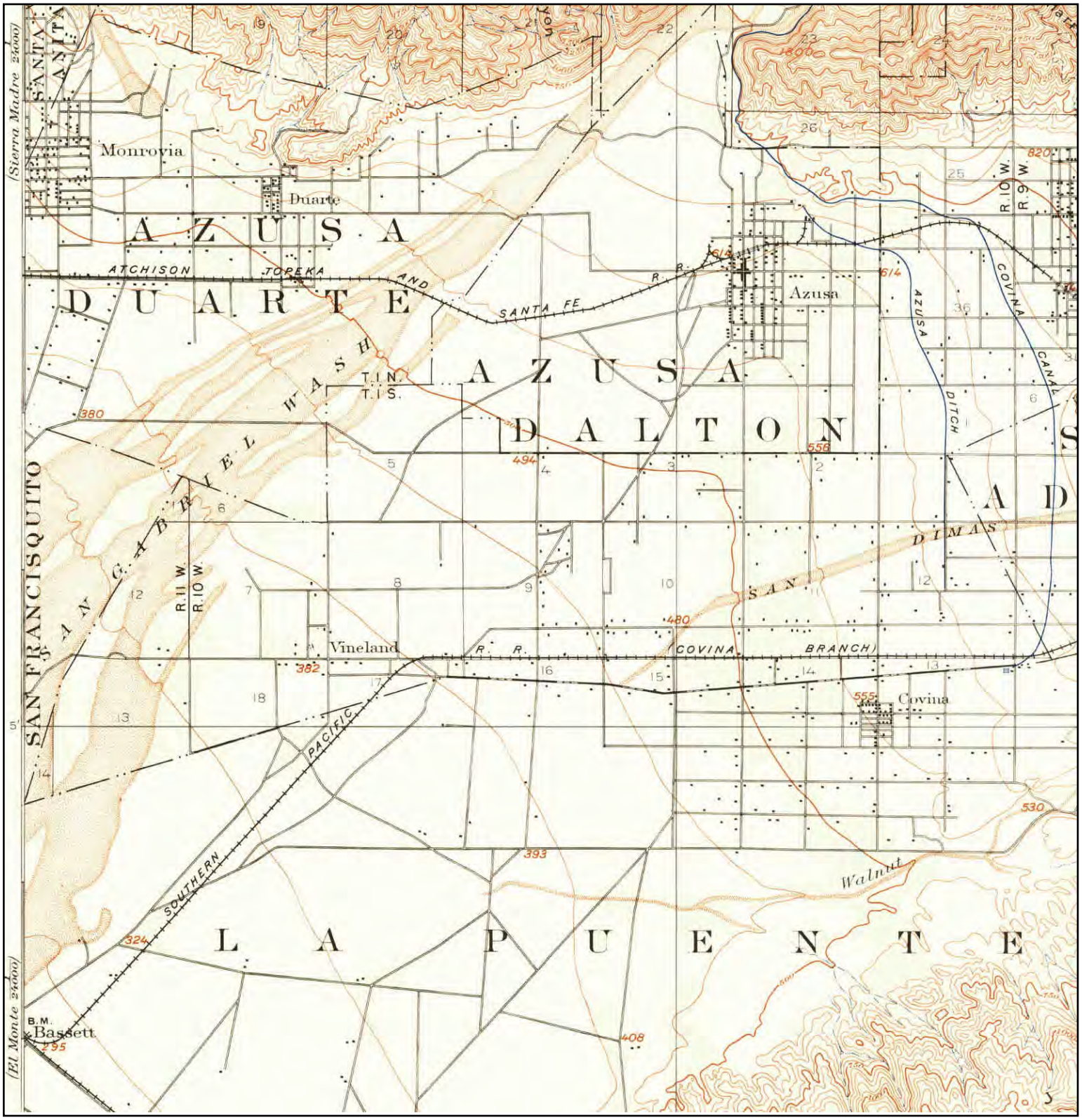
Historical Topographic Map

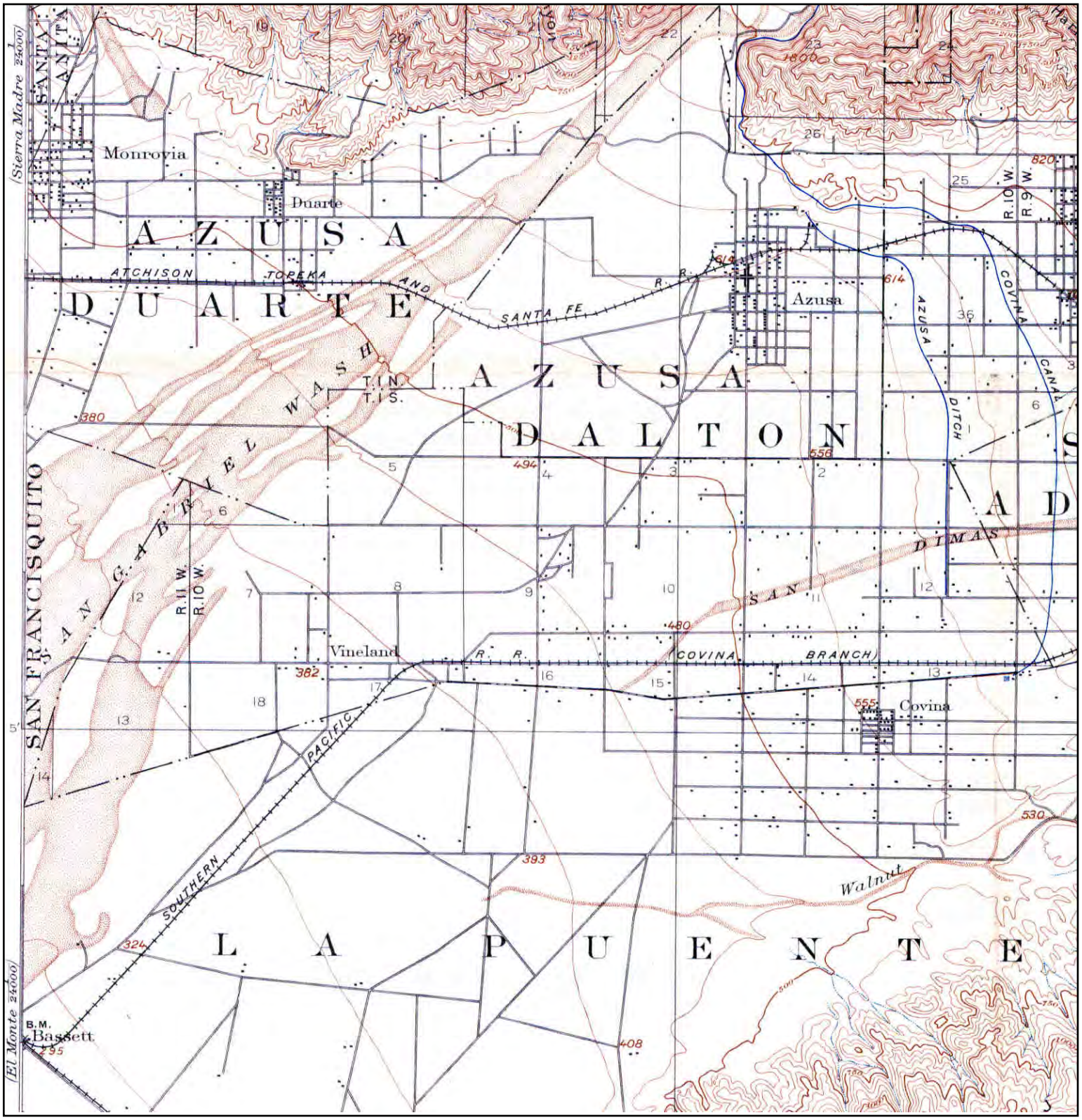


N	TARGET QUAD NAME: POMONA MAP YEAR: 1894 SERIES: 15 SCALE: 1:62500	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

Historical Topographic Map

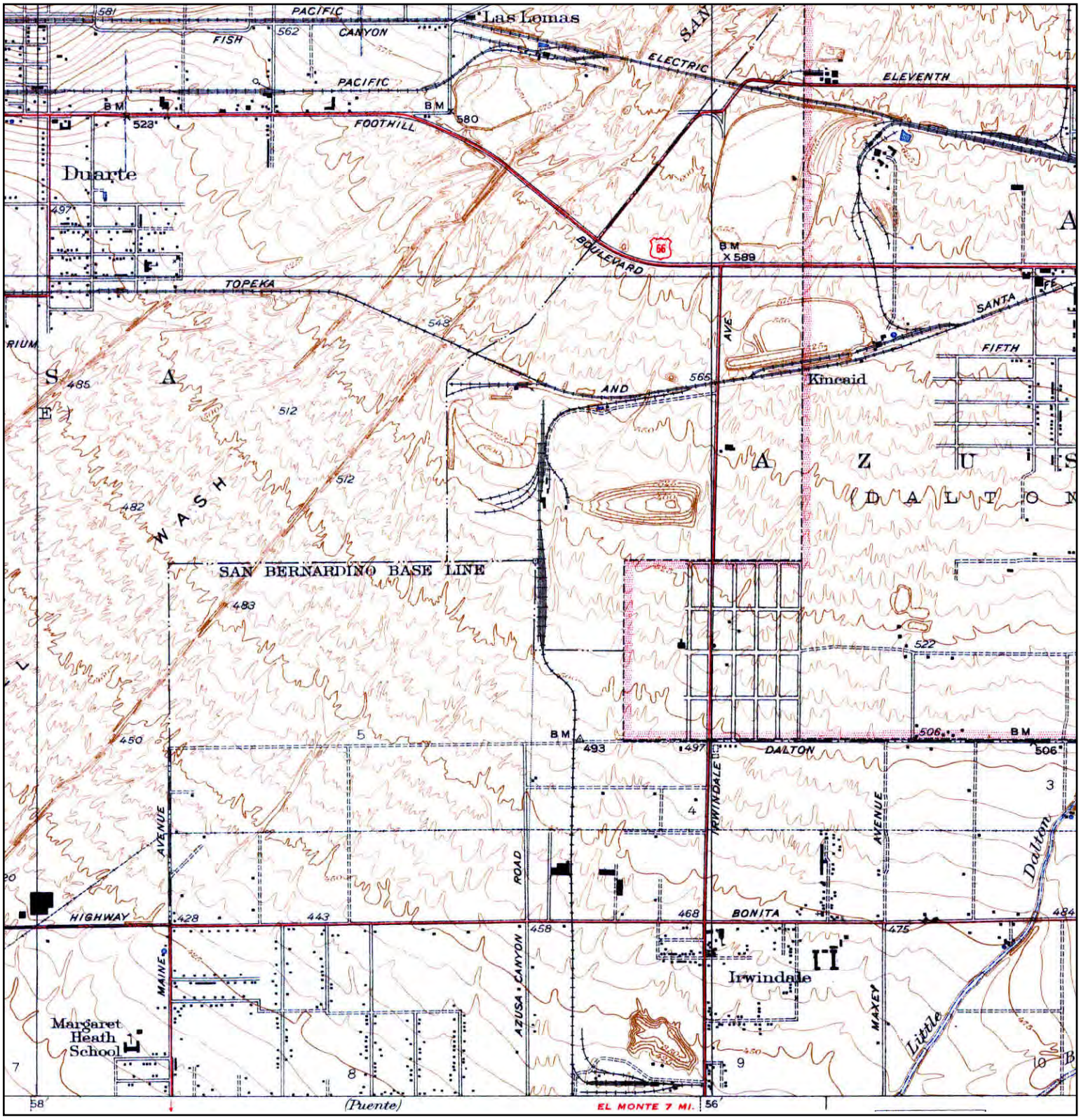
N	**TARGET QUAD** NAME: SOUTHERN CA SHEET 1 MAP YEAR: 1901 SERIES: 60 SCALE: 1:250000	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

Historical Topographic Map



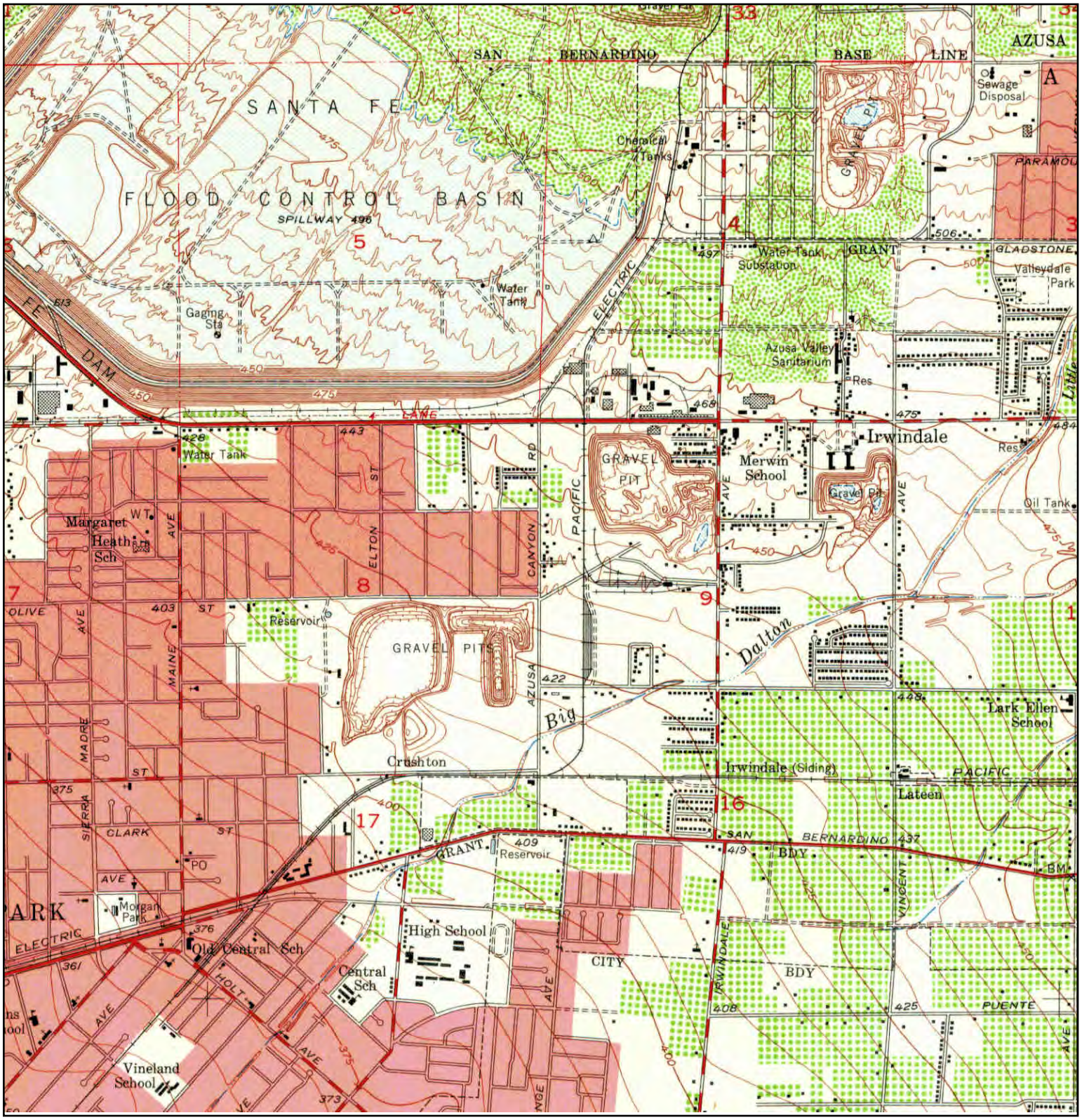
N	TARGET QUAD NAME: POMONA MAP YEAR: 1904 SERIES: 15 SCALE: 1:62500	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

Historical Topographic Map



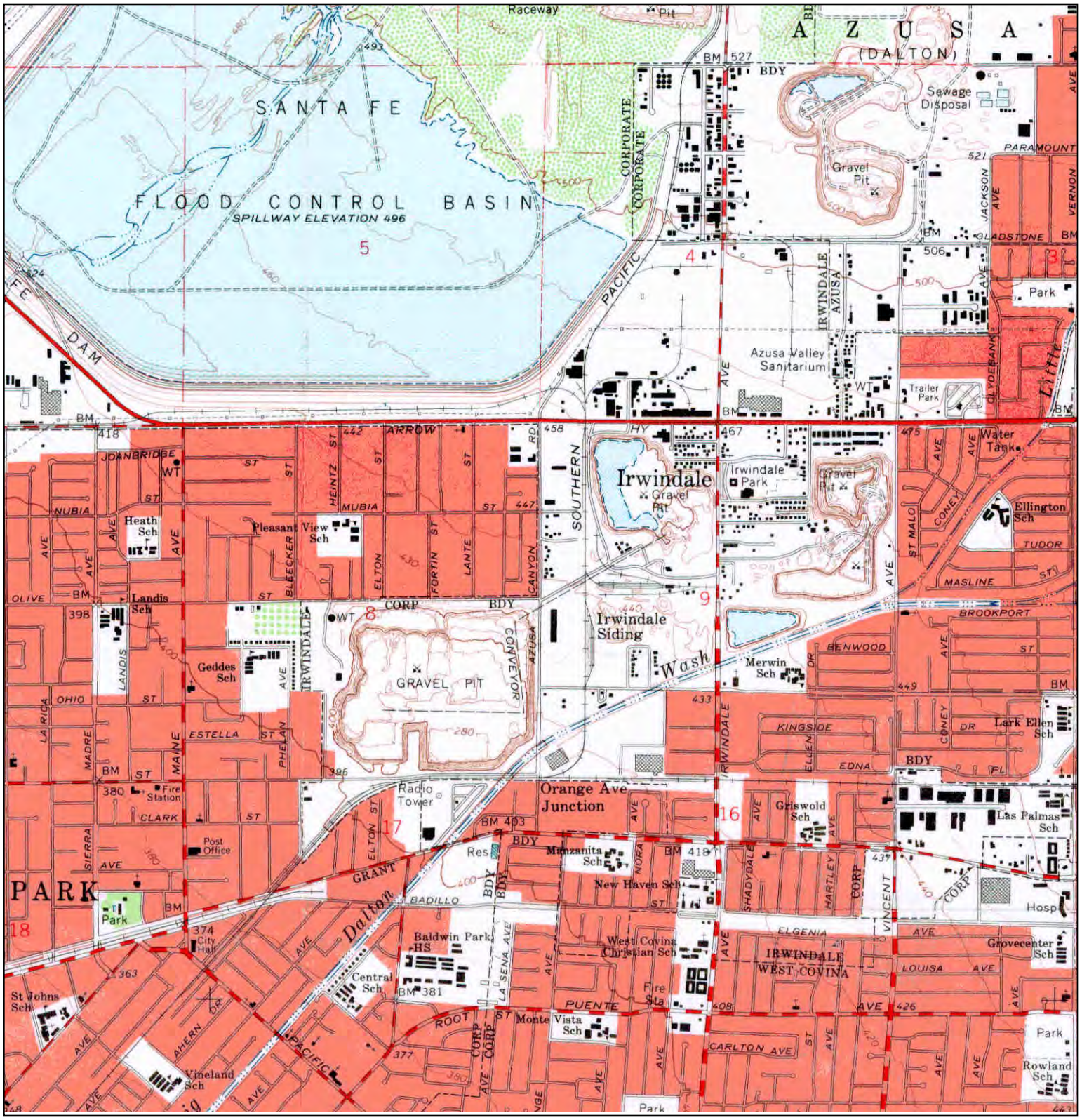
N	TARGET QUAD NAME: AZUSA MAP YEAR: 1939 SERIES: 6 SCALE: 1:24000	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

Historical Topographic Map



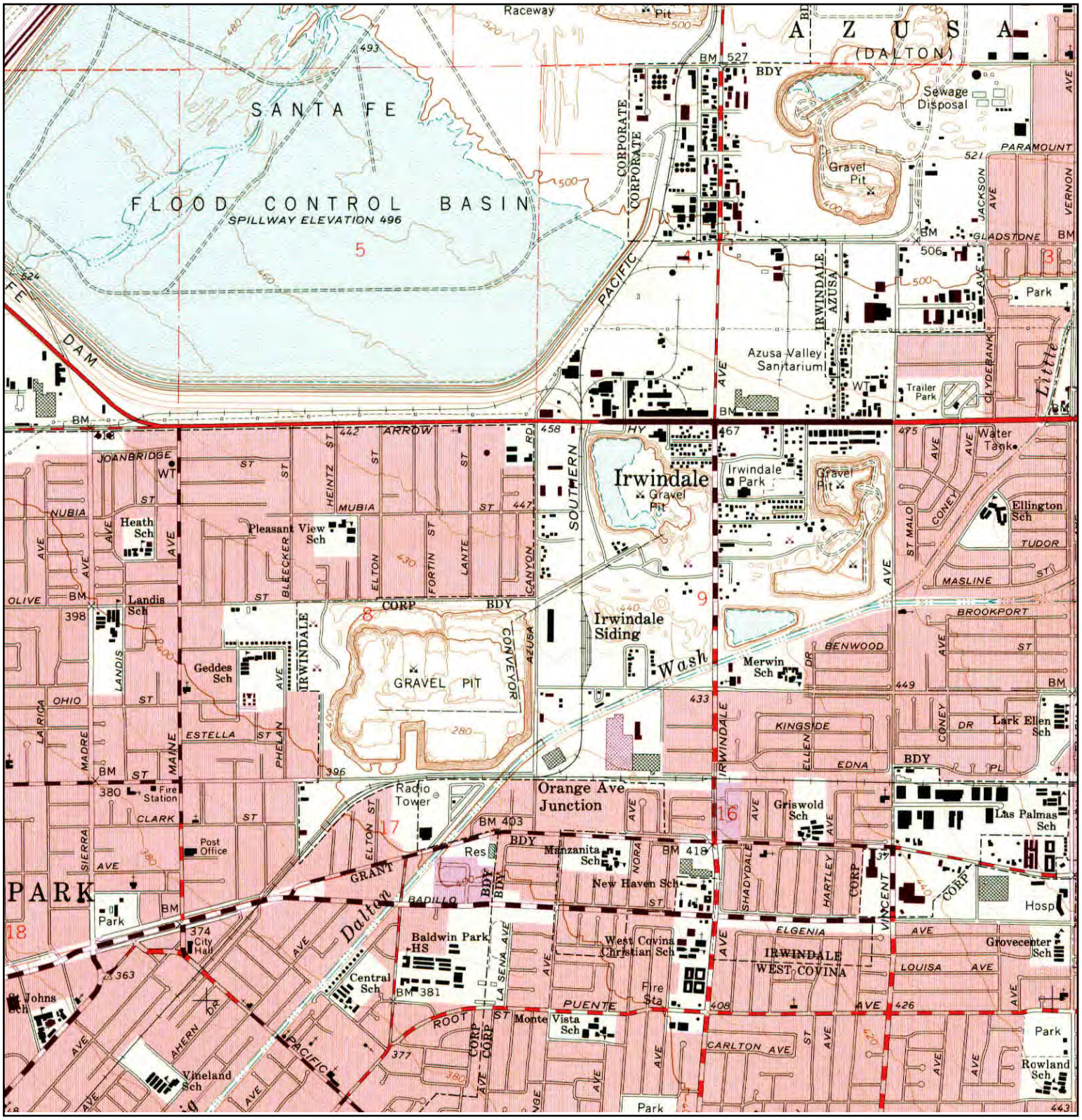
N	TARGET QUAD NAME: BALDWIN PARK MAP YEAR: 1953 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

Historical Topographic Map



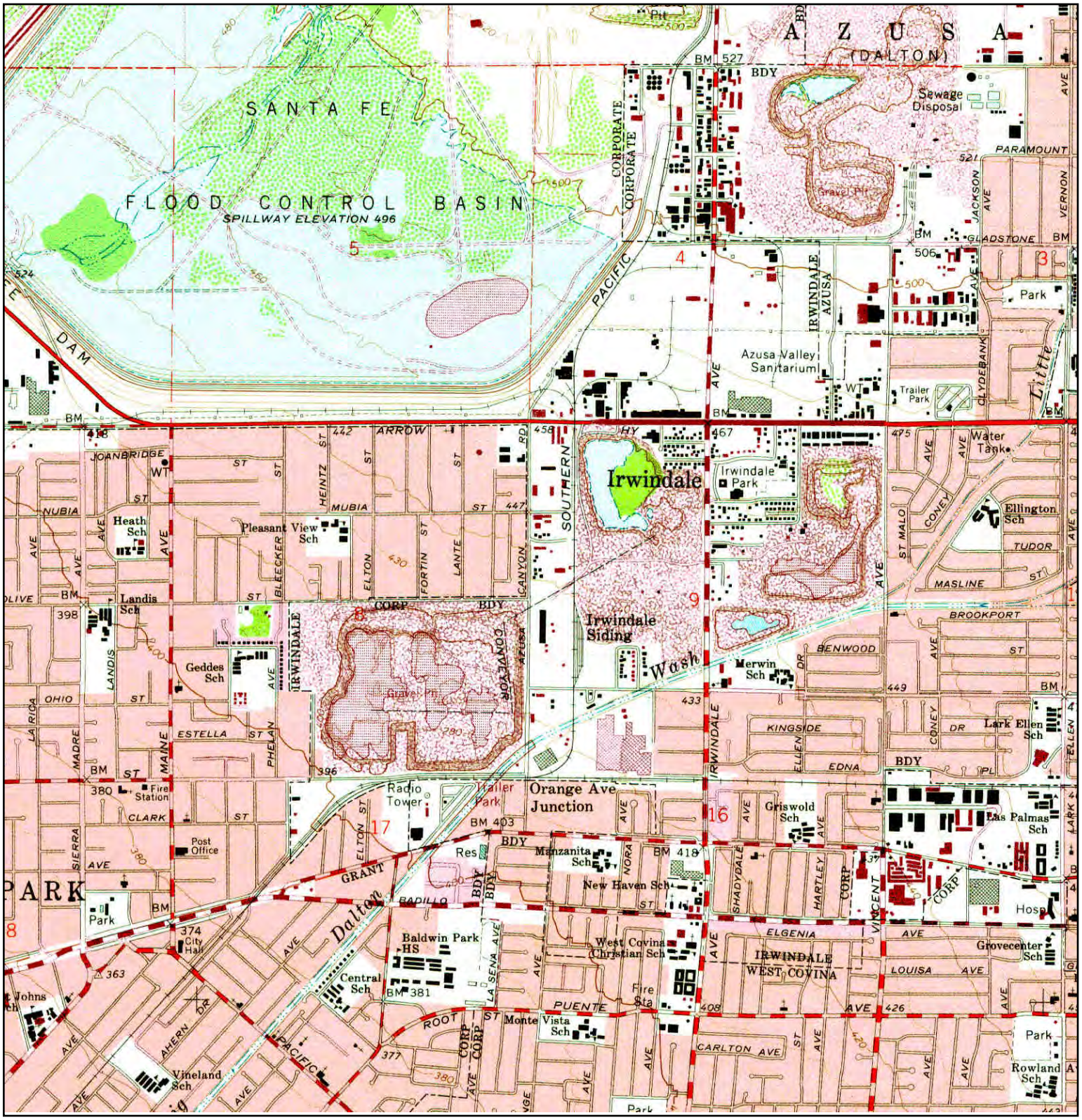
N	TARGET QUAD NAME: BALDWIN PARK MAP YEAR: 1966 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

Historical Topographic Map



N	TARGET QUAD NAME: BALDWIN PARK MAP YEAR: 1972 PHOTOREVISED FROM :1966 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

Historical Topographic Map



N	TARGET QUAD NAME: BALDWIN PARK MAP YEAR: 1981 PHOTOREVISED FROM :1966 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

Historical Topographic Map

N	ADJOINING QUAD NAME: PUENTE MAP YEAR: 1927 SERIES: 6 SCALE: 1:24000	SITE NAME: 4848 Azusa Canyon Road ADDRESS: 4848 Azusa Canyon Road Baldwin Park, CA 91706 LAT/LONG: 34.1013 / -117.9418	CLIENT: AMEC Environment & Infrastructure CONTACT: Ellen Smith INQUIRY#: 3674352.4 RESEARCH DATE: 07/24/2013

APPENDIX C

Environmental Data Resources, Inc.
Radius Map Report with GeoCheck®

4848 Azusa Canyon Road
4848 Azusa Canyon Road
Baldwin Park, CA 91706

Inquiry Number: 3674352.2s
July 24, 2013

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	128
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

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Physical Setting Source Summary	A-2
Physical Setting Source Map	A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched	A-28

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EXECUTIVE SUMMARY

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

TARGET PROPERTY INFORMATION

ADDRESS

4848 AZUSA CANYON ROAD
BALDWIN PARK, CA 91706

COORDINATES

Latitude (North):	34.1013000 - 34˚ 6' 4.68''
Longitude (West):	117.9418000 - 117˚ 56' 30.48''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	413126.8
UTM Y (Meters):	3773593.5
Elevation:	444 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	34117-A8 BALDWIN PARK, CA
Most Recent Revision:	1981

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
JIMS ROOFING MATERIALS 4848 AZUSA CANYON RD IRWINDALE, CA 91706	WIP Facility Status: Historical	N/A
AIRCRAFT WELDING INC 4848 AZUSA CANYON RD IRWINDALE, CA 91706	HAZNET	N/A
AIRCRAFT WELDING INC 4848 AZUSA CANYON RD IRWINDALE, CA 91706	HAZNET	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land
FEMA UST ..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP ..... Voluntary Cleanup Program Properties
INDIAN VCP ..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
Toxic Pits ..... Toxic Pits Cleanup Act Sites
CDL ..... Clandestine Drug Labs
US HIST CDL ..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST ..... Facility Inventory Database

Local Land Records

LIENS 2 ..... CERCLA Lien Information
LIENS ..... Environmental Liens Listing
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators

EXECUTIVE SUMMARY

DOT OPS	Incident and Accident Data
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
UMTRA	Uranium Mill Tailings Sites
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
CA BOND EXP. PLAN	Bond Expenditure Plan
UIC	UIC Listing
NPDES	NPDES Permits Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
LA Co. Site Mitigation	Site Mitigation List
DRYCLEANERS	Cleaner Facilities
LOS ANGELES CO. HMS	HMS: Street Number List
ENF	Enforcement Action Listing
EMI	Emissions Inventory Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
WDS	Waste Discharge System
PRP	Potentially Responsible Parties
US AIRS	Aerometric Information Retrieval System Facility Subsystem
2020 COR ACTION	2020 Corrective Action Program List
LEAD SMELTERS	Lead Smelter Sites
Financial Assurance	Financial Assurance Information Listing
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
COAL ASH DOE	Steam-Electric Plant Operation Data
MWMP	Medical Waste Management Program Listing
PCB TRANSFORMER	PCB Transformer Registration Database
PROC	Certified Processors Database

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 04/26/2013 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN GABRIEL VALLEY (AREA 2)	***SUNSET & SAN BERNARDINO***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

Federal CERCLIS list

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

A review of the CERCLIS list, as provided by EDR, and dated 02/04/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN GABRIEL VALLEY (AREA 2)	***SUNSET & SAN BERNARDINO***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

Federal CERCLIS NFRAP site List

CERC-NFRAP: 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.

A review of the CERC-NFRAP list, as provided by EDR, and dated 02/05/2013 has revealed that there is

1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SPECIALTY ORGANICS INC	***5263 N 4TH ST***	***NNE 1/4 - 1/2 (0.483 mi.)***	***52***	***83***

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/12/2013 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VERIZON CALIFORNIA INCORPORATE	5010 AZUSA CANYON RD	NNW 0 - 1/8 (0.106 mi.)	D20	45

Lower Elevation	Address	Direction / Distance	Map ID	Page
MALCOLM DRILLING CO INC	***4926 N AZUSA CANYON RD***	***NW 0 - 1/8 (0.005 mi.)***	***C10***	***38***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 03/14/2013 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN GABRIEL VALLEY (AREA 2)	***SUNSET & SAN BERNARDINO***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/06/2013 has revealed that there are

EXECUTIVE SUMMARY

3 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DAVIS WIRE CORP Status: Refer: Other Agency	***5555 IRWINDALE AVE***	***NNE 1/2 - 1 (0.725 mi.)***	***54***	***99***
KEMAC TECHNOLOGY INC. Status: Refer: Other Agency	***5462 N. IRWINDALE***	***NNE 1/2 - 1 (0.823 mi.)***	***55***	***122***

Lower Elevation	Address	Direction / Distance	Map ID	Page
READY PAC PRODUCE INCORPORATED Status: Refer: RWQCB	***4401 FOXDALE AVENUE***	***SSE 1/2 - 1 (0.594 mi.)***	***53***	***91***

State and tribal landfill and/or solid waste disposal site lists

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 05/20/2013 has revealed that there is 1 SWF/LF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
IRWINDALE (CONROCK) D.S.	4827 N. IRWINDALE AVE.	E 1/4 - 1/2 (0.370 mi.)	H44	68

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 06/17/2013 has revealed that there are 10 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GENERAL TELEPHONE CO. Status: Completed - Case Closed	5010 AZUSA CANYON RD N	NNW 0 - 1/8 (0.107 mi.)	D24	48
ARROW PARKING Status: Completed - Case Closed	***5065 CALMVIEW AVE***	***WNW 1/4 - 1/2 (0.338 mi.)***	***40***	***60***
U.S. RENTALS Status: Open - Site Assessment Status: Completed - Case Closed	***15402 ARROW HWY E***	***NNW 1/4 - 1/2 (0.357 mi.)***	***43***	***64***
SHANNON CASKET CO Status: Completed - Case Closed	15744 ARROW HWY E	NNE 1/4 - 1/2 (0.377 mi.)	I47	70
IRWINDALE REDEVELOPMENT Status: Completed - Case Closed	***4900 IRWINDALE AVE***	***E 1/4 - 1/2 (0.381 mi.)***	***H49***	***73***
IRWINDALE CITY OF Status: Completed - Case Closed	***16034 CALLE DEL NORTE***	***ENE 1/4 - 1/2 (0.475 mi.)***	***51***	***79***
SPECIALTY ORGANICS INC Status: Completed - Case Closed	***5263 N 4TH ST***	***NNE 1/4 - 1/2 (0.483 mi.)***	***52***	***83***

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
RODRIQUEZ TRUCKING Status: Open - Site Assessment	***4938 N AZUSA CANYON RD***	***NW 0 - 1/8 (0.016 mi.)***	***C12***	***41***
IRWINDALE SHOP Status: Completed - Case Closed	***4701 AZUSA CANYON RD***	***SSW 1/8 - 1/4 (0.165 mi.)***	***E28***	***52***
DS WATERS OF AMERICA LP Status: Completed - Case Closed	***4548 N AZUSA CANYON RD***	***S 1/4 - 1/2 (0.376 mi.)***	***46***	***69***

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 06/17/2013 has revealed that there are 4 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JASCO WOOD PRODUCTS Facility Status: Open - Site Assessment	***15519 ARROW HWY.***	***N 1/4 - 1/2 (0.353 mi.)***	***41***	***62***
L & M METAL PRODUCTS, INC. Facility Status: Open - Site Assessment	***5108 CALMVIEW AVE.***	***NW 1/4 - 1/2 (0.371 mi.)***	***45***	***68***
IOPTEX RESEARCH INC Facility Status: Open - Site Assessment	***15715 ARROWHIGH***	***NE 1/4 - 1/2 (0.452 mi.)***	***50***	***76***

Lower Elevation	Address	Direction / Distance	Map ID	Page
POWERS LUMBER CO., Facility Status: Open - Site Assessment	***4407 AZUSA CANYON RD.***	***SSW 1/4 - 1/2 (0.293 mi.)***	***39***	***59***

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 06/17/2013 has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GTE CALIFORNIA	5010 AZUSA CANYON RD	NNW 0 - 1/8 (0.106 mi.)	D21	47

Lower Elevation	Address	Direction / Distance	Map ID	Page
MALCOLM DRILLING CO INC	4926 AZUSA CANYON RD	NW 0 - 1/8 (0.005 mi.)	C8	37
CALMAT CO	4702 AZUSA CANYON RD	SSW 1/8 - 1/4 (0.165 mi.)	E27	52

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

AOCONCERN: San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

A review of the AOCONCERN list, as provided by EDR, and dated 03/30/2009 has revealed that there is 1 AOCONCERN site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN GABRIEL VALLEY		0 - 1/8 (0.000 mi.)	0	9

Local Lists of Registered Storage Tanks

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 4 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GENERAL TELEPHONE COMPANY OF C	5010 AZUSA CANYON RD	NNW 0 - 1/8 (0.106 mi.)	D22	47
SAM P. WALLACE COMPANY, INC.	5115 AZUSA CANYON RD	NNW 1/8 - 1/4 (0.216 mi.)	F33	57

Lower Elevation	Address	Direction / Distance	Map ID	Page
J. G. RODRIGUEZ TRUCKING	***4938 AZUSA CANYON RD***	***NW 0 - 1/8 (0.022 mi.)***	***C13***	***42***
IRWINDALE SHOP	***4701 AZUSA CANYON RD***	***SSW 1/8 - 1/4 (0.165 mi.)***	***E28***	***52***

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GENERAL TELEPHONE	***5010 N AZUSA CANYON RD***	***NNW 0 - 1/8 (0.107 mi.)***	***D25***	***50***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CM2 COMPANY INC	4926 AZUSA CANYON	NW 0 - 1/8 (0.009 mi.)	C11	40
IRWINDALE SHOP	***4701 AZUSA CANYON RD***	***SSW 1/8 - 1/4 (0.165 mi.)***	***E28***	***52***

Other Ascertainable Records

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 12/18/2012 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN GABRIEL VALLEY (AREA 2)	***SUNSET & SAN BERNARDINO***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 7 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GENERAL TELEPHONE CO	5010 AZUSA CNYN	NNW 0 - 1/8 (0.107 mi.)	D23	48
ARROW PARKING	***5065 CALMVIEW AVE***	***WNW 1/4 - 1/2 (0.338 mi.)***	***40***	***60***
ATASCADERO YARD	15627 ARROW	NNE 1/4 - 1/2 (0.354 mi.)	42	64
U.S. RENTALS	***15402 ARROW HWY E***	***NNW 1/4 - 1/2 (0.357 mi.)***	***43***	***64***
SHANNON CASKET COMPANY, INC.	***15744 ARROW HWY***	***NNE 1/4 - 1/2 (0.377 mi.)***	***I48***	***72***
IRWINDALE REDEVELOPMENT	***4900 IRWINDALE AVE***	***E 1/4 - 1/2 (0.381 mi.)***	***H49***	***73***
SPECIALTY ORGANICS INC	***5263 N 4TH ST***	***NNE 1/4 - 1/2 (0.483 mi.)***	***52***	***83***

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORD SPEED PARTS SPC	4273 AUCTION AVE.	SW 1/2 - 1 (0.877 mi.)	56	127

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

A review of the WIP list, as provided by EDR, and dated 07/03/2009 has revealed that there are 20 WIP sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARROW ENGINEERING Facility Status: Historical	4946 AZUSA CANYON RD	NW 0 - 1/8 (0.024 mi.)	C15	43
ADVANCE MARINE & DEVELOPMENT Facility Status: Historical	4954 AZUSA CANYON RD	NW 0 - 1/8 (0.034 mi.)	C17	44
ALBERT C. CLEGG & SONS	4945 AZUSA CANYON RD	NNW 0 - 1/8 (0.060 mi.)	D19	45
GENERAL TELEPHONE Facility Status: Historical	***5010 N AZUSA CANYON RD***	***NNW 0 - 1/8 (0.107 mi.)***	***D25***	***50***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KARL BRYAN PLUMBING Facility Status: Historical	5029 AZUSA CANYON RD	NNW 0 - 1/8 (0.123 mi.)	26	52
FORD PRINTING & MAILING INC. Facility Status: Historical	5102 AZUSA CANYON RD	NNW 1/8 - 1/4 (0.199 mi.)	F31	57
PLASTECH TRANSPARENCIES Facility Status: Historical	5108 AZUSA CANYON RD	NNW 1/8 - 1/4 (0.208 mi.)	F32	57
IMPERIAL HORIZON	5116 AZUSA CANYON RD	NNW 1/8 - 1/4 (0.220 mi.)	F34	58
ORECO DUCT SYSTEMS, INC. Facility Status: Historical	5119 AZUSA CANYON RD	NNW 1/8 - 1/4 (0.222 mi.)	F35	58
NATIONAL COOLER CORP., Facility Status: Historical	5018 LANTE ST	WNW 1/8 - 1/4 (0.229 mi.)	G36	58
GLENDORA TREE SURGERY, INC. Facility Status: Historical	5040 LANTE ST	NW 1/8 - 1/4 (0.243 mi.)	G38	59

Lower Elevation	Address	Direction / Distance	Map ID	Page
UTILITY DISPOSAL COMPANY	4854 AZUSA CANYON RD	WSW 0 - 1/8 (0.005 mi.)	B4	36
HARPENG MATCH PLATE Facility Status: Historical	4910 AZUSA CANYON RD	WNW 0 - 1/8 (0.005 mi.)	C5	36
HARPENG MATCH PLATE Facility Status: Historical	4910 AZUSA CANYON RD	WNW 0 - 1/8 (0.005 mi.)	C6	36
CMZ CO Facility Status: Historical	***4926 N AZUSA CANYON RD***	***NW 0 - 1/8 (0.005 mi.)***	***C9***	***37***
J. G. RODRIGUEZ TRUCKING Facility Status: Historical	***4938 AZUSA CANYON RD***	***NW 0 - 1/8 (0.022 mi.)***	***C13***	***42***
DAVALOS TRUCKING, M. F. Facility Status: Historical	***4800 AZUSA CANYON RD***	***SW 0 - 1/8 (0.056 mi.)***	***18***	***44***
IRWINDALE SHOP Facility Status: Historical	***4701 AZUSA CANYON RD***	***SSW 1/8 - 1/4 (0.165 mi.)***	***E28***	***52***
POLMARK CONSTRUCTION Facility Status: Historical	4848 LANTE ST	W 1/8 - 1/4 (0.194 mi.)	29	56
J & B CEMENT CONTRACTOR	4938 LANTE ST	WNW 1/8 - 1/4 (0.195 mi.)	30	56

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 4 EDR US

EXECUTIVE SUMMARY

Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	4946 AZUSA CANYON RD	NW 0 - 1/8 (0.024 mi.)	C14	43
Not reported	4954 AZUSA CANYON RD	NW 0 - 1/8 (0.034 mi.)	C16	43
Not reported	5029 LANTE ST	NW 1/8 - 1/4 (0.237 mi.)	G37	59

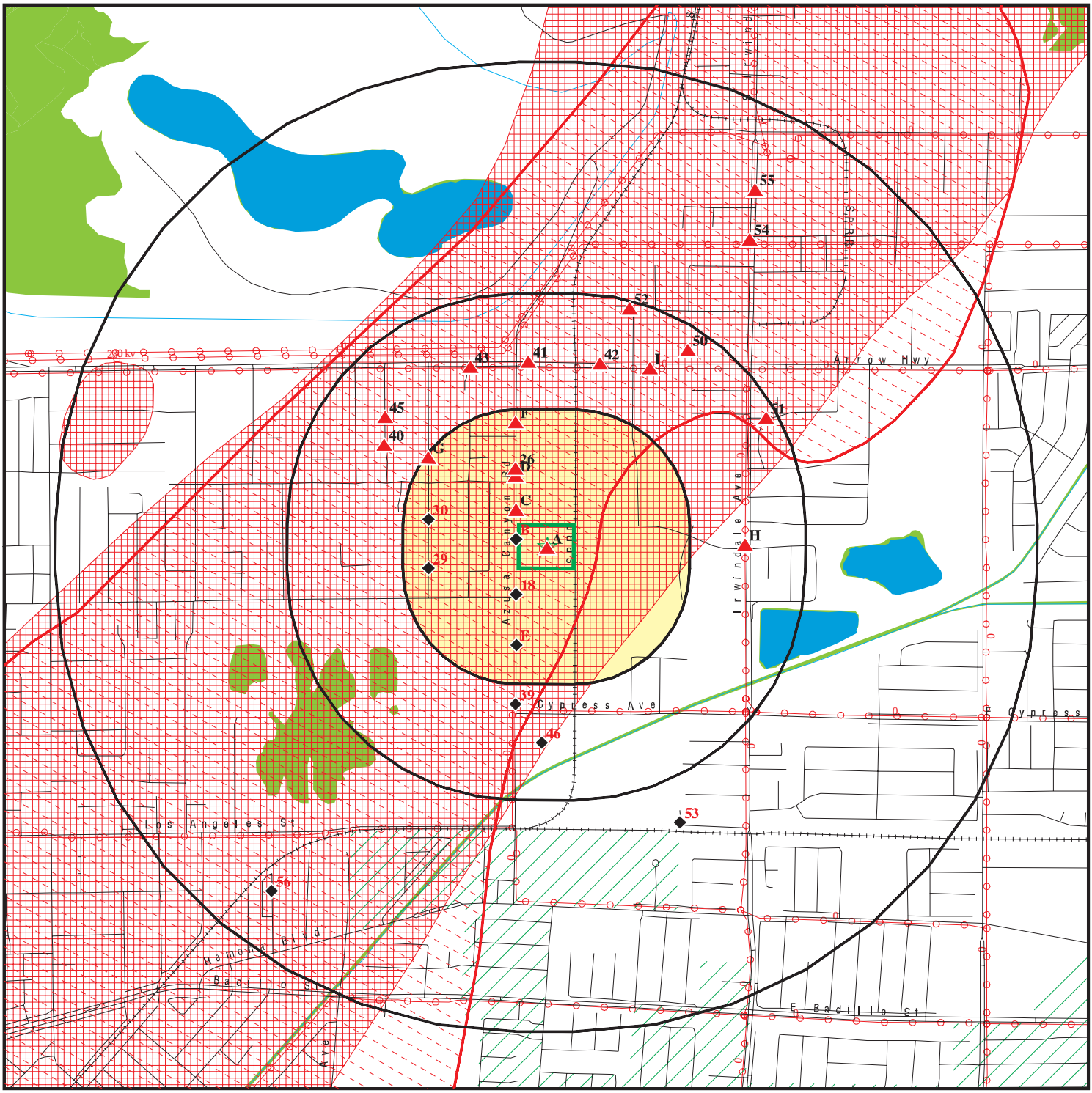
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	4900 AZUSA CANYON RD	WNW 0 - 1/8 (0.005 mi.)	B7	37

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name	Database(s)
CANYON FILTRATION PLANT	RMP
MORRIS DAM, NOSC	HIST CORTESE
AZUSA CANYON ROAD DUMP-IRWINDA	HIST CALSITES,WMUDS/SWAT,LUST
KARDASHIAN & MAX GOLDRING	CERCLIS-NFRAP
RINCON STATION/MT BALDY WORK	LUST
MORRIS DAM	HIST UST
ANDAVAR INC. - CRYSTAL LAKE	HIST UST
MT BALDY WORK CENTER	HIST UST
ANDAVAR INC.-CRYSTAL LAKE RESO	HIST UST
CRYSTAL LAKE ADMINISTRATIVE SI	HIST UST
RINCON RANGER STATION	HIST UST
E. FORK RANGER STATION	HIST UST
SHELL SERVICE STATION	RCRA-SQG,FINDS,HAZNET
	ERNS
AZUSA CLASS II DISPOSAL SITE	FINDS
AZUSA CITY / VAN TASSEL CYN	FINDS
BOCK MACHINE INC.	WIP
VAN ASCH INC.	WIP
UNITED ROCK PRODUCTS	MINES
BOUQUET CANYON STONE CO INC	MINES

OVERVIEW MAP - 3674352.2s



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 4848 Azusa Canyon Road	CLIENT: AMEC Environment & Infrastructure
ADDRESS: 4848 Azusa Canyon Road Baldwin Park CA 91706	CONTACT: Ellen Smith INQUIRY #: 3674352.2s
LAT/LONG: 34.1013 / 117.9418	DATE: July 24, 2013 9:12 am

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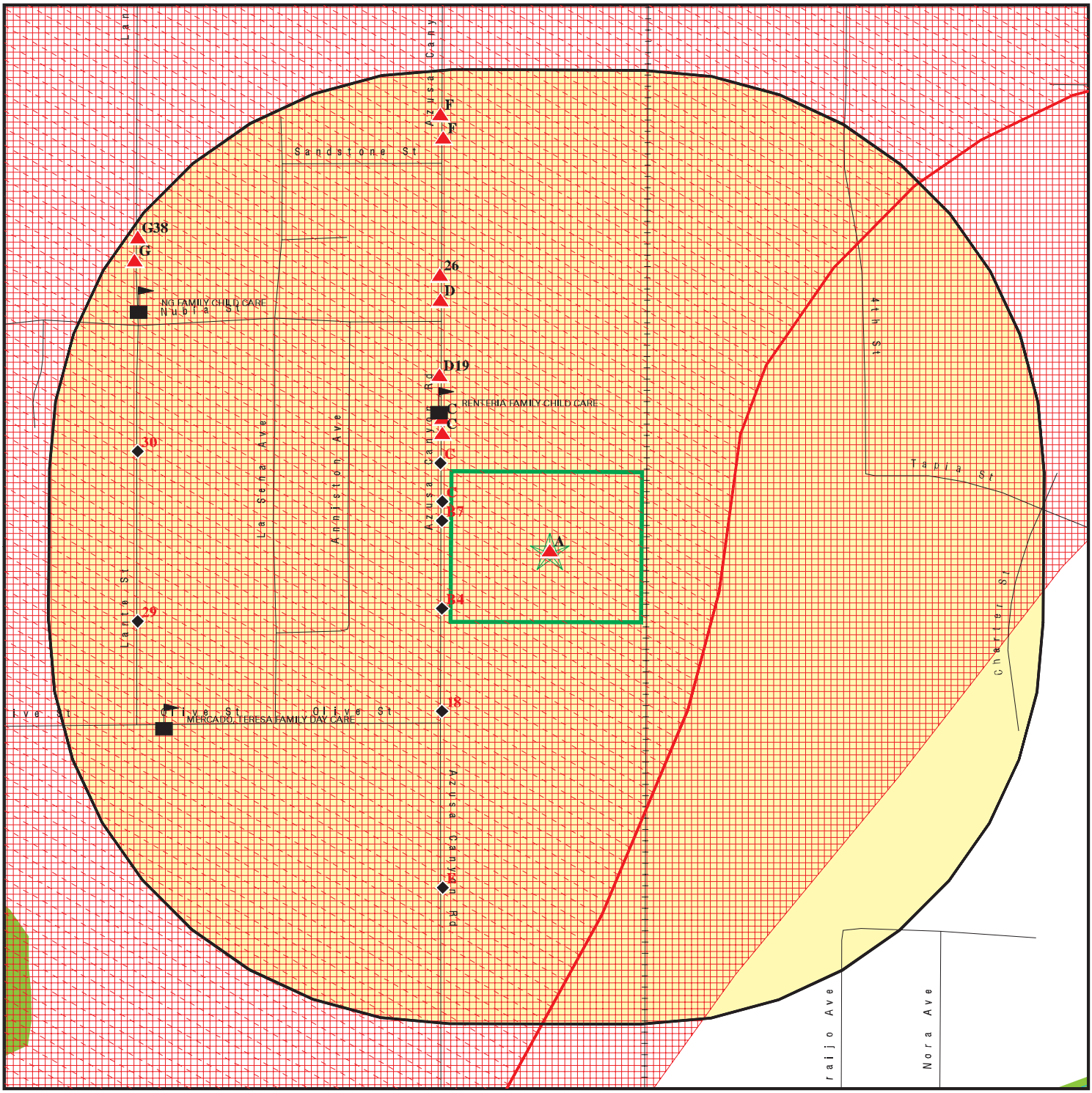
DETAIL MAP - 3674352.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 4848 Azusa Canyon Road	CLIENT: AMEC Environment & Infrastructure
ADDRESS: 4848 Azusa Canyon Road Baldwin Park CA 91706	CONTACT: Ellen Smith INQUIRY #: 3674352.2s
LAT/LONG: 34.1013 / 117.9418	DATE: July 24, 2013 9:15 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		1	0	0	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		2	0	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	3	NR	3
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	1	NR	NR	1
State and tribal leaking storage tank lists								
LUST	0.500		2	1	7	NR	NR	10

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		0	0	4	NR	NR	4
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		2	1	NR	NR	NR	3
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
AOCONCERN	1.000		1	0	0	0	NR	1
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		2	2	NR	NR	NR	4
SWEEPS UST	0.250		2	1	NR	NR	NR	3
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		1	0	0	0	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		1	0	6	NR	NR	7
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
LA Co. Site Mitigation	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250	1	11	9	NR	NR	NR	21
LOS ANGELES CO. HMS	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	TP	2	NR	NR	NR	NR	NR	2
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
COAL ASH EPA	0.500		0	0	0	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		3	1	NR	NR	NR	4
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **JIMS ROOFING MATERIALS** | **WIP** | **S103661670**
4848 AZUSA CANYON RD | **N/A**
IRWINDALE, CA 91706

Site 1 of 3 in cluster A

Actual: 444 ft.

WIP:

Region:	4
File Number:	108.0447
File Status:	**Historical**
Staff:	TB
Facility Suite:	Not reported

Region:	4
File Number:	108.0448
File Status:	**Historical**
Staff:	DKOO
Facility Suite:	Not reported

A2 Target Property | **AIRCRAFT WELDING INC** | **HAZNET** | **S113127298**
4848 AZUSA CANYON RD | **N/A**
IRWINDALE, CA 91706

Site 2 of 3 in cluster A

Actual: 444 ft.

HAZNET:

Year:	2007
Gepaid:	CAL000272398
Contact:	TYLER BROOKS
Telephone:	6268131180
Mailing Name:	Not reported
Mailing Address:	4848 AZUSA CANYON RD
Mailing City,St,Zip:	IRWINDALE, CA 917060000
Gen County:	Not reported
TSD EPA ID:	CAD099452708
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.51
Facility County:	Los Angeles

Year:	2005
Gepaid:	CAL000272398
Contact:	REGIS DUNCAN-GEN MGR
Telephone:	6268131180
Mailing Name:	Not reported
Mailing Address:	4848 AZUSA CANYON RD
Mailing City,St,Zip:	IRWINDALE, CA 917060000
Gen County:	Not reported
TSD EPA ID:	CAD099452708
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	0.81
Facility County:	Los Angeles

Year:	2004
Gepaid:	CAL000272398
Contact:	REGIS DUNCAN-GEN MGR

AIRCRAFT WELDING INC (Continued) **S113127298**

Telephone:	6268131180
Mailing Name:	Not reported
Mailing Address:	4848 AZUSA CANYON RD
Mailing City,St,Zip:	IRWINDALE, CA 917060000
Gen County:	Not reported
TSD EPA ID:	CAD099452708
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	1.1
Facility County:	Los Angeles

A3 Target Property | **AIRCRAFT WELDING INC** | **HAZNET** | **S112881358**
4848 AZUSA CANYON RD | **N/A**
IRWINDALE, CA 91706

Site 3 of 3 in cluster A

Actual: 444 ft.

HAZNET:

Year:	1997
Gepaid:	CAC001310336
Contact:	LAWRENCE BROOKS
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	4848 AZUSA CANYON RD
Mailing City,St,Zip:	IRWINDALE, CA 917060000
Gen County:	Not reported
TSD EPA ID:	CAD982444481
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Transfer Station
Tons:	.1251
Facility County:	Los Angeles

Areas of Concern | **SAN GABRIEL VALLEY** | **AOCONCERN** | **CCA0000001**
N/A

LOS ANGELES (County), CA

< 1/8
1 ft.

AOCONCERN:
area where VOC contamination is at or above the MCL as designated by region 9 EPA office

NPL	**SAN GABRIEL VALLEY (AREA 2)**	**NPL**	**1000114961**
Region	**SUNSET & SAN BERNARDINO FREEWAY**	**CERCLIS**	**CAD980818512**
	BALDWIN PARK, CA 91706	**US ENG CONTROLS**	
< 1/8		**ROD**	
1 ft.		**FINDS**	
		PRP	

NPL:

EPA ID:	CAD980818512
EPA Region:	09
Federal:	N
Final Date:	1984-05-08 00:00:00

Category Details:

NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-<= 10 Feet
Category Value:	1
NPL Status:	Currently on the Final NPL
Category Description:	Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value:	10

Site Details:

Site Name:	SAN GABRIEL VALLEY (AREA 2)
Site Status:	Final
Site Zip:	91706
Site City:	BALDWIN PARK
Site State:	CA
Federal Site:	No
Site County:	LOS ANGELES
EPA Region:	09
Date Proposed:	09/08/83
Date Deleted:	Not reported
Date Finalized:	05/08/84

Substance Details:

NPL Status:	Currently on the Final NPL
Substance ID:	Not reported
Substance:	Not reported
CAS #:	Not reported
Pathway:	Not reported
Scoring:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	U210
Substance:	TETRACHLOROETHENE
CAS #:	127-18-4
Pathway:	GROUND WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U211
Substance:	CARBON TETRACHLORIDE
CAS #:	56-23-5
Pathway:	GROUND WATER PATHWAY
Scoring:	4
NPL Status:	Currently on the Final NPL

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

Summary Details:

Conditions at listing September 1983): San Gabriel Valley Area 2) is a ground water plume that parallels the San Gabriel River to the west in the San Gabriel ground water basin in the Baldwin Park area of Los Angeles County, California. The plume is about 7.5 miles long and 1.5 miles wide.
Ground water is contaminated with trichloroethylene TCE), perchloroethylene PCE), and carbon tetrachloride, according to analyses by State agencies and local water companies. Many public wells in the area exceed the EPA Suggested No Adverse Response Levels SNARL) for TCE and PCE. Approximately 100,000 people are affected. Cities and public water companies in the area have tested to ensure that their water supplies containless than 5 parts per billion ppb) of TCE, a level considered safe for human consumption. When alternative methods of reducing the TCE level below 5 ppb are not effective, wells are removed from service. Status June 1984): A supplemental sampling program of contaminated wells will begin soon to get a snapshot view of the degree of contamination. The State Department of Health Services and EPA are preparing to initiate a remedial investigation/ feasibility study to determine the aerial and vertical extent of contamination and to develop alternatives for treatment and management of the problem. EPA continues its investigation to identify sources of the contamination. This site, along with the threeother San Gabriel Valley sites, was added to the NPL in May 1984 because it involves a serious problem that required taking immediate remedial action.

Site Status Details:
NPL Status: Final
Proposed Date: 09/08/1983
Final Date: 05/08/1984
Deleted Date: Not reported

Narratives Details:
NPL Name: SAN GABRIEL VALLEY (AREA 2)
City: BALDWIN PARK
State: CA

CERCLIS:
Site ID: 0902092
EPA ID: CAD980818512
Facility County: LOS ANGELES
Short Name: SAN GABRIEL VALLEY (AREA
Congressional District: 28,31,34
IFMS ID: 09M5
SMSA Number: 4480
USGC Hydro Unit: 18070106
Federal Facility: Not a Federal Facility
DMNSN Number: 12.25000
Site Orphan Flag: N
RCRA ID: Not reported
USGS Quadrangle: Not reported

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	09
Classification:	Groundwater
Site Settings Code:	SU
NPL Status:	Currently on the Final NPL
DMNSN Unit Code:	SQMI
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Not reported
Non NPL Status Date:	/ /
Site Fips Code:	06037
CC Concurrence Date:	/ /
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	9000127.00000
Contact Name:	Wayne Praskins
Contact Tel:	(415) 972-3181
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not reported
Contact ID:	9271184.00000
Contact Name:	Karen Jurist
Contact Tel:	(415) 972-3219
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported
Contact ID:	13003854.00000
Contact Name:	Leslie Ramirez
Contact Tel:	(415) 972-3978
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported
Contact ID:	13003858.00000
Contact Name:	Sharon Murray
Contact Tel:	(415) 972-4250
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported
Contact ID:	13004003.00000
Contact Name:	Carl Brickner
Contact Tel:	Not reported
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported

CERCLIS Site Alias Name(s):

Alias ID:	101
Alias Name:	BALDWIN PARK
Alias Address:	Not reported
	Not reported
Alias ID:	102

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Alias Name: SAN GABRIEL VALLEY (AREA 2)
Alias Address: SUNSET & SN BERNARDINO FRWY
BALDWIN PARK, CA 91706
Alias ID: 103
Alias Name: SAN GABRIEL VALLEY (AREA 2)
Alias Address: SUNSET & SAN BERNARDINO FREEWAY
BALDWIN PARK AREA, CA 91706
Alias Comments: Not reported
Site Description: Four areas of groundwater contamination are listed on the National Priorities List: San Gabriel Valley Area 1, San Gabriel Valley Area 2, San Gabriel Valley 3, and San Gabriel Valley 4. The four areas represent a significant portion of the 170 square mile San Gabriel Valley in Los Angeles County, California. More than one million residents live in the San Gabriel Valley alongside a variety of commercial and industrial operations. The San Gabriel Aquifer, which underlies most of the San Gabriel Valley Basin, stores an estimated three trillion gallons of water and is the primary source of water for most of the Basin?s residents. Major surface water features in the San Gabriel Valley include the San Gabriel River, tributaries to the San Gabriel River system, and spreading basins located in or adjacent to the river channels. The approximate location of the San Gabriel Valley Area 2 Site is west of highway 39, south of the San Gabriel Mountains, east of the San Gabriel River, and north of Walnut Creek. Nearly all of the Baldwin Park area is fully developed for residential, commercial, and industrial use. The largest parcels of open land are active and inactive gravel pits and the Santa Fe flood Control Basin. Water purveyors in the site area include: the City of Azusa, California Domestic Water Company, City of Glendora, La Puente Valley County Water District, San Gabriel Valley Water Company, Suburban Water Systems, and Valley County Water District. Volatile Organic Compounds (VOCs), major contaminants of concern at the San Gabriel Valley Sites, were used in large quantities at industrial facilities as early as the 1940?s. From the 1940?s through the 1980?s, carbon tetrachloride, tetrachloroethane, thrichlorethene, and other chlorinated solvents were used by hundreds of businesses for degreasing, as raw materials for automotive products, by a solvent recycler, for chemical extractions , and for other purposes. VOCs have been released by a combination of intentional disposal, careless handling during loading and unloading, leaking tanks and pipes, and other means. VOCs were not detected in ground water until 1979 during environmental monitoring activities conducted by Aerojet Electrosystems near its facility in Azusa. In May 1984, EPA listed four areas of contamination were listed as San Gabriel Valley Area 1 through 4. EPA began its enforcement efforts in the site area in 1985 with searches for and evaluations of historical Federal, State, and local records on chemical usage, handling, and disposal. In 1985, the California Regional Water Quality Board began its Well Investigation Program (WIP) to identify the sources of ground water contamination detected in water supply wells. In 1989, EPA entered into a cooperative agreement to expand the WIP program to determine the nature and extent of contamination in the San Gabriel Valley. The RI/FS for the Baldwin Park OU was conducted concurrently with source identification efforts, as a fund-lead project. In March 1994, the Record of Decision (ROD) document was signed.

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: / /
Date Completed: 04/01/80
Priority Level: Not reported
Operable Unit: SITEWIDE

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Primary Responsibility:	State, No Fund Money
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	/ /
Date Completed:	08/01/83
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	SITE INSPECTION
Date Started:	03/01/83
Date Completed:	09/01/83
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	09/01/83
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	/ /
Date Completed:	09/01/83
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 09/08/83
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: ISSUE REQUEST LETTERS (104E)
Date Started: / /
Date Completed: 01/01/84
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: COMMUNITY INVOLVEMENT
Date Started: 05/01/84
Date Completed: 05/01/84
Priority Level: Not reported
Operable Unit: BALDWIN PARK
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 05/08/84
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Code:	003
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	/ /
Date Completed:	12/30/88
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	006
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	05/07/90
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	007
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	06/07/90
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	ISSUE REQUEST LETTERS (104E)
Date Started:	/ /
Date Completed:	06/08/90
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	008
Action:	Notice Letters Issued
Date Started:	/ /

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Date Completed:	07/09/90
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	014
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	09/20/90
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	016
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	10/12/90
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	017
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	12/05/90
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	018
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	12/06/90
Priority Level:	Not reported
Operable Unit:	SITEWIDE

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 019
Action: Notice Letters Issued
Date Started: / /
Date Completed: 12/07/90
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Notice Letters Issued
Date Started: / /
Date Completed: 02/07/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: Notice Letters Issued
Date Started: / /
Date Completed: 03/06/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 009
Action: Notice Letters Issued
Date Started: / /
Date Completed: 07/09/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 015
Action: Notice Letters Issued
Date Started: / /
Date Completed: 09/26/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ADMINISTATIVE/VOLUNTARY COST RECOVERY
Date Started: / /
Date Completed: 09/30/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL ASSESSMENT
Date Started: 12/27/91
Date Completed: 12/27/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: RISK/HEALTH ASSESSMENT
Date Started: / /
Date Completed: 09/16/92
Priority Level: Not reported
Operable Unit: BALDWIN PARK
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Code:	001
Action:	ECOLOGICAL RISK ASSESSMENT
Date Started:	/ /
Date Completed:	09/16/92
Priority Level:	Not reported
Operable Unit:	BALDWIN PARK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	Special Notice Issued
Date Started:	/ /
Date Completed:	05/26/93
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	010
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	08/04/93
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	013
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	08/27/93
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Special Notice Issued
Date Started:	/ /

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Date Completed:	02/03/94
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	08/01/87
Date Completed:	03/31/94
Priority Level:	Not reported
Operable Unit:	BALDWIN PARK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	RECORD OF DECISION
Date Started:	/ /
Date Completed:	03/31/94
Priority Level:	Not reported
Operable Unit:	BALDWIN PARK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	09/30/84
Date Completed:	07/01/94
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	01/30/89
Date Completed:	07/01/94
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 011
Action: Notice Letters Issued
Date Started: / /
Date Completed: 08/09/94
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: Notice Letters Issued
Date Started: / /
Date Completed: 04/13/95
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: Notice Letters Issued
Date Started: / /
Date Completed: 04/20/95
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: Notice Letters Issued
Date Started: / /
Date Completed: 05/05/95
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Code:	012
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	08/18/95
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	05/13/96
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	05/15/97
Date Completed:	06/30/00
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	UNILATERAL ADMIN ORDER
Date Started:	/ /
Date Completed:	06/30/00
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PROSPECTIVE PURCHASER AGREEMENT ASSESSMENT
Date Started:	06/05/01
Date Completed:	09/25/01

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Priority Level:	PPA Signed
Operable Unit:	BALDWIN PARK
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	09/25/01
Priority Level:	Not reported
Operable Unit:	BALDWIN PARK
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	04/11/02
Priority Level:	Not reported
Operable Unit:	BALDWIN PARK
Primary Responsibility:	Not reported
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	ALTERNATIVE DISPUTE RESOLUTION
Date Started:	07/01/00
Date Completed:	05/31/02
Priority Level:	Not reported
Operable Unit:	BALDWIN PARK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	CONSENT DECREE
Date Started:	01/01/02
Date Completed:	08/27/02
Priority Level:	Not reported
Operable Unit:	BALDWIN PARK
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 07/21/00
Date Completed: 09/26/02
Priority Level: Not reported
Operable Unit: LPVCWD SUBPROJECT
Primary Responsibility: Responsible Party
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 07/21/00
Date Completed: 03/31/03
Priority Level: Not reported
Operable Unit: VCWD SUBPROJECT
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 07/21/00
Date Completed: 08/08/03
Priority Level: Not reported
Operable Unit: SGVWC B6 SUBPROJECT
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 09/26/02
Date Completed: 09/30/03
Priority Level: Interim RA Report
Operable Unit: LPVCWD SUBPROJECT
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Code:	005
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	07/21/00
Date Completed:	09/29/04
Priority Level:	Not reported
Operable Unit:	SGVWC B5 SUBPROJECT
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	03/31/03
Date Completed:	09/30/04
Priority Level:	Interim RA Report
Operable Unit:	VCWD SUBPROJECT
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Long Term Action
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	CLAIM IN BANKRUPTCY PROCEEDING
Date Started:	03/14/05
Date Completed:	03/14/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	08/08/03
Date Completed:	03/31/05
Priority Level:	Interim RA Report
Operable Unit:	SGVWC B6 SUBPROJECT
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Long Term Action
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	010
Action:	Lodged By DOJ
Date Started:	/ /

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Date Completed:	09/20/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	012
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	10/26/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	011
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	10/26/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	013
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	10/26/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	009
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	10/26/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	008
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	10/26/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	007
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	10/26/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	006
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	10/26/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	SETTLEMENT (GENERIC)
Date Started:	/ /
Date Completed:	11/01/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: CONSENT DECREE
Date Started: 09/28/05
Date Completed: 12/12/05
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 006
Action: CONSENT DECREE
Date Started: 09/28/05
Date Completed: 12/13/05
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: CONSENT DECREE
Date Started: 09/28/05
Date Completed: 12/13/05
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: CONSENT DECREE
Date Started: 09/28/05
Date Completed: 12/13/05
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Code:	004
Action:	CONSENT DECREE
Date Started:	09/28/05
Date Completed:	12/13/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	007
Action:	CONSENT DECREE
Date Started:	09/28/05
Date Completed:	12/14/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	008
Action:	CONSENT DECREE
Date Started:	09/28/05
Date Completed:	12/16/05
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	09/29/04
Date Completed:	09/28/06
Priority Level:	Interim RA Report
Operable Unit:	SGVWC B5 SUBPROJECT
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	009
Action:	CONSENT DECREE
Date Started:	03/26/07

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Date Completed: 03/26/07
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 014
Action: Lodged By DOJ
Date Started: / /
Date Completed: 06/21/07
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FIVE-YEAR REVIEW
Date Started: 05/01/07
Date Completed: 09/27/07
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: FIVE-YEAR REVIEW
Date Started: / /
Date Completed: 09/24/12
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 07/21/00
Date Completed: / /
Priority Level: Not reported
Operable Unit: BALDWIN PARK
Primary Responsibility: Responsible Party

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Other Start and Completion Anomaly

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 09/26/02
Date Completed: / /
Priority Level: Not reported
Operable Unit: BALDWIN PARK
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Other Start and Completion Anomaly

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY LONG-TERM RESPONSE ACTION
Date Started: 09/30/03
Date Completed: / /
Priority Level: Not reported
Operable Unit: BALDWIN PARK
Primary Responsibility: Responsible Party
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: OPERATIONS AND MAINTENANCE
Date Started: 09/30/03
Date Completed: / /
Priority Level: Not reported
Operable Unit: BALDWIN PARK
Primary Responsibility: Responsible Party
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: OPERATIONS AND MAINTENANCE
Date Started: 09/30/03
Date Completed: / /
Priority Level: Not reported
Operable Unit: LPVCWD SUBPROJECT
Primary Responsibility: Responsible Party
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Action Code:	003
Action:	OPERATIONS AND MAINTENANCE
Date Started:	09/30/04
Date Completed:	/ /
Priority Level:	Not reported
Operable Unit:	VCWD SUBPROJECT
Primary Responsibility:	Responsible Party
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	OPERATIONS AND MAINTENANCE
Date Started:	03/31/05
Date Completed:	/ /
Priority Level:	Not reported
Operable Unit:	SGVWC B6 SUBPROJECT
Primary Responsibility:	Responsible Party
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	OPERATIONS AND MAINTENANCE
Date Started:	09/28/06
Date Completed:	/ /
Priority Level:	Not reported
Operable Unit:	SGVWC B5 SUBPROJECT
Primary Responsibility:	Responsible Party
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Federal Register Details:

Fed Register Date:	05/08/84
Fed Register Volume:	49
Page Number:	19480

Fed Register Date:	09/08/83
Fed Register Volume:	48
Page Number:	40674

Click this hyperlink while viewing on your computer to access
1455 additional US CERCLIS Financial: record(s) in the EDR Site Report.

US ENG CONTROLS:

EPA ID:	CAD980818512
Site ID:	0902092
Name:	SAN GABRIEL VALLEY (AREA 2)

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

Address: SUNSET & SAN BERNARDINO FREEWAY
BALDWIN PARK, CA 91706
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Actual Date: 03/31/94

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 03/31/94
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Air Stripping

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 03/31/94
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Discharge

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 03/31/94
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Liquid Phase Carbon Adsorption

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 03/31/94
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Monitoring

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 03/31/94
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Pump And Treat

ROD:

Full-text of USEPA Record of Decision(s) is available from EDR.

FINDS:

Registry ID: 110009267916

Environmental Interest/Information System

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities,

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

and financial information.

PRP:
PRP name:

A & J SYSTEMS
A&E PLASTICS CO.
A-1 ORNAMENTAL IRON
ACORN ENGINEERING CO.
ACROMIL
ADAMS AND COLTRIN, INC.
ADAMS CAMPBELL CO., LTD.
ADVANCED HEAT TECHNOLOGY CORP.
AEROJET ELECTROSYSTEMS
AEROJET ELECTROSYSTEMS
AEROJET-GENERAL CORP.
AEROJET-GENERAL CORP.
AEROJET-GENERAL CORP.
AEROSOL SERVICES COMPANY
AIR DISTRIBUTION PRODUCTS, INC.
ALLEGIANCE HEALTHCARE CORPORATION
ALLEGIANCE HEALTHCARE CORPORATION
ALLFAST FASTENING SYSTEMS, INC.
ALLIED PHOTO PRODUCTS INC.
ALLSTATE INSURANCE CO.
AMERICAN SHEDS INC.
ARCADIA MACHINE AND TOOL
AREMAC ASSOCIATES
AREMAC HEAT TREATING,INC.
ARMY CORPS OF ENGINEERS
ARTHUR B. SCHULTZ AND JOSEPH POLTORAK
ARTISTIC POLISHING AND PLATING
ASSOCIATED ASPHALT PAVING MATERIALS
ASTRO SEAL, INC.
ASTRO SEAL, INC.
ASTRONAUTIC ENAMELERS
AZUSA GAS SYSTEMS
AZUSA LAND RECLAMATION
AZUSA LAND RECLAMATION
AZUSA PIPE AND TUBE BENDING
AZUSA PIPE AND TUBE BENDING
AZUSA ROCK INC.
B&B RED-I-MIX-CONCRETE INC.
BALL-ICON, BALL GLASS DIV.
BAXTER HEALTHCARE CORPORATION
BDP CO.
BENCHMARK HOLDING GROUP
BENCHMARK TECHNOLOGY
BIRTCHER
BRENT FAMILY TRUST
BROWN JORDEN CO.
C&H DISTRIBUTING
CAL MAT CO.
CALIFORNIA HYDROFORMING CO., INC.
CALIFORNIA STEEL AND TUBE
CALTRANS
CARDINAL INDUSTRIES FINISHERS
CHAMPION PARTS, INC.

SAN GABRIEL VALLEY (AREA 2) (Continued) **1000114961**

CHARLES HOFGAARDEN
CHEM ARROW CORPORATION
CHEMICAL WASTE MANAGEMENT
CHEMLAWN SERVICE CORP.
CHEVRON CORPORATION
CHEVRON USA, INC.
CLAUDEAN MULLINS KAWIE

Click this hyperlink while viewing on your computer to access
193 additional PRP: record(s) in the EDR Site Report.

B4
WSW
< 1/8
0.005 mi.
27 ft.

UTILITY DISPOSAL COMPANY
4854 AZUSA CANYON RD
IRWINDALE, CA 91706

WIP **S106766476**
N/A

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
442 ft.

WIP:
Region: 4
File Number: 108.0449
File Status: **Not reported**
Staff: UNIDENTIFIED
Facility Suite: Not reported

C5
WNW
< 1/8
0.005 mi.
29 ft.

HARPENG MATCH PLATE
4910 AZUSA CANYON RD
IRWINDALE, CA 91706

WIP **S106766477**
N/A

Site 1 of 12 in cluster C

Relative:
Lower

Actual:
442 ft.

WIP:
Region: 4
File Number: 108.0451
File Status: **Historical**
Staff: PAR
Facility Suite: Not reported

C6
WNW
< 1/8
0.005 mi.
29 ft.

HARPENG MATCH PLATE
4910 AZUSA CANYON RD
BALDWIN PARK, CA 91750

WIP **S106766478**
N/A

Site 2 of 12 in cluster C

Relative:
Lower

Actual:
442 ft.

WIP:
Region: 4
File Number: 108.0452
File Status: **Historical**
Staff: DRASMUSS
Facility Suite: Not reported

B7 **EDR US Hist Auto Stat** **1015517405**
WNW **4900 AZUSA CANYON RD** **N/A**
< 1/8 **BALDWIN PARK, CA 91706**
0.005 mi.
29 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
442 ft.

EDR Historical Auto Stations:
Name: JORGE AUTO
Year: 1999
Address: 4900 AZUSA CANYON RD

C8 **MALCOLM DRILLING CO INC** **UST** **U004049527**
NW **4926 AZUSA CANYON RD** **N/A**
< 1/8 **BALDWIN PARK, CA 91706**
0.005 mi.
29 ft. **Site 3 of 12 in cluster C**

Relative:
Lower

Actual:
442 ft.

UST:
Facility ID: 26668
Latitude: 34.10199
Longitude: -117.94296

C9 **CMZ CO** **LOS ANGELES CO. HMS** **U002282001**
NW **4926 N AZUSA CANYON RD** **WIP** **N/A**
< 1/8 **IRWINDALE, CA**
0.005 mi.
29 ft. **Site 4 of 12 in cluster C**

Relative:
Lower

Actual:
442 ft.

LOS ANGELES CO. HMS:
Region: LA
Facility Id: 008649-015819
Facility Type: T0
Facility Status: Permit
Area: 3S
Permit Number: 00006018T
Permit Status: Closed

Region: LA
Facility Id: 008649-I15819
Facility Type: I01
Facility Status: Closed
Area: 3S
Permit Number: 00010767C
Permit Status: Closed

WIP:
Region: 4
File Number: 108.0453
File Status: **Historical**
Staff: DKOO
Facility Suite: Not reported

C10 NW < 1/8 0.005 mi. 29 ft. | **MALCOLM DRILLING CO INC**
4926 N AZUSA CANYON RD
IRWINDALE, CA

Site 5 of 12 in cluster C

RCRA-SQG
FINDS
LOS ANGELES CO. HMS
EMI

1000595938
CAD983598962

Relative: Lower

Actual: 442 ft.

RCRA-SQG:

Date form received by agency:	10/21/2004
Facility name:	MALCOLM DRILLING CO INC
Facility address:	4926 N AZUSA CANYON RD IRWINDALE, CA 91706
EPA ID:	CAD983598962
Contact:	MICHAEL R BRASHEAR
Contact address:	4926 N AZUSA CANYON RD IRWINDALE, CA 91706
Contact country:	US
Contact telephone:	626-337-8131
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MALCOLM
Owner/operator address:	4926 N AZUSA CYN RD IRWINDALE, CA 91706
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	03/01/1997
Owner/Op end date:	Not reported

Owner/operator name:	MALCOLM DRILLING CO INC
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	03/01/1997
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

MALCOLM DRILLING CO INC (Continued) **1000595938**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 07/17/1992
Facility name: MALCOLM DRILLING CO INC
Site name: C M Z TRUCKING CO
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110002855955

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LOS ANGELES CO. HMS:
Region: LA
Facility Id: 008649-026668
Facility Type: T0
Facility Status: Removed
Area: 3S
Permit Number: 000240999
Permit Status: Removed

Region: LA

MALCOLM DRILLING CO INC (Continued) **1000595938**

Facility Id: 008649-025562
Facility Type: I01
Facility Status: Permit
Area: 3S
Permit Number: 000015101
Permit Status: Permit

EMI:

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	77893
Air District Name:	SC
SIC Code:	5
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

C11 **CM2 COMPANY INC** **SWEEPS UST** **S106924741**
NW **4926 AZUSA CANYON** **N/A**
< 1/8 **IRWINDALE, CA 91706**
0.009 mi.
45 ft. **Site 6 of 12 in cluster C**

Relative:
Lower

Actual:
443 ft.

SWEEPS UST:

Status:	Active
Comp Number:	15819
Number:	1
Board Of Equalization:	Not reported
Referral Date:	01-04-91
Action Date:	01-04-91
Created Date:	01-04-91
Tank Status:	A
Owner Tank Id:	1
Swrcb Tank Id:	19-000-015819-000001
Actv Date:	01-04-91
Capacity:	6000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	2

Status:	Active
Comp Number:	15819
Number:	1
Board Of Equalization:	Not reported
Referral Date:	01-04-91
Action Date:	01-04-91
Created Date:	01-04-91
Tank Status:	A

CM2 COMPANY INC (Continued) **S106924741**

Owner Tank Id:	2
Swrcb Tank Id:	19-000-015819-000002
Actv Date:	01-04-91
Capacity:	6000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

C12 **RODRIQUEZ TRUCKING** **LUST** **S106024788**
NW **4938 N AZUSA CANYON RD** **LOS ANGELES CO. HMS** **N/A**
< 1/8 **IRWINDALE, CA 91706**
0.016 mi.
82 ft. **Site 7 of 12 in cluster C**

Relative:
Lower

Actual:
443 ft.

LUST:

Region:	STATE
Global Id:	T10000000418
Latitude:	34.0997474
Longitude:	-117.9429602
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	10/21/2008
Lead Agency:	LOS ANGELES COUNTY
Case Worker:	JOA
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	Not reported
LOC Case Number:	015531-016981
File Location:	Not reported
Potential Media Affect:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T10000000418
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

LOS ANGELES CO. HMS:

Region:	LA
Facility Id:	015531-016981
Facility Type:	T1
Facility Status:	Removed
Area:	3S
Permit Number:	000323486
Permit Status:	Removed

Region:	LA
Facility Id:	015531-043683
Facility Type:	I01

RODRIQUEZ TRUCKING (Continued) **S106024788**

Facility Status: Permit
Area: 3S
Permit Number: 000431363
Permit Status: Permit

C13 NW < 1/8 0.022 mi. 114 ft. | **J. G. RODRIGUEZ TRUCKING** | **HIST UST** | **U001569001**
4938 AZUSA CANYON RD | **WIP** | **N/A**
IRWINDALE, CA 91711

Site 8 of 12 in cluster C

Relative: Lower

Actual: 443 ft.

HIST UST:
Region: STATE
Facility ID: 00000002978
Facility Type: Other
Other Type: Not reported
Total Tanks: 0002
Contact Name: Not reported
Telephone: 7146216098
Owner Name: JORGE GONZALO RODRIGUEZ
Owner Address: 162. FAIRFIELD DR. CLAREMONT
Owner City,St,Zip: CLAREMONT, CA 91711

Tank Num: 001
Container Num: 1
Year Installed: 1967
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1967
Tank Capacity: 00000500
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

WIP:
Region: 4
File Number: 108.0454
File Status: Historical
Staff: UNIDENTIFIED
Facility Suite: Not reported

C14
NW
< 1/8
0.024 mi.
129 ft.

4946 AZUSA CANYON RD
BALDWIN PARK, CA 91706

EDR US Hist Auto Stat **1015519108**
N/A

Site 9 of 12 in cluster C

Relative:
Higher

Actual:
444 ft.

EDR Historical Auto Stations:

Name: ARROW ENGINEERING
Year: 2006
Address: 4946 AZUSA CANYON RD

Name: ARROW ENGINEERING
Year: 2007
Address: 4946 AZUSA CANYON RD

Name: ARROW ENGINEERING
Year: 2008
Address: 4946 AZUSA CANYON RD

C15
NW
< 1/8
0.024 mi.
129 ft.

ARROW ENGINEERING
4946 AZUSA CANYON RD
IRWINDALE, CA 91706

WIP **1000343828**
N/A

Site 10 of 12 in cluster C

Relative:
Higher

Actual:
444 ft.

WIP:

Region: 4
File Number: 108.0455
File Status: Historical
Staff: TB
Facility Suite: Not reported

Region: 4
File Number: 108.0456
File Status: Historical
Staff: UNIDENTIFIED
Facility Suite: Not reported

C16
NW
< 1/8
0.034 mi.
178 ft.

4954 AZUSA CANYON RD
BALDWIN PARK, CA 91706

EDR US Hist Auto Stat **1015519465**
N/A

Site 11 of 12 in cluster C

Relative:
Higher

Actual:
444 ft.

EDR Historical Auto Stations:

Name: SAMS FOREIGN & DOMESTIC AUTO CENTER
Year: 1999
Address: 4954 AZUSA CANYON RD

Name: SAMS FOREIGN & DOM AUTO CTR
Year: 2004
Address: 4954 AZUSA CANYON RD

Name: SAMS FOREIGN & DOMESTIC AUTO CENTER
Year: 2007
Address: 4954 AZUSA CANYON RD

Name: SAMS FOREIGN & DOM AUTO CENTER

(Continued) **1015519465**

Year: 2008
Address: 4954 AZUSA CANYON RD

Name: SAMS FOREIGN & DOMESTIC AUTO CENTER
Year: 2009
Address: 4954 AZUSA CANYON RD

Name: SAMS FOREIGN & DOMESTIC AUTO
Year: 2010
Address: 4954 AZUSA CANYON RD

Name: SAMS FOREIGN & DOMESTIC AUTO CENTER
Year: 2011
Address: 4954 AZUSA CANYON RD

Name: SAMS FOREIGN & DOMESTIC AUTO CENTER
Year: 2012
Address: 4954 AZUSA CANYON RD

C17
NW
< 1/8
0.034 mi.
178 ft.

ADVANCE MARINE & DEVELOPMENT **WIP** **S106766480**
4954 AZUSA CANYON RD **N/A**
IRWINDALE, CA 91706

Site 12 of 12 in cluster C

Relative:
Higher

Actual:
444 ft.

WIP:
Region: 4
File Number: 108.0457
File Status: **Historical**
Staff: TB
Facility Suite: Not reported

18
SW
< 1/8
0.056 mi.
295 ft.

DAVALOS TRUCKING, M. F. **NPDES** **S106766475**
4800 AZUSA CANYON RD **WIP** **N/A**
IRWINDALE, CA 91706

Relative:
Lower

Actual:
436 ft.

NPDES:
Npdes Number: CAS000002
Facility Status: Terminated
Agency Id: 0
Region: 4
Regulatory Measure Id: 406019
Order No: 2009-0009-DWQ
Regulatory Measure Type: Enrollee
Place Id: Not reported
WDID: 4 19C359333
Program Type: Construction
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 08/06/2010
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: 08/22/2011
Discharge Name: Huy Fong Irwindale LLC
Discharge Address: 5001 Earle Avenue
Discharge City: Rosemead

DAVALOS TRUCKING, M. F. (Continued) **S106766475**

Discharge State: California
Discharge Zip: 91770

WIP:
Region: 4
File Number: 108.0446
File Status: Historical
Staff: UNIDENTIFIED
Facility Suite: Not reported

D19 NNW < 1/8 0.060 mi. 319 ft. **ALBERT C. CLEGG & SONS** **WIP** **S106766958**
4945 AZUSA CANYON RD **N/A**
BALDWIN PARK, CA 91706

Site 1 of 7 in cluster D

Relative: Higher

Actual: 445 ft.

WIP:
Region: 4
File Number: 108.1130
File Status: Not reported
Staff: UNIDENTIFIED
Facility Suite: Not reported

D20 NNW < 1/8 0.106 mi. 558 ft. **VERIZON CALIFORNIA INCORPORATED IRWINDAL** **RCRA-SQG** **1004676359**
5010 AZUSA CANYON RD **CAR000084251**
IRWINDALE, CA 91706

Site 2 of 7 in cluster D

Relative: Higher

Actual: 447 ft.

RCRA-SQG:
Date form received by agency: 10/10/2000
Facility name: VERIZON CALIFORNIA INCORPORATED IRWINDAL
Facility address: 5010 AZUSA CANYON RD
IRWINDALE, CA 91706
EPA ID: CAR000084251
Mailing address: P O BOX 725 CA302HJ
CHINO, CA 91708
Contact: KIM BRAY
Contact address: P O BOX 725 CA302HJ
CHINO, CA 91708
Contact country: US
Contact telephone: (800) 331-8891
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: VERIZON CALIFORNIA INC
Owner/operator address: 1 G T E PL
THOUSAND OAKS, CA 91362

VERIZON CALIFORNIA INCORPORATED IRWINDAL (Continued) **1004676359**

Owner/operator country: Not reported
Owner/operator telephone: (800) 331-8891
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D018
Waste name: BENZENE

Waste code: D039
Waste name: TETRACHLOROETHYLENE

VERIZON CALIFORNIA INCORPORATED IRWINDAL (Continued) **1004676359**

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

D21
NNW
< 1/8
0.106 mi.
558 ft.

GTE CALIFORNIA **UST** **U004049655**
5010 AZUSA CANYON RD **N/A**
BALDWIN PARK, CA 91706

Site 3 of 7 in cluster D

Relative:
Higher

Actual:
447 ft.

UST:
Facility ID: 3882
Latitude: 34.10367
Longitude: -117.94297

D22
NNW
< 1/8
0.106 mi.
558 ft.

GENERAL TELEPHONE COMPANY OF C **HIST UST** **U001568756**
5010 AZUSA CANYON RD **N/A**
IRWINDALE, CA 91706

Site 4 of 7 in cluster D

Relative:
Higher

Actual:
447 ft.

HIST UST:
Region: STATE
Facility ID: 00000003723
Facility Type: Other
Other Type: UTILITY COMPANY
Total Tanks: 0004
Contact Name: KENNETH C. SCHIMMEL
Telephone: 8189603175
Owner Name: GENERAL TELEPHONE COMPANY OF C
Owner Address: 4969 PALO VERDE DRIVE
Owner City,St,Zip: MONTCLAIR, CA 91763

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL

GENERAL TELEPHONE COMPANY OF C (Continued) **U001568756**

Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

D23
NNW
< 1/8
0.107 mi.
564 ft.

GENERAL TELEPHONE CO **HIST CORTESE** **S105024237**
5010 AZUSA CNYN **N/A**
IRWINDALE, CA 91706

Site 5 of 7 in cluster D

Relative:
Higher

Actual:
447 ft.

CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: R-03882

D24
NNW
< 1/8
0.107 mi.
564 ft.

GENERAL TELEPHONE CO. **LUST** **S102430701**
5010 AZUSA CANYON RD N **N/A**
IRWINDALE, CA 91706

Site 6 of 7 in cluster D

Relative:
Higher

Actual:
447 ft.

LUST:
Region: STATE
Global Id: T0603704631
Latitude: 34.1037064
Longitude: -117.9427372
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 11/26/1996
Lead Agency: LOS ANGELES COUNTY
Case Worker: JOA
Local Agency: LOS ANGELES COUNTY
RB Case Number: R-03882
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel
Site History: Not reported

GENERAL TELEPHONE CO. (Continued) **S102430701**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603704631
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603704631
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Regulatory Activities:

Global Id:	T0603704631
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0603704631
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

Global Id:	T0603704631
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	R-03882
Status:	Case Closed
Substance:	Diesel
Substance Quantity:	Not reported
Local Case No:	Not reported
Case Type:	Soil
Abatement Method Used at the Site:	Not reported
Global ID:	T0603704631
W Global ID:	Not reported
Staff:	UNK
Local Agency:	19000
Cross Street:	ARROW HWY
Enforcement Type:	Not reported
Date Leak Discovered:	1/2/1991

GENERAL TELEPHONE CO. (Continued) **S102430701**

Date Leak First Reported:		5/16/1991
Date Leak Record Entered:	5/22/1991	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	1/2/1991	
Date Case Last Changed on Database:		5/14/1993
Date the Case was Closed:		11/26/1996
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	MCCORMIC, J.D.	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		1095.9329582527268714588079786
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		5/16/1991
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	GTE CALIFORNIA, INC.	
RP Address:	P.O. BOX 725, CHINO, CA 91708	
Program:	LUST	
Lat/Long:	34.1037064 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	OLD CASE #061391-10	

D25 **GENERAL TELEPHONE** **SWEEPS UST** **S103662538**
NNW **5010 N AZUSA CANYON RD** **WIP** **N/A**
< 1/8 **IRWINDALE, CA 91706**
0.107 mi.
564 ft. **Site 7 of 7 in cluster D**

Relative:
Higher

Actual:
447 ft.

SWEEPS UST:

Status:	Active
Comp Number:	3882
Number:	9
Board Of Equalization:	44-007526
Referral Date:	06-30-89
Action Date:	Not reported
Created Date:	06-30-89
Tank Status:	A
Owner Tank Id:	Not reported

GENERAL TELEPHONE (Continued) **S103662538**

Swrcb Tank Id:	19-000-003882-000001
Actv Date:	06-30-89
Capacity:	Not reported
Tank Use:	UNKNOWN
Stg:	W
Content:	Not reported
Number Of Tanks:	4

Status:	Active
Comp Number:	3882
Number:	9
Board Of Equalization:	44-007526
Referral Date:	06-30-89
Action Date:	Not reported
Created Date:	06-30-89
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	19-000-003882-000002
Actv Date:	06-30-89
Capacity:	Not reported
Tank Use:	UNKNOWN
Stg:	W
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	3882
Number:	9
Board Of Equalization:	44-007526
Referral Date:	06-30-89
Action Date:	Not reported
Created Date:	06-30-89
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	19-000-003882-000003
Actv Date:	06-30-89
Capacity:	Not reported
Tank Use:	UNKNOWN
Stg:	W
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	3882
Number:	9
Board Of Equalization:	44-007526
Referral Date:	06-30-89
Action Date:	Not reported
Created Date:	06-30-89
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	19-000-003882-000004
Actv Date:	06-30-89
Capacity:	Not reported
Tank Use:	UNKNOWN
Stg:	W
Content:	Not reported

GENERAL TELEPHONE (Continued) **S103662538**

Number Of Tanks: Not reported

WIP:
Region: 4
File Number: 108.0212
File Status: Historical
Staff: DRASMUSS
Facility Suite: Not reported

26
NNW
< 1/8
0.123 mi.
647 ft.

KARL BRYAN PLUMBING **WIP** **S106766959**
5029 AZUSA CANYON RD **N/A**
BALDWIN PARK, CA 91706

Relative:
Higher

Actual:
448 ft.

WIP:
Region: 4
File Number: 108.1131
File Status: Historical
Staff: UNIDENTIFIED
Facility Suite: Not reported

E27
SSW
1/8-1/4
0.165 mi.
873 ft.

CALMAT CO **UST** **U004050484**
4702 AZUSA CANYON RD **N/A**
BALDWIN PARK, CA 91706

Site 1 of 2 in cluster E

Relative:
Lower

Actual:
433 ft.

UST:
Facility ID: 4917
Latitude: 34.09812
Longitude: -117.94292

E28
SSW
1/8-1/4
0.165 mi.
873 ft.

IRWINDALE SHOP **LUST** **U001568768**
4701 AZUSA CANYON RD **HIST UST** **N/A**
IRWINDALE, CA 91706 **SWEEPS UST**
WIP
Site 2 of 2 in cluster E **WDS**

Relative:
Lower

Actual:
433 ft.

LUST:
Region: STATE
Global Id: T0603762683
Latitude: 34.098438
Longitude: -117.942934
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 05/15/2008
Lead Agency: LOS ANGELES COUNTY
Case Worker: RVI
Local Agency: LOS ANGELES COUNTY
RB Case Number: Not reported
LOC Case Number: 004917
File Location: Not reported
Potential Media Affect: Under Investigation

IRWINDALE SHOP (Continued) **U001568768**

Potential Contaminants of Concern: Gasoline, Diesel, Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603762683
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0603762683
Contact Type: Local Agency Caseworker
Contact Name: MANUEL R REGALADO
Organization Name: LOS ANGELES COUNTY
Address: 900 S. FREMONT AVE.
City: ALHAMBRA
Email: mregalad@dpw.lacounty.gov
Phone Number: Not reported

Regulatory Activities:
Global Id: T0603762683
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0603762683
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0603762683
Action Type: REMEDIATION
Date: 01/01/1950
Action: Not reported

HIST UST:
Region: STATE
Facility ID: 00000004815
Facility Type: Other
Other Type: TRUCK SHOP
Total Tanks: 0005
Contact Name: Not reported
Telephone: 2132582777
Owner Name: CAL MAT CO. FORMERLY CONROCK C
Owner Address: 3200 SAN FERNANDO RD
Owner City,St,Zip: LOS ANGELES, CA 90065

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00010400

IRWINDALE SHOP (Continued) **U001568768**

Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: None

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: None

Tank Num: 004
Container Num: 4
Year Installed: Not reported
Tank Capacity: 00000500
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 005
Container Num: 5
Year Installed: 1982
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 6 inches
Leak Detection: None

SWEEPS UST:
Status: Active
Comp Number: 4917
Number: 9
Board Of Equalization: 44-007867
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 19-000-004917-000001
Actv Date: 06-30-89
Capacity: Not reported
Tank Use: UNKNOWN
Stg: W
Content: Not reported

IRWINDALE SHOP (Continued) **U001568768**

Number Of Tanks: 3

Status: Active
Comp Number: 4917
Number: 9
Board Of Equalization: 44-007867
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 19-000-004917-000002
Actv Date: 06-30-89
Capacity: Not reported
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 4917
Number: 9
Board Of Equalization: 44-007867
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 19-000-004917-000003
Actv Date: 06-30-89
Capacity: Not reported
Tank Use: UNKNOWN
Stg: W
Content: Not reported
Number Of Tanks: Not reported

WIP:
Region: 4
File Number: 108.0013
File Status: Historical
Staff: DKOO
Facility Suite: Not reported

Region: 4
File Number: 108.0149
File Status: Not reported
Staff: UNIDENTIFIED
Facility Suite: Not reported

CA WDS:
Facility ID: 4 19I002244
Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
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

IRWINDALE SHOP (Continued) **U001568768**

	are assigned by the Regional Board
Subregion:	4
Facility Telephone:	Not reported
Facility Contact:	Not reported
Agency Name:	CALMAT CO.
Agency Address:	Not reported
Agency City,St,Zip:	0
Agency Contact:	Not reported
Agency Telephone:	Not reported
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
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.

29
West
1/8-1/4
0.194 mi.
1026 ft.

POLMARK CONSTRUCTION **WIP** **S106767105**
4848 LANTE ST **N/A**
BALDWIN PARK, CA 91706

Relative:
Lower

Actual:
435 ft.

WIP:

Region:	4
File Number:	108.1352
File Status:	**Historical**
Staff:	UNIDENTIFIED
Facility Suite:	Not reported

30
WNW
1/8-1/4
0.195 mi.
1032 ft.

J & B CEMENT CONTRACTOR **WIP** **S106767106**
4938 LANTE ST **N/A**
BALDWIN PARK, CA 91706

Relative:
Lower

Actual:
441 ft.

WIP:

Region:	4
File Number:	108.1353
File Status:	**Not reported**

J & B CEMENT CONTRACTOR (Continued) **S106767106**

Staff: UNIDENTIFIED
Facility Suite: Not reported

F31
NNW
1/8-1/4
0.199 mi.
1050 ft.

FORD PRINTING & MAILING INC. **WIP** **S106766481**
5102 AZUSA CANYON RD **N/A**
IRWINDALE, CA 91706

Site 1 of 5 in cluster F

Relative:
Higher

Actual:
451 ft.

WIP:
Region: 4
File Number: 108.0459
File Status: **Historical**
Staff: DKOO
Facility Suite: Not reported

F32
NNW
1/8-1/4
0.208 mi.
1097 ft.

PLASTECH TRANSPARENCIES **WIP** **S106766482**
5108 AZUSA CANYON RD **N/A**
IRWINDALE, CA 91706

Site 2 of 5 in cluster F

Relative:
Higher

Actual:
451 ft.

WIP:
Region: 4
File Number: 108.0460
File Status: **Historical**
Staff: DRASMUSS
Facility Suite: Not reported

F33
NNW
1/8-1/4
0.216 mi.
1143 ft.

SAM P. WALLACE COMPANY, INC. **HIST UST** **U001568800**
5115 AZUSA CANYON RD **N/A**
BALDWIN PARK, CA 91706

Site 3 of 5 in cluster F

Relative:
Higher

Actual:
452 ft.

HIST UST:
Region: STATE
Facility ID: 00000050882
Facility Type: Other
Other Type: FABRICATION SHOP
Total Tanks: 0002
Contact Name: WILLIAM D. WILHITE
Telephone: 8189606431
Owner Name: N.G. FINANCIAL CORPORATION
Owner Address: 3660 WILSHIRE BLVD. PENTHOUSE
Owner City,St,Zip: LOS ANGELES, CA 90010

Tank Num: 001
Container Num: 001
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: None

SAM P. WALLACE COMPANY, INC. (Continued) **U001568800**

Tank Num: 002
Container Num: 0002
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 6 inches
Leak Detection: Visual

F34
NNW
1/8-1/4
0.220 mi.
1160 ft.

IMPERIAL HORIZON **WIP** **S106766346**
5116 AZUSA CANYON RD **N/A**
IRWINDALE, CA 91706

Site 4 of 5 in cluster F

Relative:
Higher

Actual:
452 ft.

WIP:
Region: 4
File Number: 108.0202
File Status: **Not reported**
Staff: UNIDENTIFIED
Facility Suite: Not reported

F35
NNW
1/8-1/4
0.222 mi.
1174 ft.

ORECO DUCT SYSTEMS, INC. **WIP** **S106766960**
5119 AZUSA CANYON RD **N/A**
BALDWIN PARK, CA 91706

Site 5 of 5 in cluster F

Relative:
Higher

Actual:
452 ft.

WIP:
Region: 4
File Number: 108.1134
File Status: **Historical**
Staff: DKOO
Facility Suite: Not reported

G36
WNW
1/8-1/4
0.229 mi.
1207 ft.

NATIONAL COOLER CORP., **WIP** **S106767107**
5018 LANTE ST **N/A**
BALDWIN PARK, CA 91706

Site 1 of 3 in cluster G

Relative:
Higher

Actual:
446 ft.

WIP:
Region: 4
File Number: 108.1356
File Status: **Historical**
Staff: UNIDENTIFIED
Facility Suite: Not reported

G37
NW
1/8-1/4
0.237 mi.
1250 ft.

5029 LANTE ST
BALDWIN PARK, CA 91706

EDR US Hist Auto Stat **1015525971**
N/A

Site 2 of 3 in cluster G

Relative:
Higher

Actual:
446 ft.

EDR Historical Auto Stations:

Name:	ROLAND & SONS AUTO BODY
Year:	2008
Address:	5029 LANTE ST

G38
NW
1/8-1/4
0.243 mi.
1285 ft.

GLENDORA TREE SURGERY, INC.
5040 LANTE ST
BALDWIN PARK, CA 91706

WIP **S106767108**
N/A

Site 3 of 3 in cluster G

Relative:
Higher

Actual:
447 ft.

WIP:

Region:	4
File Number:	108.1357
File Status:	**Historical**
Staff:	UNIDENTIFIED
Facility Suite:	Not reported

39
SSW
1/4-1/2
0.293 mi.
1547 ft.

POWERS LUMBER CO.,
4407 AZUSA CANYON RD.
IRWINDALE, CA 91706

SLIC **S106484686**
WIP **N/A**

Relative:
Lower

Actual:
424 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	10/19/1995
Global Id:	SL603798880
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number:	Not reported
Latitude:	34.092659
Longitude:	-117.942063
Case Type:	Cleanup Program Site
Case Worker:	GJH
Local Agency:	Not reported
RB Case Number:	108.0440
File Location:	Not reported
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

WIP:

Region:	4
File Number:	108.0440
File Status:	**Backlog**
Staff:	UNIDENTIFIED
Facility Suite:	Not reported

40 WNW 1/4-1/2 0.338 mi. 1785 ft. | **ARROW PARKING 5065 CALMVIEW AVE BALDWIN PARK, CA 91706** | **HIST CORTESE LUST WIP** | **S102060002 N/A**

Relative: Higher

Actual: 445 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	R-15598

LUST:

Region:	STATE
Global Id:	T0603705254
Latitude:	34.105051
Longitude:	-117.948238
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/04/1990
Lead Agency:	LOS ANGELES COUNTY
Case Worker:	JOA
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	R-15598
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Aviation
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603705254
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603705254
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Regulatory Activities:

Global Id:	T0603705254
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

ARROW PARKING (Continued) **S102060002**

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	R-15598
Status:	Case Closed
Substance:	1
Substance Quantity:	Not reported
Local Case No:	Not reported
Case Type:	Soil
Abatement Method Used at the Site:	Not reported
Global ID:	T0603705254
W Global ID:	Not reported
Staff:	UNK
Local Agency:	19000
Cross Street:	ARROW HWY
Enforcement Type:	Not reported
Date Leak Discovered:	Not reported
Date Leak First Reported:	9/4/1990
Date Leak Record Entered:	4/19/1996
Date Confirmation Began:	Not reported
Date Leak Stopped:	Not reported
Date Case Last Changed on Database:	9/4/1990
Date the Case was Closed:	9/4/1990
How Leak Discovered:	Not reported
How Leak Stopped:	Not reported
Cause of Leak:	Not reported
Leak Source:	Not reported
Operator:	Not reported
Water System:	Not reported
Well Name:	Not reported
Approx. Dist To Production Well (ft):	965.2737798618563355569512896
Source of Cleanup Funding:	Not reported
Preliminary Site Assessment Workplan Submitted:	Not reported
Preliminary Site Assessment Began:	Not reported
Pollution Characterization Began:	Not reported
Remediation Plan Submitted:	Not reported
Remedial Action Underway:	Not reported
Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	Not reported
Historical Max MTBE Date:	Not reported
Hist Max MTBE Conc in Groundwater:	Not reported
Hist Max MTBE Conc in Soil:	Not reported
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	ARROW PARKING
RP Address:	5030 GAYHURST AVE, BALDWIN PARK CA 91706
Program:	LUST
Lat/Long:	34.1045163 / -1
Local Agency Staff:	Not reported
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported

ARROW PARKING (Continued) **S102060002**

Assigned Name: Not reported
Summary: Not reported

WIP:
Region: 4
File Number: 108.1195
File Status: Historical
Staff: DKOO
Facility Suite: Not reported

---

41 North 1/4-1/2 0.353 mi. 1864 ft.

JASCO WOOD PRODUCTS
15519 ARROW HWY.
IRWINDALE, CA 91706

SLIC S106484685
WIP N/A
EMI

Relative: Higher

Actual: 459 ft.

SLIC:
Region: STATE
Facility Status: Open - Site Assessment
Status Date: 09/29/1989
Global Id: SL603798879
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number: Not reported
Latitude: 34.107067
Longitude: -117.941999
Case Type: Cleanup Program Site
Case Worker: GJH
Local Agency: Not reported
RB Case Number: 108.0325
File Location: Not reported
Potential Media Affected: Aquifer used for drinking water supply
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

WIP:
Region: 4
File Number: 108.0325
File Status: Backlog
Staff: UNIDENTIFIED
Facility Suite: Not reported

EMI:
Year: 1990
County Code: 19
Air Basin: SC
Facility ID: 59317
Air District Name: SC
SIC Code: 2491
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 2
Reactive Organic Gases Tons/Yr: 2
Carbon Monoxide Emissions Tons/Yr: 0

JASCO WOOD PRODUCTS (Continued) **S106484685**

NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1993
County Code:	19
Air Basin:	SC
Facility ID:	81663
Air District Name:	SC
SIC Code:	2599
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1993
County Code:	19
Air Basin:	SC
Facility ID:	59317
Air District Name:	SC
SIC Code:	2491
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	19
Air Basin:	SC
Facility ID:	81663
Air District Name:	SC
SIC Code:	2599
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995

JASCO WOOD PRODUCTS (Continued) **S106484685**

County Code:	19
Air Basin:	SC
Facility ID:	59317
Air District Name:	SC
SIC Code:	2491
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

42
NNE
1/4-1/2
0.354 mi.
1867 ft.

ATASCADERO YARD **HIST CORTESE** **S105024235**
15627 ARROW **N/A**
IRWINDALE, CA 91706

Relative:
Higher

Actual:
465 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	2399

43
NNW
1/4-1/2
0.357 mi.
1887 ft.

U.S. RENTALS **HIST CORTESE** **S101295582**
15402 ARROW HWY E **LUST** **N/A**
BALDWIN PARK, CA 91706

Relative:
Higher

Actual:
457 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	I-11270

LUST:

Region:	STATE
Global Id:	T0603792260
Latitude:	34.106972
Longitude:	-117.944714
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	07/16/2009
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	GK
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	I-11270A
LOC Case Number:	011251-011270
File Location:	Regional Board
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Gasoline

U.S. RENTALS (Continued) **S101295582**

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603792260
Contact Type:	Regional Board Caseworker
Contact Name:	AHMAD J. LAMMA
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 West 4th Street Suite 200
City:	Los Angeles
Email:	alamaa@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603792260
Contact Type:	Local Agency Caseworker
Contact Name:	SAM STEVENS
Organization Name:	LOS ANGELES COUNTY
Address:	900 S. FREMONT AVE.
City:	ALHAMBRA
Email:	Not reported
Phone Number:	6264583507

Regulatory Activities:

Global Id:	T0603792260
Action Type:	ENFORCEMENT
Date:	04/27/2009
Action:	Referral to Regional Board - #c607469

Global Id:	T0603792260
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0603792260
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0603792260
Action Type:	ENFORCEMENT
Date:	07/16/2009
Action:	Staff Letter

Global Id:	T0603792260
Action Type:	RESPONSE
Date:	08/17/2009
Action:	Other Report / Document

Region:	STATE
Global Id:	T0603703774
Latitude:	34.106505
Longitude:	-117.944682
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/08/1996

U.S. RENTALS (Continued) **S101295582**

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	YR
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	I-11270
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603703774
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603703774
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Regulatory Activities:

Global Id:	T0603703774
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0603703774
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0603703774
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	I-11270
Status:	Case Closed
Substance:	Diesel
Substance Quantity:	Not reported
Local Case No:	Not reported

U.S. RENTALS (Continued) **S101295582**

Case Type:	Soil	
Abatement Method Used at the Site:		Excavate and Treat
Global ID:	T0603703774	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	10/1/1987	
Date Leak First Reported:		9/8/1988
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	10/1/1988	
Date Case Last Changed on Database:		7/8/1996
Date the Case was Closed:		7/8/1996
How Leak Discovered:	Tank Test	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	Tank	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		446.4102223313188145119400062 3
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		4/1/1996
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	BLANK RP	
RP Address:	417 W. ALLEN AVE, SUITE 110, SAN DIMAS CA 91773	
Program:	LUST	
Lat/Long:	34.1069593 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	Not reported	

H44 East 1/4-1/2 0.370 mi. 1951 ft. | **IRWINDALE (CONROCK) D.S.** | **SWF/LF** | **S102360621** **N/A**

4827 N. IRWINDALE AVE.
IRWINDALE, CA

Site 1 of 2 in cluster H

Relative: Higher

Actual: 447 ft.

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AA-0024
Lat/Long:	34.0997199 / -117.95
Owner Name:	Cal Mat Co.
Owner Telephone:	2132582777
Owner Address:	Not reported
Owner Address2:	3200 San Fernando
Owner City,St,Zip:	Los Angeles, CA 900065
Operational Status:	Closed
Operator:	Conrock Co.
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	3200 San Fernando Rd
Operator City,St,Zip:	Los Angeles, CA 90051
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	0
Activity:	Solid Waste Disposal Site
Regulation Status:	Unpermitted
Landuse Name:	Residential,Industrial,Commercial
GIS Source:	Map
Category:	Disposal
Unit Number:	01
Inspection Frequency:	Annual
Accepted Waste:	Not reported
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	0
SWIS Num:	19-AA-0024
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	Not reported
Actual Throughput with Units:	Not reported
Permitted Capacity with Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Not reported

---

45 NW 1/4-1/2 0.371 mi. 1958 ft. | **L & M METAL PRODUCTS, INC.** | **SLIC WIP** | **S106484710** **N/A**

5108 CALMVIEW AVE.
BALDWIN PARK, CA 91706

Relative: Higher

Actual: 448 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	01/04/1991
Global Id:	SL603798909
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number:	Not reported
Latitude:	34.103289
Longitude:	-117.946822
Case Type:	Cleanup Program Site

L & M METAL PRODUCTS, INC. (Continued) **S106484710**

Case Worker:	GJH
Local Agency:	Not reported
RB Case Number:	108.1198
File Location:	Not reported
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

WIP:

Region:	4
File Number:	108.1198
File Status:	**Backlog**
Staff:	UNIDENTIFIED
Facility Suite:	Not reported

46
South
1/4-1/2
0.376 mi.
1984 ft.

DS WATERS OF AMERICA LP **LUST** **S108147379**
4548 N AZUSA CANYON RD **LOS ANGELES CO. HMS** **N/A**
IRWINDALE, CA

Relative:
Lower

Actual:
424 ft.

LUST:

Region:	STATE
Global Id:	T10000003521
Latitude:	34.0944328
Longitude:	-117.942974
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/08/2003
Lead Agency:	LOS ANGELES COUNTY
Case Worker:	TS
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	Not reported
LOC Case Number:	007815-008269
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T10000003521
Contact Type:	Local Agency Caseworker
Contact Name:	ANOUSH HOUSEPIANS
Organization Name:	LOS ANGELES COUNTY
Address:	Not reported
City:	ALHAMBRA
Email:	Not reported
Phone Number:	6264583516

Regulatory Activities:

Global Id:	T10000003521
Action Type:	Other
Date:	01/01/1950

DS WATERS OF AMERICA LP (Continued) **S108147379**

Action:	Leak Reported
Global Id:	T10000003521
Action Type:	ENFORCEMENT
Date:	12/08/2003
Action:	Closure/No Further Action Letter
Global Id:	T10000003521
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped
Global Id:	T10000003521
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

LOS ANGELES CO. HMS:

Region:	LA
Facility Id:	007815-046724
Facility Type:	I01
Facility Status:	Permit
Area:	3S
Permit Number:	000564493
Permit Status:	Permit

I47 **SHANNON CASKET CO** **LUST** **S105032679**
NNE **15744 ARROW HWY E** **N/A**
1/4-1/2 **IRWINDALE, CA 91706**
0.377 mi.
1989 ft. **Site 1 of 2 in cluster I**

Relative:
Higher

Actual:
465 ft.

LUST:

Region:	STATE
Global Id:	T0603704656
Latitude:	34.1069223
Longitude:	-117.937976
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/19/1996
Lead Agency:	LOS ANGELES COUNTY
Case Worker:	JOA
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	R-04831
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Aviation
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603704656
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)

SHANNON CASKET CO (Continued) **S105032679**

Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603704656
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Regulatory Activities:

Global Id:	T0603704656
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	R-04831
Status:	Case Closed
Substance:	1
Substance Quantity:	Not reported
Local Case No:	Not reported
Case Type:	Soil
Abatement Method Used at the Site:	Not reported
Global ID:	T0603704656
W Global ID:	Not reported
Staff:	UNK
Local Agency:	19000
Cross Street:	Not reported
Enforcement Type:	Not reported
Date Leak Discovered:	Not reported
Date Leak First Reported:	10/3/1994
Date Leak Record Entered:	8/23/1996
Date Confirmation Began:	Not reported
Date Leak Stopped:	Not reported
Date Case Last Changed on Database:	10/3/1994
Date the Case was Closed:	8/19/1996
How Leak Discovered:	Not reported
How Leak Stopped:	Not reported
Cause of Leak:	Not reported
Leak Source:	Not reported
Operator:	Not reported
Water System:	Not reported
Well Name:	Not reported
Approx. Dist To Production Well (ft):	2218.1669440004060294070780462
Source of Cleanup Funding:	Not reported
Preliminary Site Assessment Workplan Submitted:	Not reported
Preliminary Site Assessment Began:	Not reported

SHANNON CASKET CO (Continued) **S105032679**

Pollution Characterization Began:	Not reported
Remediation Plan Submitted:	Not reported
Remedial Action Underway:	Not reported
Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	Not reported
Historical Max MTBE Date:	Not reported
Hist Max MTBE Conc in Groundwater:	Not reported
Hist Max MTBE Conc in Soil:	Not reported
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	SHANNON CASKET
RP Address:	5657 WASHINGTON BL E., LOS ANGELES CA 90040
Program:	LUST
Lat/Long:	34.1069223 / -1
Local Agency Staff:	Not reported
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	Not reported

I48 **SHANNON CASKET COMPANY, INC.** **HIST CORTESE** **U001568808**
NNE **15744 ARROW HWY** **HIST UST** **N/A**
1/4-1/2 **IRWINDALE, CA 91706** **WIP**
0.377 mi.
1991 ft. **Site 2 of 2 in cluster I**

Relative:
Higher

Actual:
465 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	R-04831

HIST UST:

Region:	STATE
Facility ID:	00000003833
Facility Type:	Other
Other Type:	MFG. OF CASKET SHELL
Total Tanks:	0002
Contact Name:	DAVID SHANNON
Telephone:	8183371288
Owner Name:	E. M. SHANNON
Owner Address:	15744 ARROW HIGHWAY
Owner City,St,Zip:	IRWINDALE, CA 91706
Tank Num:	001
Container Num:	1
Year Installed:	1969
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Stock Inventor

SHANNON CASKET COMPANY, INC. (Continued) **U001568808**

Tank Num:	002
Container Num:	2
Year Installed:	1969
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	Stock Inventor

WIP:

Region:	4
File Number:	108.0358
File Status:	**Historical**
Staff:	PAR
Facility Suite:	Not reported

H49 **IRWINDALE REDEVELOPMENT** **HIST CORTESE** **S101296481**
East **4900 IRWINDALE AVE** **LUST** **N/A**
1/4-1/2 **IRWINDALE, CA 91706** **SWEEPS UST**
0.381 mi.
2014 ft. **Site 2 of 2 in cluster H**

Relative:
Higher

Actual:
449 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	I-04924

LUST:

Region:	STATE
Global Id:	T0603703009
Latitude:	34.1013145
Longitude:	-117.9340589
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/21/1993
Lead Agency:	LOS ANGELES COUNTY
Case Worker:	JOA
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	I-04924
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603703009
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

IRWINDALE REDEVELOPMENT (Continued) **S101296481**

Global Id:	T0603703009
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Regulatory Activities:

Global Id:	T0603703009
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0603703009
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

Global Id:	T0603703009
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	I-04924
Status:	Case Closed
Substance:	Diesel
Substance Quantity:	Not reported
Local Case No:	Not reported
Case Type:	Soil
Abatement Method Used at the Site:	Not reported
Global ID:	T0603703009
W Global ID:	Not reported
Staff:	UNK
Local Agency:	19000
Cross Street:	PEPPERTREE LANE
Enforcement Type:	Not reported
Date Leak Discovered:	3/5/1991
Date Leak First Reported:	12/9/1991
Date Leak Record Entered:	12/22/1991
Date Confirmation Began:	Not reported
Date Leak Stopped:	3/5/1991
Date Case Last Changed on Database:	10/21/1993
Date the Case was Closed:	10/21/1993
How Leak Discovered:	Tank Closure
How Leak Stopped:	Not reported
Cause of Leak:	UNK
Leak Source:	UNK
Operator:	ALVARADO, CARLOS
Water System:	Not reported

IRWINDALE REDEVELOPMENT (Continued) **S101296481**

Well Name: Not reported
Approx. Dist To Production Well (ft): 526.7723177882561924895458730 7
Source of Cleanup Funding: UNK
Preliminary Site Assessment Workplan Submitted: Not reported
Preliminary Site Assessment Began: 12/9/1991
Pollution Characterization Began: Not reported
Remediation Plan Submitted: Not reported
Remedial Action Underway: 7/14/1992
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: IRWINDALE REDEVELOPMENT
RP Address: 5050 N IRWINDALE AVE, IRWINDALE, 91706
Program: LUST
Lat/Long: 34.1013145 / -1
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

SWEEPS UST:
Status: Active
Comp Number: 13528
Number: 1
Board Of Equalization: Not reported
Referral Date: 02-06-92
Action Date: 02-06-92
Created Date: 06-30-89
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 19-000-013528-000001
Actv Date: 02-06-92
Capacity: 1000
Tank Use: OIL
Stg: W
Content: Not reported
Number Of Tanks: 2

Status: Active
Comp Number: 13528
Number: 1
Board Of Equalization: Not reported
Referral Date: 02-06-92
Action Date: 02-06-92
Created Date: 06-30-89
Tank Status: A
Owner Tank Id: 2

IRWINDALE REDEVELOPMENT (Continued) **S101296481**

Swrcb Tank Id:	19-000-013528-000002
Actv Date:	02-06-92
Capacity:	2000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

50
NE
1/4-1/2
0.452 mi.
2384 ft.

IOPTEX RESEARCH INC
15715 ARROWHIGH
IRWINDALE, CA

RCRA-SQG **1000404139**
FINDS **CAD982360992**
NPDES
SLIC
LOS ANGELES CO. HMS

Relative:
Higher

Actual:
470 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	IOPTEX RESEARCH INC
Facility address:	15715 ARROWHIGH IRWINDALE, CA 91706
EPA ID:	CAD982360992
Mailing address:	ARROWHIGH IRWINDALE, CA 91706
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SMITH & NEPHEW
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

IOPTEX RESEARCH INC (Continued) **1000404139**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency: 09/01/1996
Facility name: IOPTEX RESEARCH INC
Classification: Small Quantity Generator

Date form received by agency: 03/08/1996
Facility name: IOPTEX RESEARCH INC
Site name: ALLERGAN MEDICAL OPTICS, IRWINDALE
Classification: Large Quantity Generator

Date form received by agency: 03/19/1994
Facility name: IOPTEX RESEARCH INC
Site name: IOPTEX RESEARCH, INC
Classification: Large Quantity Generator

Date form received by agency: 01/14/1992
Facility name: IOPTEX RESEARCH INC
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002801200

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	4

IOPTEX RESEARCH INC (Continued) **1000404139**

Regulatory Measure Id:	191081
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19I016097
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/15/2000
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Biosense Webster Inc
Discharge Address:	15715 Arrow Hwy
Discharge City:	Irwindale
Discharge State:	California
Discharge Zip:	91706

SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	09/29/1989
Global Id:	SL603798877
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number:	Not reported
Latitude:	34.107038
Longitude:	-117.937666
Case Type:	Cleanup Program Site
Case Worker:	GJH
Local Agency:	Not reported
RB Case Number:	108.0255
File Location:	Not reported
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LOS ANGELES CO. HMS:

Region:	LA
Facility Id:	008219-I08751
Facility Type:	I01
Facility Status:	Closed
Area:	3S
Permit Number:	000011899
Permit Status:	Closed

Region:	LA
Facility Id:	008219-008751
Facility Type:	Not reported
Facility Status:	OPEN
Area:	3S
Permit Number:	Not reported
Permit Status:	Not reported

51 ENE 1/4-1/2 0.475 mi. 2509 ft. | **IRWINDALE CITY OF**
16034 CALLE DEL NORTE
IRWINDALE, CA | **RCRA-SQG FINDS LUST HAZNET** | **1000596055 CAD983600149**

Relative: Higher

Actual: 466 ft.

RCRA-SQG:

Date form received by agency:	08/05/1991
Facility name:	IRWINDALE CITY OF
Facility address:	16034 CALLE DEL NORTE IRWINDALE, CA 91706
EPA ID:	CAD983600149
Mailing address:	N IRWINDALE AVE IRWINDALE, CA 91706
Contact:	LOUIE RIOS
Contact address:	5050 N IRWINDALE AVE IRWINDALE, CA 91706
Contact country:	US
Contact telephone:	(818) 337-3262
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CITY OF IRWINDALE
Owner/operator address:	5050 N IRWINDALE AVE IRWINDALE, CA 91706
Owner/operator country:	Not reported
Owner/operator telephone:	(818) 962-3381
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

IRWINDALE CITY OF (Continued) **1000596055**

FINDS:

Registry ID: 110002856918

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST:

Region:	STATE
Global Id:	T10000000509
Latitude:	0
Longitude:	0
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/09/2009
Lead Agency:	LOS ANGELES COUNTY
Case Worker:	PGT
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	Not reported
LOC Case Number:	005442-005643
File Location:	Local Agency
Potential Media Affect:	Not reported
Potential Contaminants of Concern:	Gasoline, Other Petroleum
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T10000000509
Contact Type:	Local Agency Caseworker
Contact Name:	PHILLIP GHARIBIANS-TABRIZI
Organization Name:	LOS ANGELES COUNTY
Address:	900 S. FREMONT AVE.
City:	ALHAMBRA
Email:	pgharibians@dpw.lacounty.gov
Phone Number:	Not reported

Global Id:	T10000000509
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

IRWINDALE CITY OF (Continued) **1000596055**

Regulatory Activities:

Global Id:	T10000000509
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T10000000509
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped
Global Id:	T10000000509
Action Type:	ENFORCEMENT
Date:	04/09/2009
Action:	Closure/No Further Action Letter - #C604657
Global Id:	T10000000509
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

HAZNET:

Year:	2011
Gepaid:	CAD983600149
Contact:	EDGAR ROJAS, ENG & MINING MGR
Telephone:	6264302210
Mailing Name:	Not reported
Mailing Address:	5050 IRWINDALE AVE
Mailing City,St,Zip:	IRWINDALE, CA 917062133
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Unspecified aqueous solution
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.126
Facility County:	Los Angeles
Year:	2011
Gepaid:	CAD983600149
Contact:	EDGAR ROJAS, ENG & MINING MGR
Telephone:	6264302210
Mailing Name:	Not reported
Mailing Address:	5050 IRWINDALE AVE
Mailing City,St,Zip:	IRWINDALE, CA 917062133
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.187
Facility County:	Los Angeles
Year:	2011

IRWINDALE CITY OF (Continued) **1000596055**

Gepaid: CAD983600149
Contact: EDGAR ROJAS, ENG & MINING MGR
Telephone: 6264302210
Mailing Name: Not reported
Mailing Address: 5050 IRWINDALE AVE
Mailing City,St,Zip: IRWINDALE, CA 917062133
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Off-specification, aged or surplus organics
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.1815
Facility County: Los Angeles

Year: 2010
Gepaid: CAD983600149
Contact: EDGAR ROJAS, ENG & MINING MGR
Telephone: 6264302210
Mailing Name: Not reported
Mailing Address: 5050 IRWINDALE AVE
Mailing City,St,Zip: IRWINDALE, CA 917062133
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.627
Facility County: Los Angeles

Year: 2010
Gepaid: CAD983600149
Contact: EDGAR ROJAS, ENG & MINING MGR
Telephone: 6264302210
Mailing Name: Not reported
Mailing Address: 5050 IRWINDALE AVE
Mailing City,St,Zip: IRWINDALE, CA 917062133
Gen County: Not reported
TSD EPA ID: AZR000501510
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.05
Facility County: Los Angeles

Click this hyperlink while viewing on your computer to access
44 additional CA_HAZNET: record(s) in the EDR Site Report.

52 **NNE** **1/4-1/2** **0.483 mi.** **2552 ft.** **Relative:** **Higher** **Actual:** **473 ft.**	**SPECIALTY ORGANICS INC** **5263 N 4TH ST** **IRWINDALE, CA**	**CERC-NFRAP** **RCRA-SQG** **FINDS** **NPDES** **HIST CORTESE** **LUST** **HIST UST** **WIP** **LOS ANGELES CO. HMS** **WDS**	**1000171503** **CAD981389661**

CERC-NFRAP:

Site ID:	0901357
Federal Facility:	Not a Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID:	13051235.00000
Person ID:	9271184.00000
Contact Sequence ID:	13286160.00000
Person ID:	13003854.00000
Contact Sequence ID:	13291755.00000
Person ID:	13003858.00000
Contact Sequence ID:	13297613.00000
Person ID:	13004003.00000

CERCLIS-NFRAP Assessment History:

Action:	DISCOVERY
Date Started:	/ /
Date Completed:	07/01/84
Priority Level:	Not reported
Action:	ARCHIVE SITE
Date Started:	/ /
Date Completed:	09/01/88
Priority Level:	Not reported
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	09/01/88
Priority Level:	NFRAP-Site does not qualify for the NPL based on existing information
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	12/01/87
Priority Level:	Low priority for further assessment

RCRA-SQG:

Date form received by agency:	02/21/2002
Facility name:	SPECIALTY ORGANICS, INC.
Facility address:	5263 N. FOURTH STREET IRWINDALE, CA 91706
EPA ID:	CAD981389661
Contact:	JOSEPH V SERUTO

SPECIALTY ORGANICS INC (Continued) **1000171503**

Contact address:	Not reported
	Not reported
Contact country:	Not reported
Contact telephone:	(626) 962-2008
Contact email:	JOSEPH_SERUTO@COMPUSERVE.COM
EPA Region:	09
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	02/21/2002
Facility name:	SPECIALTY ORGANICS, INC.
Classification:	Large Quantity Generator

Date form received by agency:	09/01/1996
Facility name:	SPECIALTY ORGANICS, INC.
Site name:	SPECIALTY ORGANICS INC
Classification:	Small Quantity Generator

Date form received by agency:	02/19/1986
Facility name:	SPECIALTY ORGANICS, INC.
Site name:	SPECIALTY ORGANICS INC
Classification:	Large Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated:	F - 262.40-43.D
Area of violation:	Generators - General
Date violation determined:	08/20/2001
Date achieved compliance:	01/08/2002
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	11/05/2001
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported

SPECIALTY ORGANICS INC (Continued) **1000171503**

Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 08/20/2001
Date achieved compliance: 01/08/2002
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: 10/05/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 08/20/2001
Date achieved compliance: 01/08/2002
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/05/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 08/20/2001
Date achieved compliance: 01/08/2002
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: 10/05/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 08/20/2001
Date achieved compliance: 01/08/2002
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/05/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

SPECIALTY ORGANICS INC (Continued) **1000171503**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 262.40-43.D
Area of violation: Generators - General
Date violation determined: 08/20/2001
Date achieved compliance: 01/08/2002
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: 10/05/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 10/26/1993
Date achieved compliance: 08/20/2001
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 08/20/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/08/2002
Evaluation lead agency: EPA

Evaluation date: 10/26/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/20/2001
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110002691034

Environmental Interest/Information System
The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal

SPECIALTY ORGANICS INC (Continued) **1000171503**

facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	188781
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19I001298
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/27/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Specialty Organics Inc
Discharge Address:	5263 4th St
Discharge City:	Irwindale
Discharge State:	California
Discharge Zip:	91706

CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	I-08370

LUST:

Region:	STATE
Global Id:	T0603703325
Latitude:	34.1079883
Longitude:	-117.9387
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	02/01/1995
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	DK
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	108.0514
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil

SPECIALTY ORGANICS INC (Continued) **1000171503**

Potential Contaminants of Concern: Aviation
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0603703325
Contact Type: Regional Board Caseworker
Contact Name: DAVID KOO
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dkoo@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0603703325
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Regulatory Activities:

Global Id: T0603703325
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0603703325
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0603703325
Action Type: ENFORCEMENT
Date: 02/01/1995
Action: Closure/No Further Action Letter

Global Id: T0603703325
Action Type: Other
Date: 01/01/1950
Action: Leak Stopped

LUST REG 4:

Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: I-08370
Status: Preliminary site assessment underway
Substance: 1
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Soil
Abatement Method Used at the Site: Not reported

SPECIALTY ORGANICS INC (Continued) **1000171503**

Global ID:	T0603703325	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	2/15/1990	
Date Leak First Reported:		2/15/1990
Date Leak Record Entered:	5/15/1990	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	2/15/1990	
Date Case Last Changed on Database:		5/16/1990
Date the Case was Closed:		Not reported
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		2110.2328523068967503729171 54
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		4/10/1990
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	SPECIALTY ORGANICS, INC.	
RP Address:	5263 004TH ST., N., IRWINDALE, 91706	
Program:	LUST	
Lat/Long:	34.1079883 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	Not reported	

HIST UST:

Region:	STATE
Facility ID:	00000055884
Facility Type:	Other
Other Type:	CHEMICAL MFG.
Total Tanks:	0001
Contact Name:	Not reported
Telephone:	8189622008

SPECIALTY ORGANICS INC (Continued) **1000171503**

Owner Name: SPECIALTY ORGANICS, INC.
Owner Address: 5263 N. FOURTH ST.
Owner City,St,Zip: IRWINDALE, CA 91706

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Not reported

WIP:
Region: 4
File Number: 108.0514
File Status: Historical
Staff: DRASMUSS
Facility Suite: Not reported

LOS ANGELES CO. HMS:
Region: LA
Facility Id: 007903-047865
Facility Type: SS6
Facility Status: Closed
Area: 3S
Permit Number: CGI001298
Permit Status: Closed

Region: LA
Facility Id: 009132-008370
Facility Type: Not reported
Facility Status: Removed
Area: 3S
Permit Number: Not reported
Permit Status: Not reported

CA WDS:
Facility ID: 4 19I001298
Facility Type: Not reported
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: 4
Facility Telephone: Not reported
Facility Contact: Not reported
Agency Name: SPECIALTY ORGANICS INC.
Agency Address: Not reported
Agency City,St,Zip: 0
Agency Contact: Not reported
Agency Telephone: Not reported
Agency Type: Not reported
SIC Code: 0
SIC Code 2: Not reported
Primary Waste: Not reported

SPECIALTY ORGANICS INC (Continued) **1000171503**

Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
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.

53
SSE
1/2-1
0.594 mi.
3136 ft.

Relative:
Lower

Actual:
425 ft.

READY PAC PRODUCE INCORPORATED
4401 FOXDALE AVENUE
IRWINDALE, CA

CERCLIS **1000360641**
RCRA-SQG **CAD000628099**
FINDS
NPDES
HIST CORTESE
HIST UST
LA Co. Site Mitigation
WIP
HAZNET
ENVIROSTOR

CERCLIS:

Site ID:	0903628
EPA ID:	CAD000628099
Facility County:	LOS ANGELES
Short Name:	BAXTER HEALTHCARE CORP. S
Congressional District:	30
IFMS ID:	Not reported
SMSA Number:	4480
USGC Hydro Unit:	18070106
Federal Facility:	Not a Federal Facility
DMNSN Number:	0.00000
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	09
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Site is Part of NPL Site
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Not reported
Non NPL Status Date:	/ /

READY PAC PRODUCE INCORPORATED (Continued) **1000360641**

Site Fips Code: 06037
CC Concurrence Date: / /
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):
Contact ID: 9271184.00000
Contact Name: Karen Jurist
Contact Tel: (415) 972-3219
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13003854.00000
Contact Name: Leslie Ramirez
Contact Tel: (415) 972-3978
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13003858.00000
Contact Name: Sharon Murray
Contact Tel: (415) 972-4250
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13004003.00000
Contact Name: Carl Brickner
Contact Tel: Not reported
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

CERCLIS Site Alias Name(s):
Alias ID: 101
Alias Name: BAXTER HEALTHCARE CORP
Alias Address: Not reported
CA
Alias ID: 201
Alias Name: AMERICAN PHARMASEAL LABORATORIES
Alias Address: Not reported
CA
Alias ID: 201
Alias ID: 101
Alias Comments: PREVIOUS EPA ID# AZD 981 416 977PREVIOUS EPA ID# AZD 981 416 977
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: / /
Date Completed: 06/21/89
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

READY PAC PRODUCE INCORPORATED (Continued) **1000360641**

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	06/07/91
Priority Level:	Addressed as part of an existing NPL site
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	AMERICAN PHARMASEAL LABORATORIES
Facility address:	4401 FOXDALE AVE IRWINDALE, CA 91706
EPA ID:	CAD000628099
Mailing address:	4401 FOXDALE AVENUE IRWINDALE, CA 91706
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AMERICAN PHARMASEAL LABORATORIES
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

READY PAC PRODUCE INCORPORATED (Continued) **1000360641**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency: 02/19/1992
Facility name: AMERICAN PHARMASEAL LABORATORIES
Site name: BAXTER HEALTHCARE PHARMASEAL DIVISION
Classification: Large Quantity Generator

Date form received by agency: 07/30/1980
Facility name: AMERICAN PHARMASEAL LABORATORIES
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110000477378

Environmental Interest/Information System

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

HAZARDOUS WASTE BIENNIAL REPORTER

READY PAC PRODUCE INCORPORATED (Continued) **1000360641**

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	328533
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19I021020
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/20/2007
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Ready Pac Foods
Discharge Address:	4401 Foxdale Ave
Discharge City:	Irwindale
Discharge State:	California
Discharge Zip:	91706

CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	3138

HIST UST:

Region:	STATE
Facility ID:	00000003016
Facility Type:	Other
Other Type:	MANUFACTUR
Total Tanks:	0001
Contact Name:	JOHN FEENEY
Telephone:	8189623531
Owner Name:	AMERICAN PHARMASEAL LABORATORI
Owner Address:	4401 FOXDALE AVE.
Owner City,St,Zip:	IRWINDALE, CA 91706
Tank Num:	001
Container Num:	1
Year Installed:	1977
Tank Capacity:	00020000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	Visual, 10

LA Co. Site Mitigation:

Facility ID:	FA0011510
Site ID:	SD0010827
Jurisdiction:	State
Case ID:	RO0010827
Abated:	No
Assigned To:	Not reported

READY PAC PRODUCE INCORPORATED (Continued) **1000360641**

Entered Date: 05/11/2004

WIP:
Region: 4
File Number: 108.0516
File Status: Historical
Staff: ESOLOMON
Facility Suite: Not reported

HAZNET:
Year: 1994
Gepaid: CAD000628099
Contact: AMERICAN PHARMASEAL LABORATORI
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 4401 FOXDALE AVE
Mailing City,St,Zip: IRWINDALE, CA 917060000
Gen County: Not reported
TSD EPA ID: CAT000646117
TSD County: Not reported
Waste Category: Empty containers less than 30 gallons
Disposal Method: Disposal, Land Fill
Tons: .0150
Facility County: Los Angeles

Year: 1993
Gepaid: CAD000628099
Contact: AMERICAN PHARMASEAL LABORATORI
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 4401 FOXDALE AVE
Mailing City,St,Zip: IRWINDALE, CA 917060000
Gen County: Not reported
TSD EPA ID: CAD008302903
TSD County: Not reported
Waste Category: Off-specification, aged or surplus organics
Disposal Method: Recycler
Tons: 2.07999999999
Facility County: Los Angeles

Year: 1993
Gepaid: CAD000628099
Contact: AMERICAN PHARMASEAL LABORATORI
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 4401 FOXDALE AVE
Mailing City,St,Zip: IRWINDALE, CA 917060000
Gen County: Not reported
TSD EPA ID: CAT000646117
TSD County: Not reported
Waste Category: Laboratory waste chemicals
Disposal Method: Transfer Station
Tons: 3.79999999999
Facility County: Los Angeles

Year: 1993

READY PAC PRODUCE INCORPORATED (Continued) **1000360641**

Gepaid:	CAD000628099
Contact:	AMERICAN PHARMASEAL LABORATORI
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	4401 FOXDALE AVE
Mailing City,St,Zip:	IRWINDALE, CA 917060000
Gen County:	Not reported
TSD EPA ID:	CAD008302903
TSD County:	Not reported
Waste Category:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	Recycler
Tons:	0.68799999999
Facility County:	Los Angeles

Year:	1993
Gepaid:	CAD000628099
Contact:	AMERICAN PHARMASEAL LABORATORI
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	4401 FOXDALE AVE
Mailing City,St,Zip:	IRWINDALE, CA 917060000
Gen County:	Not reported
TSD EPA ID:	CAD008302903
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Recycler
Tons:	0.37530000000
Facility County:	Los Angeles

Click this hyperlink while viewing on your computer to access
7 additional CA_HAZNET: record(s) in the EDR Site Report.

ENVIROSTOR:

Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Chatsworth
Facility ID:	19380055
Site Code:	Not reported
Assembly:	48
Senate:	22
Special Program:	Not reported
Status:	Refer: RWQCB
Status Date:	05/16/1995
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	34.09397
Longitude:	-117.9381
APN:	8417004009
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED

READY PAC PRODUCE INCORPORATED (Continued) **1000360641**

Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: AMERICAN PHARMASEAL LABORATORIES
Alias Type: Alternate Name
Alias Name: 8417004009
Alias Type: APN
Alias Name: CAD000628099
Alias Type: CERCLIS ID
Alias Name: 110000477378
Alias Type: EPA (FRS #)
Alias Name: 19380055
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 07/21/1994
Comments: Site screening/visit conducted. Ejie Solomon at RWQCB is Project Manager supervising cleanup activities at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 06/26/1991
Comments: RWQCB conducted a site inspection of Baxter Pharmaseal in December 1989. As a result of the investigation, a subsurface investigation was conducted to determine the extent of contamination in the dioctyl phthalate (DOP) tank/precipatate collection and clarifier areas. Phase I and Phase II investigations were completed on 06/22/90 and 01/14/91 respectively. Phase I and Phase II investigations indicate that hazardous substances (PCE), toluene, freon-TF, Bis (2-ethyl hexyl phthalate (BEHP) have contaminated the soil. EPA recommends for a high priority SSI, DHS recommends high priority PEA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 05/03/1991
Comments: Listed on RCRA database as a hazardous waste generator since 07/30/1980.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

54
NNE
1/2-1
0.725 mi.
3826 ft.

Relative:
Higher

Actual:
488 ft.

DAVIS WIRE CORP
5555 IRWINDALE AVE
IRWINDALE, CA 91706

RCRA-SQG
NPDES
HIST CORTESE
LUST
LOS ANGELES CO. HMS
ENVIROSTOR
US AIRS

1000262472
CAD099466310

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	DAVIS WALKER CORP
Facility address:	5555 IRWINDALE AVE IRWINDALE, CA 91706
EPA ID:	CAD099466310
Mailing address:	P.O.BOX SECOND THOUSAND THIRD IRWINDALE, CA 91706
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	JAMES WALKER
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No

DAVIS WIRE CORP (Continued) **1000262472**

Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/01/1996
Facility name: DAVIS WALKER CORP
Classification: Small Quantity Generator

Date form received by agency: 04/25/1990
Facility name: DAVIS WALKER CORP
Site name: DAVIS WALKER CORPORATION
Classification: Large Quantity Generator

Date form received by agency: 10/30/1980
Facility name: DAVIS WALKER CORP
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 10/29/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

NPDES:
Npdes Number: CAS000001
Facility Status: Active
Agency Id: 0
Region: 4
Regulatory Measure Id: 190045
Order No: 97-03-DWQ
Regulatory Measure Type: Enrollee
Place Id: Not reported
WDID: 4 19I010894
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 02/17/1994
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Davis Wire Corp
Discharge Address: 5555 Irwindale Ave
Discharge City: Irwindale
Discharge State: California
Discharge Zip: 91706

CORTESE:

DAVIS WIRE CORP (Continued) **1000262472**

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	108.0533

LUST:

Region:	STATE
Global Id:	T0603700169
Latitude:	34.113352
Longitude:	-117.937158
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/20/1996
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	WIP
Local Agency:	LOS ANGELES COUNTY
RB Case Number:	108.0533
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603700169
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Global Id:	T0603700169
Contact Type:	Regional Board Caseworker
Contact Name:	WELL INVESTIGATION PROGRAM
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	LOS ANGELES
Email:	Not reported
Phone Number:	Not reported

Regulatory Activities:

Global Id:	T0603700169
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0603700169
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

Global Id:	T0603700169
Action Type:	Other

DAVIS WIRE CORP (Continued) **1000262472**

Date: 01/01/1950
Action: Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	108.0533
Status:	Case Closed
Substance:	Waste Oil
Substance Quantity:	Not reported
Local Case No:	Not reported
Case Type:	Soil
Abatement Method Used at the Site:	Not reported
Global ID:	T0603700169
W Global ID:	Not reported
Staff:	WIP
Local Agency:	19000
Cross Street:	GLADSTONE ST.
Enforcement Type:	Not reported
Date Leak Discovered:	7/30/1990
Date Leak First Reported:	8/7/1990
Date Leak Record Entered:	12/2/1990
Date Confirmation Began:	Not reported
Date Leak Stopped:	7/30/1990
Date Case Last Changed on Database:	5/20/1996
Date the Case was Closed:	5/20/1996
How Leak Discovered:	Tank Closure
How Leak Stopped:	Not reported
Cause of Leak:	UNK
Leak Source:	UNK
Operator:	BURNHAM, DALE E.
Water System:	Not reported
Well Name:	Not reported
Approx. Dist To Production Well (ft):	4331.605846450698965005415974 3
Source of Cleanup Funding:	UNK
Preliminary Site Assessment Workplan Submitted:	Not reported
Preliminary Site Assessment Began:	Not reported
Pollution Characterization Began:	Not reported
Remediation Plan Submitted:	Not reported
Remedial Action Underway:	Not reported
Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	Not reported
Historical Max MTBE Date:	Not reported
Hist Max MTBE Conc in Groundwater:	Not reported
Hist Max MTBE Conc in Soil:	Not reported
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	DAVIS WIRE CORP.
RP Address:	5555 IRWINDALE AVE., N., IRWINDALE, 91706
Program:	LUST
Lat/Long:	34.1134761 / -1
Local Agency Staff:	Not reported

DAVIS WIRE CORP (Continued) **1000262472**

Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: OLD CASE #120390-17; 3/19/96 PRELIMINARY SOIL GAS SURVEY; WIP CASE STAFF PERSON: DAVID RASMUSSEN

LOS ANGELES CO. HMS:
Region: LA
Facility Id: 002365-002447
Facility Type: T0
Facility Status: Permit
Area: 3S
Permit Number: 00001578T
Permit Status: Closed

ENVIROSTOR:
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Chatsworth
Facility ID: 71002657
Site Code: Not reported
Assembly: 48
Senate: 22
Special Program: Not reported
Status: Refer: Other Agency
Status Date: Not reported
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 34.11261
Longitude: -117.9369
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD099466310
Alias Type: EPA Identification Number
Alias Name: 110000477332
Alias Type: EPA (FRS #)
Alias Name: 71002657
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

DAVIS WIRE CORP (Continued) **1000262472**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

AIRS (AFS):

Compliance and Violation Data Major Sources:

EPA plant ID:	110013830122
Plant name:	DAVIS WIRE CORP
Plant address:	5555 IRWINDALE AVE IRWINDALE, CA 91706
County:	LOS ANGELES
Region code:	09
Dunn & Bradst #:	Not reported
Air quality cntrl region:	024
Sic code:	3315
Sic code desc:	STEEL WIRE AND RELATED PRODUCTS
North Am. industrial classf:	331222
NAIC code description:	Steel Wire Drawing
Default compliance status:	IN COMPLIANCE - INSPECTION
Default classification:	ACTUAL OR POTENTIAL EMISSIONS ARE ABOVE THE APPLICABLE MAJOR SOURCE THRESHOLDS
Govt facility:	ALL OTHER FACILITIES NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR LOCAL GOVERNMENT
Current HPV:	Not reported

Compliance and Enforcement Major Issues:

Air program:	TITLE V PERMITS
National action type:	NXXXXX
Date achieved:	000726
Penalty amount:	000005000
Air program:	SIP SOURCE
National action type:	MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER
Date achieved:	010201
Penalty amount:	000000000
Air program:	TITLE V PERMITS
National action type:	SV RESOLVED
Date achieved:	010220
Penalty amount:	000000000
Air program:	TITLE V PERMITS
National action type:	NXXXXX
Date achieved:	010808
Penalty amount:	000000000
Air program:	TITLE V PERMITS
National action type:	STATE DAY 0
Date achieved:	010907

DAVIS WIRE CORP (Continued) **1000262472**

Penalty amount: 000000000

Air program: TITLE V PERMITS
National action type: SV RESOLVED
Date achieved: 010912
Penalty amount: 000000000

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 010912
Penalty amount: 000006004

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 020515
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 021204
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 021204
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / OFF-SITE
Date achieved: 021204
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 021204
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / OFF-SITE
Date achieved: 021204
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 021204
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE DAY 0
Date achieved: 030115
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 030121
Penalty amount: 000003500

DAVIS WIRE CORP (Continued) **1000262472**

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 030320
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 030417
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 030417
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 030417
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 030417
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 030417
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 030417
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE DAY 0
Date achieved: 030522
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: SV RESOLVED
Date achieved: 030528
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 030603
Penalty amount: 000005250

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 040427
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: SV RESOLVED

DAVIS WIRE CORP (Continued) **1000262472**

Date achieved: 040616
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE DAY 0
Date achieved: 040623
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 040625
Penalty amount: 000006750

Air program: SIP SOURCE
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 040917
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 040917
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 041007
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 041007
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 041007
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 041007
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 041007
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 041007
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 041214
Penalty amount: Not reported

DAVIS WIRE CORP (Continued) **1000262472**

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 041214
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE DAY 0
Date achieved: 050216
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE DAY 0
Date achieved: 050216
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 050310
Penalty amount: 000005500

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 050310
Penalty amount: 000005500

Air program: TITLE V PERMITS
National action type: SV RESOLVED
Date achieved: 050408
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 050602
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 050602
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 050810
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 050810
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: SV RESOLVED
Date achieved: 050810
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW

DAVIS WIRE CORP (Continued) **1000262472**

Date achieved: 050810
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 050810
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: SV RESOLVED
Date achieved: 050810
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 051005
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 051005
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 051012
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 051012
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE DAY 0
Date achieved: 051209
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE DAY 0
Date achieved: 051209
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 051222
Penalty amount: 000008000

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 051222
Penalty amount: 000008000

Air program: SIP SOURCE
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 060301
Penalty amount: Not reported

DAVIS WIRE CORP (Continued) **1000262472**

Air program: TITLE V PERMITS
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 060301
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 060318
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 060318
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 060319
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 060319
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 060503
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 060503
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 060512
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 060512
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: SV RESOLVED
Date achieved: 060524
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: SV RESOLVED
Date achieved: 060524
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD

DAVIS WIRE CORP (Continued) **1000262472**

Date achieved: 060601
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 060601
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 060615
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 060615
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 060725
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 060725
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 060725
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 060725
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE DAY 0
Date achieved: 060808
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE DAY 0
Date achieved: 060808
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 060824
Penalty amount: 000012500

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 060824
Penalty amount: 000012500

DAVIS WIRE CORP (Continued) **1000262472**

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 070116
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 070116
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: SV RESOLVED
Date achieved: 070116
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: SV RESOLVED
Date achieved: 070116
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 070829
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 070829
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: TITLE V COMPLIANCE CERT DUE/RECEIVED BY
Date achieved: 070911
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 070913
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 070913
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 070930
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 070930
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX

DAVIS WIRE CORP (Continued) **1000262472**

Date achieved: 071113
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 071113
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: TITLE V COMPLIANCE CERT DUE/RECEIVED BY
Date achieved: 080117
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 080122
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 080122
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 080925
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 080925
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 080925
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 080925
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE DAY 0
Date achieved: 081015
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE DAY 0
Date achieved: 081015
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 081017
Penalty amount: 000011750

DAVIS WIRE CORP (Continued) **1000262472**

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 081017
Penalty amount: 000011750

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 090123
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 090123
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: TITLE V ANN COMPL CERT DUE/RCV BY PERMIT AUTHORITY
Date achieved: 090828
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: TITLE V ANN COMPL CERT DUE/RCV BY PERMIT AUTHORITY
Date achieved: 090828
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 090903
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 090903
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 090903
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 090903
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: TITLE V COMPLIANCE CERT DUE/RECEIVED BY
Date achieved: 090903
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 090908
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD

DAVIS WIRE CORP (Continued) **1000262472**

Date achieved: 090908
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 090924
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: PCE/OFF-SITE
Date achieved: 090924
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: SV RESOLVED
Date achieved: 100226
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: SV RESOLVED
Date achieved: 100226
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 100407
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 100407
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: TITLE V ANN COMPL CERT DUE/RCV BY PERMIT AUTHORITY
Date achieved: 100824
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: TITLE V ANN COMPL CERT DUE/RCV BY PERMIT AUTHORITY
Date achieved: 100824
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: TITLE V COMPLIANCE CERT DUE/RECEIVED BY
Date achieved: 100914
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 100916
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 100916
Penalty amount: Not reported

DAVIS WIRE CORP (Continued) **1000262472**

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 100916
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 100916
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 100930
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 100930
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: PCE/OFF-SITE
Date achieved: 101027
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: PCE/OFF-SITE
Date achieved: 101027
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 110329
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 110329
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: TITLE V ANN COMPL CERT DUE/RCV BY PERMIT AUTHORITY
Date achieved: 110810
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: TITLE V ANN COMPL CERT DUE/RCV BY PERMIT AUTHORITY
Date achieved: 110810
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 110920
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX

DAVIS WIRE CORP (Continued) **1000262472**

Date achieved: 110920
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 111011
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 111011
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 111109
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 111109
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 111109
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 111109
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE DAY 0
Date achieved: 111231
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE DAY 0
Date achieved: 111231
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: NXXXXX
Date achieved: 120203
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 120203
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: SV RESOLVED
Date achieved: 120802
Penalty amount: 000002000

DAVIS WIRE CORP (Continued) **1000262472**

Air program: TITLE V PERMITS
National action type: SV RESOLVED
Date achieved: 120802
Penalty amount: 000002000

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 120823
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 120823
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: TITLE V ANN COMPL CERT DUE/RCV BY PERMIT AUTHORITY
Date achieved: 120829
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: TITLE V ANN COMPL CERT DUE/RCV BY PERMIT AUTHORITY
Date achieved: 120829
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 120906
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: S/L REQ (O/O COND) STACK TEST/NOT OBSV BUT REVWD
Date achieved: 120906
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 121211
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 121211
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 121211
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: COMPLIANCE CERTIFICATION STATE REVIEW
Date achieved: 121211
Penalty amount: Not reported

Air program: TITLE V PERMITS
National action type: STATE CONDUCTED FCE / ON-SITE

DAVIS WIRE CORP (Continued) **1000262472**

Date achieved: 121212
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 121212
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER
Date achieved: 970123
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER
Date achieved: 971022
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER
Date achieved: 980714
Penalty amount: 000000000

Air program: TITLE V PERMITS
National action type: MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER
Date achieved: 980714
Penalty amount: 000000000

Air program: TITLE V PERMITS
National action type: NXXXXX
Date achieved: 981001
Penalty amount: 000000000

Air program: TITLE V PERMITS
National action type: STATE DAY 0
Date achieved: 990126
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER
Date achieved: 991209
Penalty amount: 000000000

Historical Compliance Minor Sources:
State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1001
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1001
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1002
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION

DAVIS WIRE CORP (Continued) **1000262472**

Hist compliance date: 1003
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1004
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1004
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1101
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1102
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1103
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1103
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1104
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1201
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1202
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1202
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1203
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1204
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1002
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1003

DAVIS WIRE CORP (Continued) **1000262472**

Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1101
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1102
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1104
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1201
Air prog code hist file: V

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1203
Air prog code hist file: 0

State compliance status: IN COMPLIANCE - INSPECTION
Hist compliance date: 1204
Air prog code hist file: V

Permit Information:
Compliance plant ID: C8871
Permit number: 7411
Permit category: V
Permit category desc: TITLE V PERMIT - PLANT SP

Permit Source:
Compliance plant ID: C8871
Plant name: DAVIS WIRE CORP
Plant address: 5555 IRWINDALE AVE
IRWINDALE, CA 91706

Event Information:
Compliance permit ID: C8871
Permit number: 7411
Event action type: IF
Event description: *PERMIT AUTHORITY ISSUES FINAL PERMIT
Event action #: 001
Event date: 20061011

55 NNE 1/2-1 0.823 mi. 4347 ft.

Relative: Higher

Actual: 496 ft.

KEMAC TECHNOLOGY INC.
5462 N. IRWINDALE
IRWINDALE, CA 91706

RCRA-SQG
LA Co. Site Mitigation
LOS ANGELES CO. HMS
EMI
ENVIROSTOR
WDS

1000133491
CAD981972771

RCRA-SQG:

Date form received by agency:	05/10/2004
Facility name:	KEMAC TECHNOLOGY INC.
Facility address:	5462 N. IRWINDALE IRWINDALE, CA 91706
EPA ID:	CAD981972771
Contact:	RICHMOND G TEH
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(626) 334-1519
Telephone ext.:	14
Contact email:	RTEH@KEMACTECH.COM
EPA Region:	09
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	KEMAC TECHNOLOGY INC.
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	05/01/1995
Owner/Op end date:	Not reported

Owner/operator name:	IRWINDALE PROPERTIES, LLC
Owner/operator address:	405 S. MOTOR AZUSA, CA 91702
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	12/27/2003
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No

KEMAC TECHNOLOGY INC. (Continued) **1000133491**

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 05/10/2004
Facility name: KEMAC TECHNOLOGY INC.
Classification: Large Quantity Generator

Date form received by agency: 03/19/2002
Facility name: KEMAC TECHNOLOGY INC.
Site name: KEMAC TECHNOLOGY, INC
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Facility name: KEMAC TECHNOLOGY INC.
Site name: KEMAC TECH INC
Classification: Large Quantity Generator

Date form received by agency: 04/23/1996
Facility name: KEMAC TECHNOLOGY INC.
Site name: KEMAC TECH INC
Classification: Large Quantity Generator

Date form received by agency: 03/29/1994
Facility name: KEMAC TECHNOLOGY INC.
Site name: TRW SENSOR OPERATIONS
Classification: Large Quantity Generator

Date form received by agency: 02/28/1992
Facility name: KEMAC TECHNOLOGY INC.
Site name: TRW TECHNAR INC
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/17/2003
Date achieved compliance: 08/18/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/17/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 07/17/2003

KEMAC TECHNOLOGY INC. (Continued) **1000133491**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/18/2003
Evaluation lead agency: State Contractor/Grantee

LA Co. Site Mitigation:
Facility ID: Not reported
Site ID: SD0000389
Jurisdiction: State
Case ID: RO0001390
Abated: No
Assigned To: Not reported
Entered Date: 10/06/2011

LOS ANGELES CO. HMS:
Region: LA
Facility Id: 007902-047859
Facility Type: SS6
Facility Status: Closed
Area: 3S
Permit Number: CGI012842
Permit Status: Closed

Region: LA
Facility Id: 007902-023516
Facility Type: I02
Facility Status: Closed
Area: 3S
Permit Number: 000014257
Permit Status: Closed

Region: LA
Facility Id: 007902-I08369
Facility Type: I02
Facility Status: Closed
Area: 3S
Permit Number: 000011280
Permit Status: Closed

EMI:
Year: 1987
County Code: 19
Air Basin: SC
Facility ID: 55829
Air District Name: SC
SIC Code: 3714
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 5
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

KEMAC TECHNOLOGY INC. (Continued) **1000133491**

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	55829
Air District Name:	SC
SIC Code:	3714
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	68
Reactive Organic Gases Tons/Yr:	26
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	19
Air Basin:	SC
Facility ID:	55829
Air District Name:	SC
SIC Code:	3714
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	30
Reactive Organic Gases Tons/Yr:	6
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

ENVIROSTOR:

Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Chatsworth
Facility ID:	71002929
Site Code:	Not reported
Assembly:	48
Senate:	22
Special Program:	Not reported
Status:	Refer: Other Agency
Status Date:	Not reported
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not reported
Latitude:	34.11169
Longitude:	-117.9339
APN:	NONE SPECIFIED

KEMAC TECHNOLOGY INC. (Continued) **1000133491**

Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD981972771
Alias Type: EPA Identification Number
Alias Name: 110009540675
Alias Type: EPA (FRS #)
Alias Name: 71002929
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CA WDS:
Facility ID: 4 19I012842
Facility Type: Not reported
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: 4
Facility Telephone: Not reported
Facility Contact: Not reported
Agency Name: KEMAC TECHNOLOGY
Agency Address: Not reported
Agency City,St,Zip: 0
Agency Contact: Not reported
Agency Telephone: Not reported
Agency Type: Not reported
SIC Code: 0
SIC Code 2: Not reported
Primary Waste: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
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

KEMAC TECHNOLOGY INC. (Continued) **1000133491**

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.

56
SW
1/2-1
0.877 mi.
4630 ft.

FORD SPEED PARTS SPC
4273 AUCTION AVE.
BALDWIN PARK, CA 91706

Notify 65 **S100177999**
N/A

Relative:
Lower

Actual:
402 ft.

Notify 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Incident Description:	91706-3408

Count: 20 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
AZUSA	1003879438	KARDASHIAN & MAX GOLDRING	OFF PEAK RD	91702	CERCLIS-NFRAP
AZUSA	1004675474	SHELL SERVICE STATION	422 AZUSA	91702	RCRA-SQG,FINDS,HAZNET
AZUSA	1011818000	CANYON FILTRATION PLANT	1870 AZUSA & SAN GABRIEL CYN.	91702	RMP
IRWINDALE	1013602704	UNITED ROCK PRODUCTS	1245 EAST ARROW HIGHWAY	91706	MINES
AZUSA	1014678752	AZUSA CITY / VAN TASSEL CYN	VAN TASSEL CYN		FINDS
AZUSA	1014678755	AZUSA CLASS II DISPOSAL SITE	NO ADDRESS		FINDS
CHILAO FLAT	2011974081		98 STAR ROAD		ERNS
	M300001888	BOUQUET CANYON STONE CO INC	DEL SUR RIDGE QUARRY		MINES
AZUSA	S102435879	RINCON STATION/MT BALDY WORK	STAR ROUTE 1	91702	LUST
	S103441502	AZUSA CANYON ROAD DUMP-IRWINDA	AZUSA CANYON RD & CYPRESS RD		HIST CALSITES,WMUDS/SWAT,LUST
ANGELES N FOREST	S105022525	MORRIS DAM, NOSC	STATE HWY 39 4.5 MI NE OF	91702	HIST CORTESE
IRWINDALE	S106766359	BOCK MACHINE INC.	16300 R ARROW HWY	91706	WIP
IRWINDALE	S106766360	VAN ASCH INC.	16300 R ARROW HWY	91706	WIP
AZUSA	U001568651	ANDAVAR INC. - CRYSTAL LAKE	STAR ROUTE	91702	HIST UST
AZUSA	U001568652	ANDAVAR INC.-CRYSTAL LAKE RESO	STAR ROUTE	91702	HIST UST
AZUZA	U001568666	CRYSTAL LAKE ADMINISTRATIVE SI	STAR ROUTE	91702	HIST UST
AZUZA	U001568667	E. FORK RANGER STATION	STAR ROUTE	91702	HIST UST
AZUSA	U001568691	MORRIS DAM	SAN GABRIEL CANYON HIGHWAY 39	91702	HIST UST
AZUSA	U001568692	MT BALDY WORK CENTER	STAR ROUTE 1	91702	HIST UST
AZUZA	U001568699	RINCON RANGER STATION	STAR ROUTE	91702	HIST UST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 05/09/2013
Next Scheduled EDR Contact: 07/22/2013
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

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

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 05/09/2013
Next Scheduled EDR Contact: 07/22/2013
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

Federal CERCLIS list

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

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/04/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: 703-412-9810
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/29/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 09/09/2013
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/09/2012	Telephone: 703-603-8704
Date Made Active in Reports: 12/20/2012	Last EDR Contact: 07/08/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 10/21/2013
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/05/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: 703-412-9810
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/29/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 05/09/2013
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 6

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
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: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
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: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

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

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/20/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/06/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 49

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/06/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 49

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

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

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 35

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/21/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 8: Leaking Underground Storage Tanks

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

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

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

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

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

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

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

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

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

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

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/01/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 162

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/01/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 10

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-327-5092
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/06/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 49

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 07/02/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 12/11/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

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

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: No Update Planned

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

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/18/2013
Date Data Arrived at EDR: 03/19/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 8

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Quarterly

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

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 04/26/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 20

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/03/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

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

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/12/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 59

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 06/03/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/06/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 49

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

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

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 06/03/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

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

Date of Government Version: 03/15/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/11/2013
Date Data Arrived at EDR: 03/12/2013
Date Made Active in Reports: 03/25/2013
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/11/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

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

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

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

Date of Government Version: 03/12/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 55

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 05/01/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 10

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/15/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

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

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/07/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 01/15/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 30

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/11/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 04/18/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/04/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 09/01/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 131

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/29/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Quarterly

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

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/01/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 114

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/20/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 112

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 29

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/12/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/30/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/12/2013
Number of Days to Update: 22

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/21/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Quarterly

UIC: UIC Listing

A listing of underground control injection wells.

Date of Government Version: 03/05/2013
Date Data Arrived at EDR: 03/19/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 8

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/21/2013
Next Scheduled EDR Contact: 12/31/2012
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 04/01/2013
Date Data Arrived at EDR: 04/02/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 42

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 07/05/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/18/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 12/11/2012
Date Data Arrived at EDR: 12/12/2012
Date Made Active in Reports: 01/04/2013
Number of Days to Update: 23

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/18/2013
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Annually

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 04/29/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 17

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/26/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/06/2012
Number of Days to Update: 14

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/16/2013
Next Scheduled EDR Contact: 10/28/2013
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: 12/31/2008
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 19

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/20/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/03/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/18/2013
Date Data Arrived at EDR: 03/19/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 8

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 03/06/2013
Date Data Arrived at EDR: 03/12/2013
Date Made Active in Reports: 03/25/2013
Number of Days to Update: 13

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/14/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 31

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/16/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/29/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/21/2013
Date Data Arrived at EDR: 05/22/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 36

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/20/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 03/01/2007
Date Data Arrived at EDR: 06/01/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 05/03/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/17/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: N/A

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 04/04/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 97

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Quarterly

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Annually

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/18/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 30

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/28/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 30

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/28/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 03/13/2013
Date Data Arrived at EDR: 03/14/2013
Date Made Active in Reports: 04/04/2013
Number of Days to Update: 21

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/18/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 10/16/2012
Date Data Arrived at EDR: 10/17/2012
Date Made Active in Reports: 11/13/2012
Number of Days to Update: 27

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 07/15/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Varies

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/16/2013
Date Data Arrived at EDR: 04/17/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 29

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/04/2013
Date Data Arrived at EDR: 01/14/2013
Date Made Active in Reports: 03/01/2013
Number of Days to Update: 46

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

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

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/10/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 34

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 35

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/06/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 03/31/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 30

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 07/15/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/15/2013
Date Data Arrived at EDR: 03/19/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 8

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 04/30/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 10

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/29/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/26/2012
Date Data Arrived at EDR: 06/27/2012
Date Made Active in Reports: 08/17/2012
Number of Days to Update: 51

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

KERN COUNTY:

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

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county?s Certified Unified Program Agency database. California?s Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/12/2013
Date Data Arrived at EDR: 02/13/2013
Date Made Active in Reports: 03/21/2013
Number of Days to Update: 36

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 07/08/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/31/2012
Date Data Arrived at EDR: 12/28/2012
Date Made Active in Reports: 01/25/2013
Number of Days to Update: 28

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/15/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/24/2013
Date Data Arrived at EDR: 04/24/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 23

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/22/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

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

Date of Government Version: 01/30/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 03/25/2013
Number of Days to Update: 32

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 04/29/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 18

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 11/04/2013
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: 04/26/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 31

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/15/2013
Next Scheduled EDR Contact: 10/28/2013
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county?s Certified Unified Program Agency database. California?s Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 04/16/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 31

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 11/26/2012
Date Data Arrived at EDR: 11/28/2012
Date Made Active in Reports: 01/21/2013
Number of Days to Update: 54

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 27

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/25/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 06/04/2013
Date Data Arrived at EDR: 06/05/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 40

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 06/03/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 12

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/03/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/03/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/29/2013
Date Data Arrived at EDR: 05/30/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 46

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/17/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/15/2013
Date Made Active in Reports: 06/12/2013
Number of Days to Update: 28

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/15/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 41

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2013
Date Data Arrived at EDR: 05/15/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 41

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/12/2013
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 14

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/23/2013
Date Data Arrived at EDR: 04/24/2013
Date Made Active in Reports: 05/17/2013
Number of Days to Update: 23

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/18/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/23/2013
Date Data Arrived at EDR: 04/24/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 22

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/18/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

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

Date of Government Version: 02/04/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/05/2013
Next Scheduled EDR Contact: 10/21/2013
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

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

Date of Government Version: 02/04/2013
Date Data Arrived at EDR: 04/12/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 34

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/05/2013
Next Scheduled EDR Contact: 10/21/2013
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: 05/30/2013
Date Data Arrived at EDR: 05/31/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 45

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/13/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/17/2012
Date Data Arrived at EDR: 08/20/2012
Date Made Active in Reports: 10/03/2012
Number of Days to Update: 44

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 07/15/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2012
Date Data Arrived at EDR: 11/06/2012
Date Made Active in Reports: 11/30/2012
Number of Days to Update: 24

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/26/2013
Next Scheduled EDR Contact: 08/12/2013
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

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

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/10/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/25/2013
Date Data Arrived at EDR: 03/25/2013
Date Made Active in Reports: 04/18/2013
Number of Days to Update: 24

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/18/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/04/2013
Date Data Arrived at EDR: 06/05/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 40

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory

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

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/10/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 34

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Annually

Fuel Leak List

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

Date of Government Version: 03/18/2013
Date Data Arrived at EDR: 03/19/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 8

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 06/10/2013
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 06/03/2013
Date Data Arrived at EDR: 06/04/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 41

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 06/03/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

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

Date of Government Version: 06/03/2013
Date Data Arrived at EDR: 06/06/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 39

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 06/03/2013
Next Scheduled EDR Contact: 09/16/2013
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/16/2013
Date Data Arrived at EDR: 05/17/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 39

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/13/2013
Next Scheduled EDR Contact: 08/26/2013
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 29

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 03/15/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 12

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/20/2013
Date Data Arrived at EDR: 03/28/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/12/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/20/2013
Date Data Arrived at EDR: 03/28/2013
Date Made Active in Reports: 05/13/2013
Number of Days to Update: 46

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/12/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 04/01/2013
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 41

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/02/2013
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 05/14/2013
Number of Days to Update: 41

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/25/2013
Next Scheduled EDR Contact: 10/14/2013
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 03/13/2013
Date Data Arrived at EDR: 03/14/2013
Date Made Active in Reports: 03/27/2013
Number of Days to Update: 13

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/10/2013
Next Scheduled EDR Contact: 09/23/2013
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/14/2013
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 42

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 05/15/2013
Next Scheduled EDR Contact: 07/29/2013
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/22/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 34

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/20/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/03/2013
Next Scheduled EDR Contact: 10/21/2013
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: 02/18/2013
Next Scheduled EDR Contact: 06/03/2013
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 01/28/2013
Date Data Arrived at EDR: 02/01/2013
Date Made Active in Reports: 03/20/2013
Number of Days to Update: 47

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 06/11/2013
Next Scheduled EDR Contact: 08/12/2013
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: 03/01/2013
Date Data Arrived at EDR: 03/28/2013
Date Made Active in Reports: 05/13/2013
Number of Days to Update: 46

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/12/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Quarterly

YOLO COUNTY:

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

Date of Government Version: 03/25/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 05/13/2013
Number of Days to Update: 45

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/07/2013
Next Scheduled EDR Contact: 10/07/2013
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 05/24/2013
Date Data Arrived at EDR: 05/24/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 34

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 05/20/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/20/2013
Date Data Arrived at EDR: 05/21/2013
Date Made Active in Reports: 06/27/2013
Number of Days to Update: 37

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/21/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/19/2013
Next Scheduled EDR Contact: 10/28/2013
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: 05/01/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/09/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/23/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 57

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/18/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 06/22/2012
Date Made Active in Reports: 07/31/2012
Number of Days to Update: 39

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 09/27/2012
Number of Days to Update: 70

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

4848 AZUSA CANYON ROAD
4848 AZUSA CANYON ROAD
BALDWIN PARK, CA 91706

TARGET PROPERTY COORDINATES

Latitude (North):	34.1013 - 34˚ 6' 4.68''
Longitude (West):	117.9418 - 117˚ 56' 30.48''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	413126.8
UTM Y (Meters):	3773593.5
Elevation:	444 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	34117-A8 BALDWIN PARK, CA
Most Recent Revision:	1981

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

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

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

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

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

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

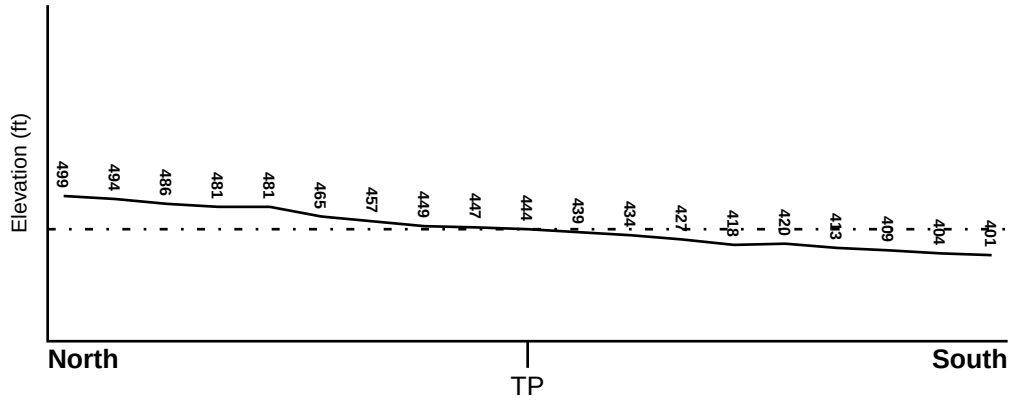
TOPOGRAPHIC INFORMATION

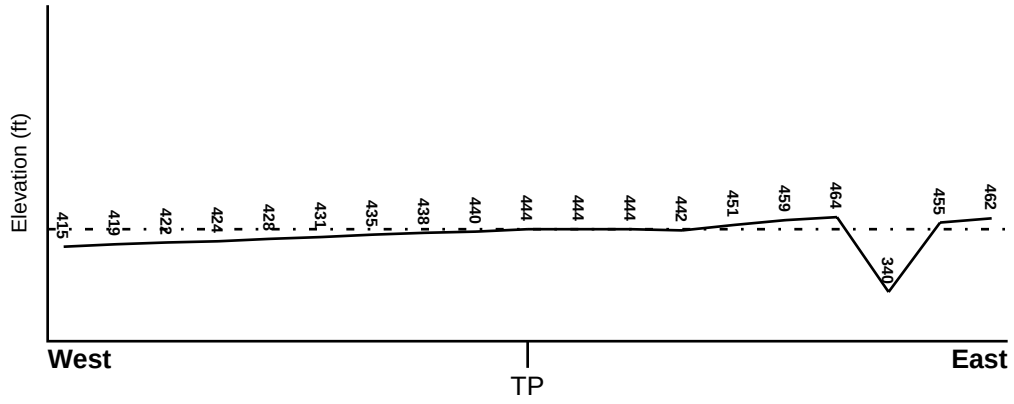
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient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

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 444 ft.

0 1/2 1 Miles

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

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

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

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

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
LOS ANGELES, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	06037C - FEMA DFIRM Flood data
Additional Panels in search area:	Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
BALDWIN PARK	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
Location Relative to TP:	1/2 - 1 Mile SSE
Site Name:	Baxter Healthcare Corp. Site
Site EPA ID Number:	CAD000628099
Groundwater Flow Direction:	Southwest
Measured Depth to Water:	196 feet in a well located one-quarter of a mile west of the site.
Hydraulic Connection:	Information is not available about the hydraulic connection between aquifer(s) under the site.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information is inferred in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

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

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site–specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

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

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

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

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

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

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

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

Soil Component Name:	URBAN LAND
Soil Surface Texture:	variable
Hydrologic Group:	Not reported
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 10 inches
Depth to Bedrock Max:	> 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: sandy loam
gravelly - sandy loam
silt loam
clay
fine sand
gravelly - sand
sand
fine sandy loam

Surficial Soil Types: sandy loam
gravelly - sandy loam
silt loam
clay
fine sand
gravelly - sand
sand
fine sandy loam

Shallow Soil Types: fine sandy loam
gravelly - loam
sandy clay
sandy clay loam
clay
silty clay
sand

Deeper Soil Types: gravelly - sandy loam
sandy loam
very gravelly - sandy loam
stratified
very fine sandy loam
weathered bedrock
sand
gravelly - fine sandy loam
silty clay loam
clay loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

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

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B7	USGS40000140852	1/2 - 1 Mile SSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

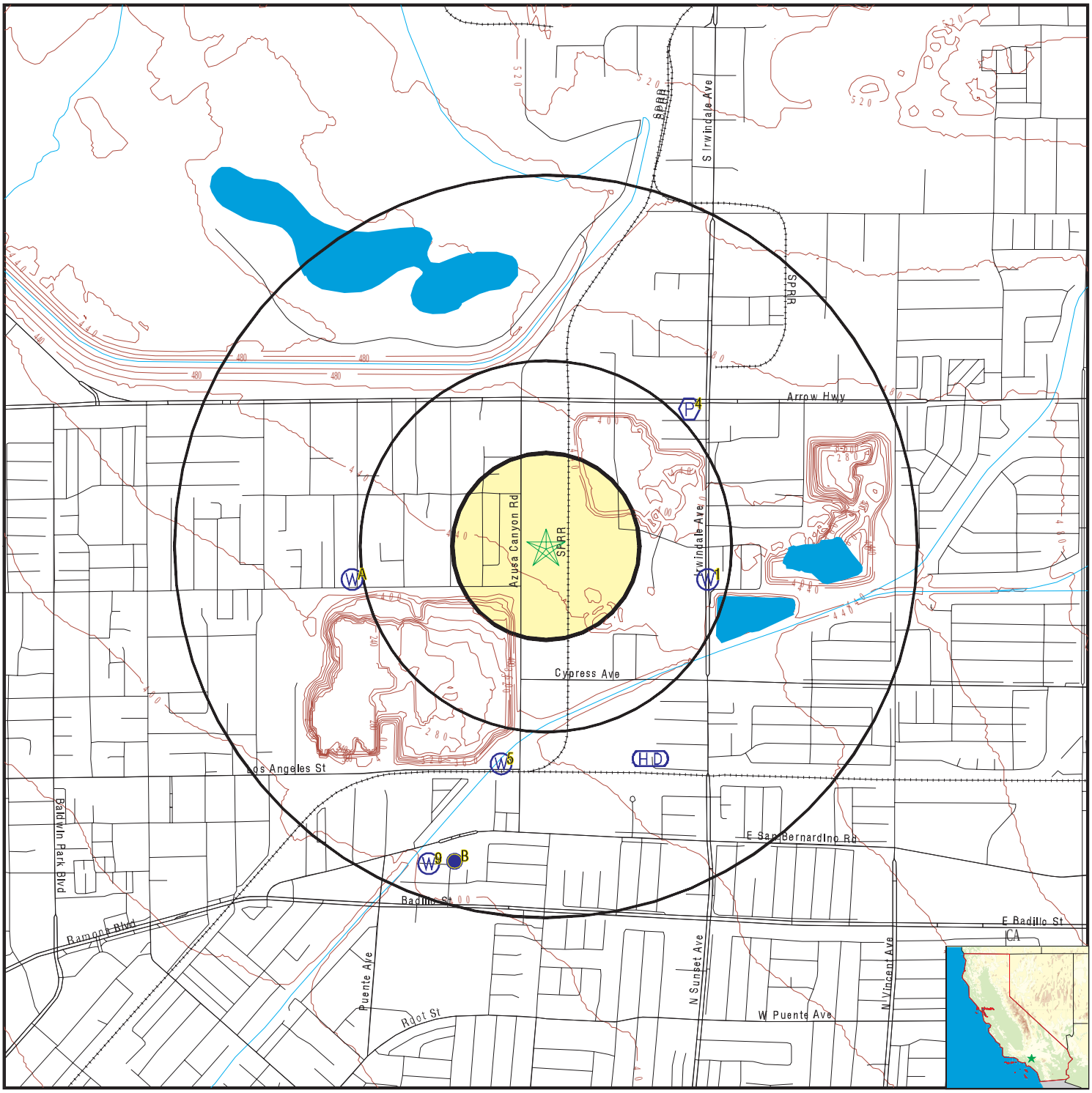
MAP ID	WELL ID	LOCATION FROM TP
4	CA1900018	1/2 - 1 Mile NE

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

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	1246	1/4 - 1/2 Mile ESE
A2	1251	1/2 - 1 Mile West
A3	1252	1/2 - 1 Mile West
5	CADW50000004307	1/2 - 1 Mile SSW
B6	1261	1/2 - 1 Mile SSW
B8	1260	1/2 - 1 Mile SSW
9	4208	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 3674352.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location
HD Closest Hydrogeological Data
Oil, gas or related wells

0 1/4 1/2 1 Miles

N

SITE NAME: 4848 Azusa Canyon Road	CLIENT: AMEC Environment & Infrastructure
ADDRESS: 4848 Azusa Canyon Road Baldwin Park CA 91706	CONTACT: Ellen Smith INQUIRY #: 3674352.2s
LAT/LONG: 34.1013 / 117.9418	DATE: July 24, 2013 9:15 am

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Map ID Direction Distance Elevation	Database	EDR ID Number
1 **ESE** **1/4 - 1/2 Mile** **Higher**	**CA WELLS**	**1246**

Water System Information:

Prime Station Code:	01S/10W-04R02 S	User ID:	4TH
FRDS Number:	1910009003	County:	Los Angeles
District Number:	07	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Inactive Untreated
Source Lat/Long:	340600.0 1175600.0	Precision:	Undefined
Source Name:	WELL 03 MORADA ST. - INACTIVE		
System Number:	1910009		
System Name:	VALLEY COUNTY WATER DIST.		
Organization That Operates System:			
	14521 E RAMONA BLD BALDWIN PARK, CA 91706		
Pop Served:	45000	Connections:	11664
Area Served:	BALDWIN PARK		

A2 **West** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**1251**

Water System Information:

Prime Station Code:	01S/10W-08A02 S	User ID:	4TH
FRDS Number:	1910009008	County:	Los Angeles
District Number:	07	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Treated
Source Lat/Long:	340600.0 1175700.0	Precision:	Undefined
Source Name:	WELL 08 HIGHWAY ARROW - TREATED		
System Number:	1910009		
System Name:	VALLEY COUNTY WATER DIST.		
Organization That Operates System:			
	14521 E RAMONA BLD BALDWIN PARK, CA 91706		
Pop Served:	45000	Connections:	11664
Area Served:	BALDWIN PARK		

A3 **West** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**1252**

Water System Information:

Prime Station Code:	01S/10W-08A03 S	User ID:	4TH
FRDS Number:	1910009007	County:	Los Angeles
District Number:	07	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Treated
Source Lat/Long:	340600.0 1175700.0	Precision:	Undefined
Source Name:	WELL 07 LANTE STREET - TREATED		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 1910009
System Name: VALLEY COUNTY WATER DIST.
Organization That Operates System:
14521 E RAMONA BLD
BALDWIN PARK, CA 91706
Pop Served: 45000 Connections: 11664
Area Served: BALDWIN PARK

Sample Collected:	01/12/2011	Findings:	1. UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	01/12/2011	Findings:	1.4 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/12/2011	Findings:	2.1e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	01/12/2011	Findings:	440. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/12/2011	Findings:	0.61 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	01/12/2011	Findings:	11. UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/12/2011	Findings:	0.55 UG/L
Chemical:	1,2-DICHLOROETHANE		
Sample Collected:	01/12/2011	Findings:	130. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/12/2011	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/12/2011	Findings:	13. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/12/2011	Findings:	8.6e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	01/12/2011	Findings:	19. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	01/12/2011	Findings:	3.7 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	02/10/2011	Findings:	39. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/16/2011	Findings:	1.4 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	02/16/2011	Findings:	1.5 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	02/16/2011	Findings:	2.6e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	02/16/2011	Findings:	430. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	02/16/2011	Findings:	0.67 UG/L
Chemical:	1,1-DICHLOROETHANE		

Sample Collected:	02/16/2011	Findings:	11. UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/16/2011	Findings:	0.69 UG/L
Chemical:	1,2-DICHLOROETHANE		
Sample Collected:	02/16/2011	Findings:	130. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02/16/2011	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/16/2011	Findings:	18. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	02/16/2011	Findings:	4.4e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	02/16/2011	Findings:	19. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	02/16/2011	Findings:	3.8 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	03/16/2011	Findings:	1.1 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	03/16/2011	Findings:	1.1 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/16/2011	Findings:	2.2e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	03/16/2011	Findings:	380. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/16/2011	Findings:	8. UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/16/2011	Findings:	0.54 UG/L
Chemical:	1,2-DICHLOROETHANE		
Sample Collected:	03/16/2011	Findings:	120. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/16/2011	Findings:	39. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/16/2011	Findings:	13. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	03/16/2011	Findings:	4.1e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	03/16/2011	Findings:	17. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	03/16/2011	Findings:	3.2 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	04/13/2011	Findings:	0.91 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	04/13/2011	Findings:	1.1 UG/L
Chemical:	CHLOROFORM (THM)		

Sample Collected:	04/13/2011	Findings:	1.9e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	04/13/2011	Findings:	410. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/13/2011	Findings:	7.2 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/13/2011	Findings:	110. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/13/2011	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/13/2011	Findings:	13. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/13/2011	Findings:	4.1e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	04/13/2011	Findings:	15. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	04/13/2011	Findings:	3.3 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	05/25/2011	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/25/2011	Findings:	560. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/25/2011	Findings:	7.5
Chemical:	PH, LABORATORY		
Sample Collected:	05/25/2011	Findings:	220. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	05/25/2011	Findings:	270. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	05/25/2011	Findings:	270. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	05/25/2011	Findings:	82. MG/L
Chemical:	CALCIUM		
Sample Collected:	05/25/2011	Findings:	17. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	05/25/2011	Findings:	23. MG/L
Chemical:	SODIUM		
Sample Collected:	05/25/2011	Findings:	4.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	05/25/2011	Findings:	37. MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/25/2011	Findings:	0.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	05/25/2011	Findings:	180. UG/L
Chemical:	BARIUM		

Sample Collected:	05/25/2011	Findings:	1.2 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	05/25/2011	Findings:	1.8e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	05/25/2011	Findings:	510. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05/25/2011	Findings:	8. UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/25/2011	Findings:	0.55 UG/L
Chemical:	1,2-DICHLOROETHANE		
Sample Collected:	05/25/2011	Findings:	150. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/25/2011	Findings:	470. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/25/2011	Findings:	0.801
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	05/25/2011	Findings:	0.255
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	05/25/2011	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/25/2011	Findings:	15. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	05/25/2011	Findings:	3.6e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	05/25/2011	Findings:	8100. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	05/25/2011	Findings:	17. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	05/25/2011	Findings:	3. UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	06/23/2011	Findings:	1.2 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	06/23/2011	Findings:	1.8e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	06/23/2011	Findings:	480. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06/23/2011	Findings:	9.3 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/23/2011	Findings:	0.53 UG/L
Chemical:	1,2-DICHLOROETHANE		
Sample Collected:	06/23/2011	Findings:	140. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/11/2012	Findings:	7.1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	09/11/2012	Findings:	50. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/11/2012	Findings:	420. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09/11/2012	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/11/2012	Findings:	4.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	09/18/2012	Findings:	9.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	09/18/2012	Findings:	160. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/18/2012	Findings:	6.8 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/18/2012	Findings:	46. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/18/2012	Findings:	36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/18/2012	Findings:	4.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	06/23/2011	Findings:	36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/23/2011	Findings:	15. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	06/23/2011	Findings:	3.6e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	06/23/2011	Findings:	16. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	06/23/2011	Findings:	3. UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	07/25/2011	Findings:	1. UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	07/25/2011	Findings:	1.8e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	07/25/2011	Findings:	320. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/25/2011	Findings:	6.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/25/2011	Findings:	100. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/25/2011	Findings:	36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/25/2011	Findings:	11. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

Sample Collected:	07/25/2011	Findings:	3.7e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	09/18/2012	Findings:	2.e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	09/18/2012	Findings:	9.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09/18/2012	Findings:	2.6 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	10/22/2012	Findings:	9.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	10/22/2012	Findings:	120. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/22/2012	Findings:	6.3 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/22/2012	Findings:	42. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/22/2012	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/22/2012	Findings:	3.8 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	10/22/2012	Findings:	2.1e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	10/22/2012	Findings:	13. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	10/22/2012	Findings:	2.7 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	07/25/2011	Findings:	14. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	07/25/2011	Findings:	2.6 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	08/18/2011	Findings:	0.86 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	08/18/2011	Findings:	1.6e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	08/18/2011	Findings:	340. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/18/2011	Findings:	5. UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/18/2011	Findings:	97. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/18/2011	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/18/2011	Findings:	7.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

Sample Collected:	08/18/2011	Findings:	3.3e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08/18/2011	Findings:	14. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/18/2011	Findings:	2.6 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	09/13/2011	Findings:	0.97 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	09/13/2011	Findings:	270. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/14/2012	Findings:	8.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	11/14/2012	Findings:	150. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/14/2012	Findings:	7.1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/14/2012	Findings:	48. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11/14/2012	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/14/2012	Findings:	4.3 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	11/14/2012	Findings:	2.1e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	11/14/2012	Findings:	10. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11/14/2012	Findings:	2.3 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	12/10/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/18/2012	Findings:	8.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	12/18/2012	Findings:	230. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12/18/2012	Findings:	4.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/13/2011	Findings:	5.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/13/2011	Findings:	89. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/13/2011	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/13/2011	Findings:	8. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

Sample Collected:	09/26/2011	Findings:	0.83 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	09/26/2011	Findings:	1.2e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	09/26/2011	Findings:	280. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/26/2011	Findings:	5.9 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/26/2011	Findings:	83. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/26/2011	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/26/2011	Findings:	8.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	12/18/2012	Findings:	54. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12/18/2012	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/18/2012	Findings:	4.8 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	12/18/2012	Findings:	1.7e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	12/18/2012	Findings:	11. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	12/18/2012	Findings:	2.1 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	09/26/2011	Findings:	2.8e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	09/26/2011	Findings:	13. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09/26/2011	Findings:	2.4 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	11/18/2011	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/18/2011	Findings:	2.5 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	11/22/2011	Findings:	0.83 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	11/22/2011	Findings:	1.1e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	11/22/2011	Findings:	300. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/22/2011	Findings:	4.9 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	11/22/2011	Findings:	84. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11/22/2011	Findings:	31. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/22/2011	Findings:	12. UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	11/22/2011	Findings:	3.e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	11/22/2011	Findings:	15. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11/22/2011	Findings:	2.3 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	12/27/2011	Findings:	0.71 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	12/27/2011	Findings:	1.3e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	12/27/2011	Findings:	290. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12/27/2011	Findings:	5. UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/27/2011	Findings:	84. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12/27/2011	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/27/2011	Findings:	9.2 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	12/27/2011	Findings:	2.8e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	12/27/2011	Findings:	13. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	12/27/2011	Findings:	2.2 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	01/25/2012	Findings:	0.68 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	01/25/2012	Findings:	1.e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	01/25/2012	Findings:	260. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/25/2012	Findings:	5.6 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	01/25/2012	Findings:	76. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/25/2012	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	01/25/2012	Findings:	7.8 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	01/25/2012	Findings:	2.9e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	01/25/2012	Findings:	14. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	01/25/2012	Findings:	2.3 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	02/16/2012	Findings:	0.24 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02/16/2012	Findings:	170. UG/L
Chemical:	BARIUM		
Sample Collected:	02/16/2012	Findings:	31. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/22/2012	Findings:	0.77 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	02/22/2012	Findings:	9.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	02/22/2012	Findings:	240. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	02/22/2012	Findings:	6.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	02/22/2012	Findings:	75. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02/22/2012	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/22/2012	Findings:	7.2 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	02/22/2012	Findings:	2.5e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	02/22/2012	Findings:	10. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	02/22/2012	Findings:	2. UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	03/14/2012	Findings:	0.53 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	03/14/2012	Findings:	8.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	03/14/2012	Findings:	260. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/14/2012	Findings:	6.1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/14/2012	Findings:	74. UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	03/14/2012	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/14/2012	Findings:	6.8 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	03/14/2012	Findings:	2.4e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	03/14/2012	Findings:	12. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	03/14/2012	Findings:	2. UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	04/24/2012	Findings:	0.64 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	04/24/2012	Findings:	1.3e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	04/24/2012	Findings:	260. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/24/2012	Findings:	7.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/24/2012	Findings:	66. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/24/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/24/2012	Findings:	6.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/24/2012	Findings:	2.5e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	04/24/2012	Findings:	11. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	04/24/2012	Findings:	2.3 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	05/11/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/16/2012	Findings:	9.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	05/16/2012	Findings:	260. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05/16/2012	Findings:	7.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/16/2012	Findings:	62. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/16/2012	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/16/2012	Findings:	6.2 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

Sample Collected:	05/16/2012	Findings:	2.6e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	05/16/2012	Findings:	11. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	05/16/2012	Findings:	2.2 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	06/05/2012	Findings:	1.e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	06/05/2012	Findings:	200. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06/05/2012	Findings:	6.9 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/05/2012	Findings:	56. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06/05/2012	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/05/2012	Findings:	6.1 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	06/05/2012	Findings:	2.3e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	06/05/2012	Findings:	13. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	06/05/2012	Findings:	2.3 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	07/25/2012	Findings:	8.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	07/25/2012	Findings:	150. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/25/2012	Findings:	6.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/25/2012	Findings:	46. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/25/2012	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/25/2012	Findings:	4.6 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/25/2012	Findings:	2.e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	07/25/2012	Findings:	12. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	07/25/2012	Findings:	2.4 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	08/22/2012	Findings:	0.53 UG/L
Chemical:	CARBON TETRACHLORIDE		

Sample Collected:	08/22/2012	Findings:	1.6e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	08/22/2012	Findings:	220. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/22/2012	Findings:	7.8 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/22/2012	Findings:	68. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/22/2012	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/22/2012	Findings:	5.9 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08/22/2012	Findings:	1.8e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08/22/2012	Findings:	11. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08/22/2012	Findings:	4.3 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	09/11/2012	Findings:	0.61 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	09/11/2012	Findings:	160. UG/L
Chemical:	TETRACHLOROETHYLENE		

4
NE **FRDS PWS** **CA1900018**
1/2 - 1 Mile
Higher

PWS ID:	CA1900018		
Date Initiated:	Not Reported	Date Deactivated:	Not Reported
PWS Name:	LIVINGSTON GRAHAM LIVINGSTON GRAHAM 16080 E. ARROW HWY IRWINDALE, CA 91706		
Addressee / Facility:	System Owner/Responsible Party LIVINGSTON GRAHAM 16080 E. ARROW HIGHWAY IRWINDALE, CA 91706		
Facility Latitude:	34 06 24	Facility Longitude:	117 56 03
City Served:	Not Reported		
Treatment Class:	Untreated	Population:	00000026

Violations information not reported.

ENFORCEMENT INFORMATION:

Truedate:	03/31/2009	Pwsid:	CA1900018
Pwsname:	LIVINGSTON-GRAHAM HANSON AGGREGATES		
Retpopsrvd:	25	Pwstypecod:	NTNC
Vioid:	0303001	Contaminant:	COLIFORM (TCR)
Viol. Type:	Monitoring, Routine Major (TCR)		
Complperbe:	10/1/2002 0:00:00		
Complperen:	12/31/2002 0:00:00	Enfdate:	1/21/2003 0:00:00
Enf action:	State AO (w/o Penalty) Issued		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	CA1900018
Pwsname:	LIVINGSTON-GRAHAM HANSON AGGREGATES		
Retpopsrvd:	25	Pwstypecod:	NTNC
Vioid:	0309002	Contaminant:	COLIFORM (TCR)
Viol. Type:	Monitoring, Routine Major (TCR)		
Complperbe:	6/1/2003 0:00:00		
Complperen:	6/30/2003 0:00:00	Enfdate:	7/24/2003 0:00:00
Enf action:	State AO (w/o Penalty) Issued		
Violmeasur:	Not Reported		

System Name:	LIVINGSTON-GRAHAM HANSON AGGREGATES		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	10/1/2002 0:00:00 - 12/31/2002 0:00:00		
Violation ID:	0303001		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00

System Name:	LIVINGSTON-GRAHAM HANSON AGGREGATES		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	10/1/2002 0:00:00 - 12/31/2002 0:00:00		
Violation ID:	0303001		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported

System Name:	LIVINGSTON-GRAHAM HANSON AGGREGATES		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	6/1/2003 0:00:00 - 6/30/2003 0:00:00		
Violation ID:	0309002		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00

System Name:	LIVINGSTON-GRAHAM HANSON AGGREGATES		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	6/1/2003 0:00:00 - 6/30/2003 0:00:00		
Violation ID:	0309002		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported

CONTACT INFORMATION:

Name:	LIVINGSTON-GRAHAM HANSON AGGREGATES	Population:	25
Contact:	Brent Oxier	Phone:	Not Reported
Address:	13550 LIVE OAK		
Address 2:	IRWINDALE		
	CA, 91 62685		

5
SSW **CA WELLS** **CADW50000004307**
1/2 - 1 Mile
Lower

Latitude :	34.0928		
Longitude :	117.9439		
Site code:	340928N1179439W001	Casgem sta:	01S10W08R001S
Local well:	3050	Casgem s 1:	Observation
County id:	19		
Basin cd:	4-13	Basin desc:	San Gabriel Valley
Org unit n:	Southern Region Office	Site id:	CADW50000004307

Map ID Direction Distance Elevation	Database	EDR ID Number
B6 **SSW** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**1261**

Water System Information:

Prime Station Code:	01S/10W-17A02 S	User ID:	MET
FRDS Number:	1910128002	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340521.0 1175642.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	BALDWIN WELL 02		
System Number:	1910128		
System Name:	COVINA IRRIGATION CO.		
Organization That Operates System:			
	146 EAST COLLEGE STREET COVINA, CA 91723		
Pop Served:	28000	Connections:	9
Area Served:	COVINA-GLENDORA		
Sample Collected:	01/25/2011	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/25/2011	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/01/2011	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/20/2011	Findings:	16. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/27/2011	Findings:	18. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/13/2011	Findings:	16. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/05/2011	Findings:	17. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/27/2011	Findings:	0.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/27/2011	Findings:	3.4 UG/L
Chemical:	ARSENIC		
Sample Collected:	07/27/2011	Findings:	130. UG/L
Chemical:	BARIUM		
Sample Collected:	07/27/2011	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/02/2011	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/06/2011	Findings:	22. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	10/04/2011	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/26/2011	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/02/2011	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/24/2012	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/25/2012	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/23/2012	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/26/2012	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/14/2012	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/04/2012	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/02/2012	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/25/2012	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/06/2012	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/04/2012	Findings:	23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/01/2012	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/24/2012	Findings:	340. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10/24/2012	Findings:	22. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/05/2012	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		

B7
SSW **FED USGS** **USGS40000140852**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340521117564201		
Monloc name:	001S010W17A003S		
Monloc type:	Well		
Monloc desc:	GAMA ULAB FAST		
Huc code:	18070106	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0889167
Longitude:	-117.9456667	Sourcemap scale:	24000

Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	402
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19510428	Welldepth:	500
Welldepth units:	ft	Wellholedepth:	500
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

B8
SSW **CA WELLS** **1260**
1/2 - 1 Mile
Lower

Water System Information:

Prime Station Code:	01S/10W-17A01 S	User ID:	MET
FRDS Number:	1910128001	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340520.0 1175645.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	BALDWIN WELL 01		
System Number:	1910128		
System Name:	COVINA IRRIGATION CO.		
Organization That Operates System:			
	146 EAST COLLEGE STREET COVINA, CA 91723		
Pop Served:	28000	Connections:	9
Area Served:	COVINA-GLENDORA		
Sample Collected:	01/25/2011	Findings:	0.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/25/2011	Findings:	3.2 UG/L
Chemical:	ARSENIC		
Sample Collected:	01/25/2011	Findings:	8.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/25/2011	Findings:	8.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/01/2011	Findings:	5.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/18/2011	Findings:	8.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/13/2011	Findings:	8.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/05/2011	Findings:	8.4 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	08/02/2011	Findings:	7.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/06/2011	Findings:	8.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/04/2011	Findings:	8.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/02/2011	Findings:	10. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/24/2012	Findings:	11. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/25/2012	Findings:	11. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/28/2012	Findings:	13. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/23/2012	Findings:	12. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/14/2012	Findings:	11. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/04/2012	Findings:	10. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/02/2012	Findings:	8.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/06/2012	Findings:	10. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/04/2012	Findings:	11. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/01/2012	Findings:	9.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/24/2012	Findings:	290. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/05/2012	Findings:	11. MG/L
Chemical:	NITRATE (AS NO3)		

9
SSW **CA WELLS** **4208**
1/2 - 1 Mile
Lower

Water System Information:

Prime Station Code:	03S/15W-12B01 S	User ID:	4TH
FRDS Number:	1910040001	County:	Los Angeles
District Number:	07	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Abandoned
Source Lat/Long:	340520.0 1175647.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 10 - ABANDONED		
System Number:	1910040		
System Name:	EL SEGUNDO-CITY, WATER DEPT.		
Organization That Operates System:			
	350 MAIN ST		
	EL SEGUNDO, CA 90245		
Pop Served:	15225	Connections:	4187
Area Served:	EL SEGUNDO		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91706	5	0

Federal EPA Radon Zone for LOS ANGELES 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 LOS ANGELES COUNTY, CA

Number of sites tested: 63

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.711 pCi/L	98%	2%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.933 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

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

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

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

Agency Correspondences

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Deborah O. Raphael, Director
9211 Oakdale Avenue
Chatsworth, California 9131

Arnold Schwarzenegger
Governor

July 29, 2013

Ms. Ellen Smith
Professional Tech, Geology II
AMEC Environmental & Infrastructure, Inc.
121 Innovation Drive, Suite 200
Irvine, CA 92617

VARIOUS SITES
PR30724137

Dear Ms. Smith:

We have received your Public Records Act Request for records from the Department of Toxic Substances Control.

After a thorough review of our files we have found that no such records exist at this office pertaining to the sites/facilities referenced below.

- 4900 Azusa Canyon Road, Irwindale, California
- 4906 Azusa Canyon Road, Irwindale, California
- 4910 Azusa Canyon Road, Irwindale, California
- 4858 Azusa Canyon Road, Irwindale, California
- 4948 Azusa Canyon Road, Irwindale, California
- 4854 Azusa Canyon Road, Irwindale, California
- 4838 Azusa Canyon Road, Irwindale, California
- 4832 Azusa Canyon Road, Irwindale, California

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We would like to inform you about Envirostor, a database that provides information and documents on over 5,000 DTSC cleanup sites. EnviroStor can be accessed at: http://www.envirostor.dtsc.ca.gov/public. Also, a computer is available in the Central Files of each DTSC Regional Office for use by community members to view EnviroStor.

If you have any questions, would like further information regarding your request or would like an appointment to visit Chatsworth Central Files, please contact me at (818) 717-6522.

Sincerely,

Glenn Castillo /bh
Regional Records Coordinator

Matthew Rodriquez
Secretary for
Environmental Protection

Department of Toxic Substances Control

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630

Edmund G. Brown Jr.
Governor

July 24, 2013

Mrs. Ellen Smith
Amec Environment & Infrastructure, Inc.
121 Innovation Drive, #200
Irvine, California 92617

PR407231311

SEE ATTACHED:

Dear Mrs. Smith:

The Department of Toxic Substances Control has received your fax to review records, under the Public Records Act.

After a thorough review of our files we have found that **no such records** exist at this office pertaining to the sites/facility referenced above.

If you have any questions, or would like further information regarding your request, please contact our Regional Records Coordinator at: (714) 484-5336.

We would like to inform you about Envirostor, a database that provides information and documents on over 5,000 DTSC cleanup sites. EnviroStor can be accessed at: htt://www.envirostor.dtsc.ca.gov/public. Also, a computer is available in the Central Files of each DTSC Regional Office for use by community members to view EnviroStor.

Sincerely,

Jone Barrio

Jone Barrio
Regional Records Coordinator
Cypress Administrative Services

Printed on Recycled Paper

DTSC

JUL 23 2013

CYPRESS

FAX

The information in this telecopy is intended for the named recipient(s) only. It may contain privileged and confidential matter. If you have received this telecopy in error, please notify the sender immediately. Thank you.

Date: July 23, 2013 **Number of pages including cover sheet:** 1

To: DTSC

File Review Request

DTSC-Cypress

Fax Phone: 714-484-5318

Phone: 714-484-5300

cc:

From: Ellen Smith

AMEC Environment & Infrastructure, Inc.

121 Innovation Dr., #200

Irvine, CA 92617

Fax Phone: 949.642.4474

Phone: 949.642.0245

Direct dial: 949.547.6755

Email: Ellen.smith@amec.com

Project No.:

Project Name:

REMARKS:

☐ Hard copy to follow ☐ Urgent ☐ For your review ☒ Reply ASAP ☐ Please comment

I am conducting a Phase I Environmental Site Assessment and would like to review any public records you may have for the following sites:

4900 Azusa Canyon Rd, Irwindale, CA

4906 Azusa Canyon Rd, Irwindale, CA

4910 Azuca Canyon Rd, Irwindale, CA

4858 Azusa Canyon Rd, Irwindale, CA

4948 Azusa Canyon Rd, Irwindale, CA

4854 Azusa Canyon Rd, Irwindale, CA

4838 Azusa Canyon Rd, Irwindale, CA

4832 Azusa Canyon Rd, Irwindale, CA

N/R

Thank you for your assistance. Please contact me if you have any questions.

Ellen Smith

510 Superior Avenue, Suite 200
Newport Beach California 92663-3627

Tel 949.642.0245
Fax 949.642.4474

www.geomatrix.com

Ilustre, Terence

From: r9foia@epa.gov
Sent: Monday, August 19, 2013 8:58 AM
To: Smith, Ellen
Subject: Final Disposition, Request EPA-R9-2013-008465

Request EPA-R9-2013-008465 has been processed with the following final disposition: No records

This disposition can be appealed by filling out the appeal creation form here: Create Appeal.

From: Villar, Rosie@Waterboards [Rosie.Villar@waterboards.ca.gov]

Sent: Thursday, August 08, 2013 10:27 AM

To: Smith, Ellen

Cc: Gallardo, Laura@Waterboards

Subject: File Review Request/Tracking No. 2013072804

*******The Los Angeles Regional Water Quality Control Board is going paperless, please submit future file review requests via e-mail to RB4-publicrecords@waterboards.ca.gov.*******

Thank you for your request to review Regional Board records for the sites at:
--

- 4900, 4906, 4910, 4858, 4948, 4854, 4838, 4832 Azusa Canyon Rd., Irwindale

The Regional Board has reviewed its files and has concluded that it does not have any records that are responsive to your request.

Thank you,
Rosie Villar
rvillar@waterboards.ca.gov

APPENDIX E

Historical Aerial Photographs

4848 Azusa Canyon Road
4848 Azusa Canyon Road
Baldwin Park, CA 91706

Inquiry Number: 3674352.5
July 26, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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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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Date EDR Searched Historical Sources:

Aerial Photography July 26, 2013

Target Property:

4848 Azusa Canyon Road

Baldwin Park, CA 91706

Year	***Scale***	***Details***	***Source***
1928	Aerial Photograph. Scale: 1"=500'	Flight Year: 1928	Fairchild
1938	Aerial Photograph. Scale: 1"=500'	Flight Year: 1938	Laval
1949	Aerial Photograph. Scale: 1"=500'	Flight Year: 1949	Fairchild
1956	Aerial Photograph. Scale: 1"=500'	Flight Year: 1956	Fairchild
1960	Aerial Photograph. Scale: 1"=500'	Flight Year: 1960	Fairchild
1968	Aerial Photograph. Scale: 1"=500'	Flight Year: 1968	Teledyne
1976	Aerial Photograph. Scale: 1"=500'	Flight Year: 1976	Teledyne
1989	Aerial Photograph. Scale: 1"=500'	Flight Year: 1989	USGS
1994,1995	Aerial Photograph. Scale: 1"=500'	/Composite DOQQ - acquisition dates: 1994,1995	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR

INQUIRY #: 3674352.5
YEAR: 1928
= 500'
N

INQUIRY #: 3674352.5
YEAR: 1938
= 500'
N

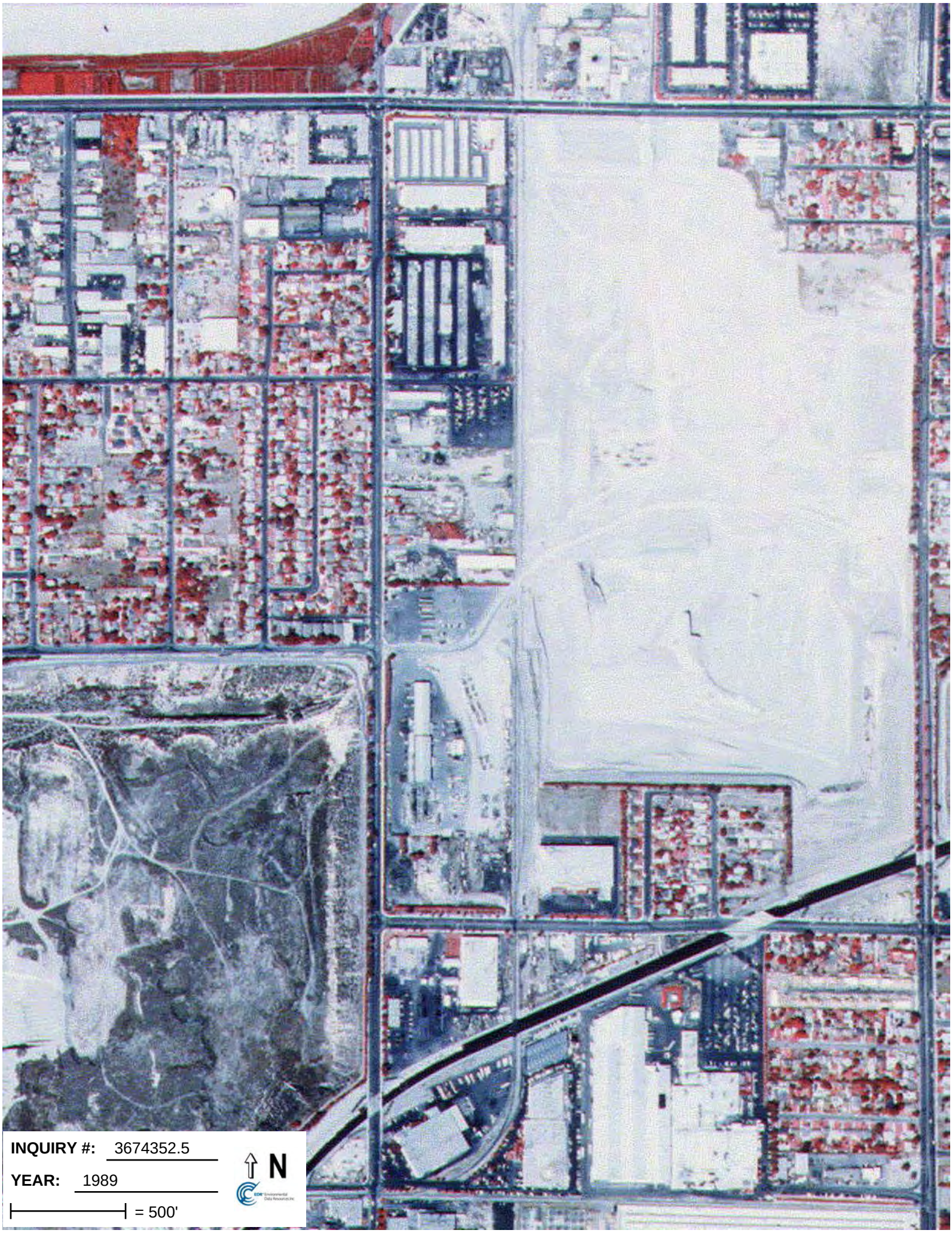
INQUIRY #: 3674352.5
YEAR: 1949
= 500'
N

INQUIRY #: 3674352.5
YEAR: 1956
= 500'
N

INQUIRY #: 3674352.5
YEAR: 1960
= 500'
N

INQUIRY #: 3674352.5
YEAR: 1968
= 500'
N

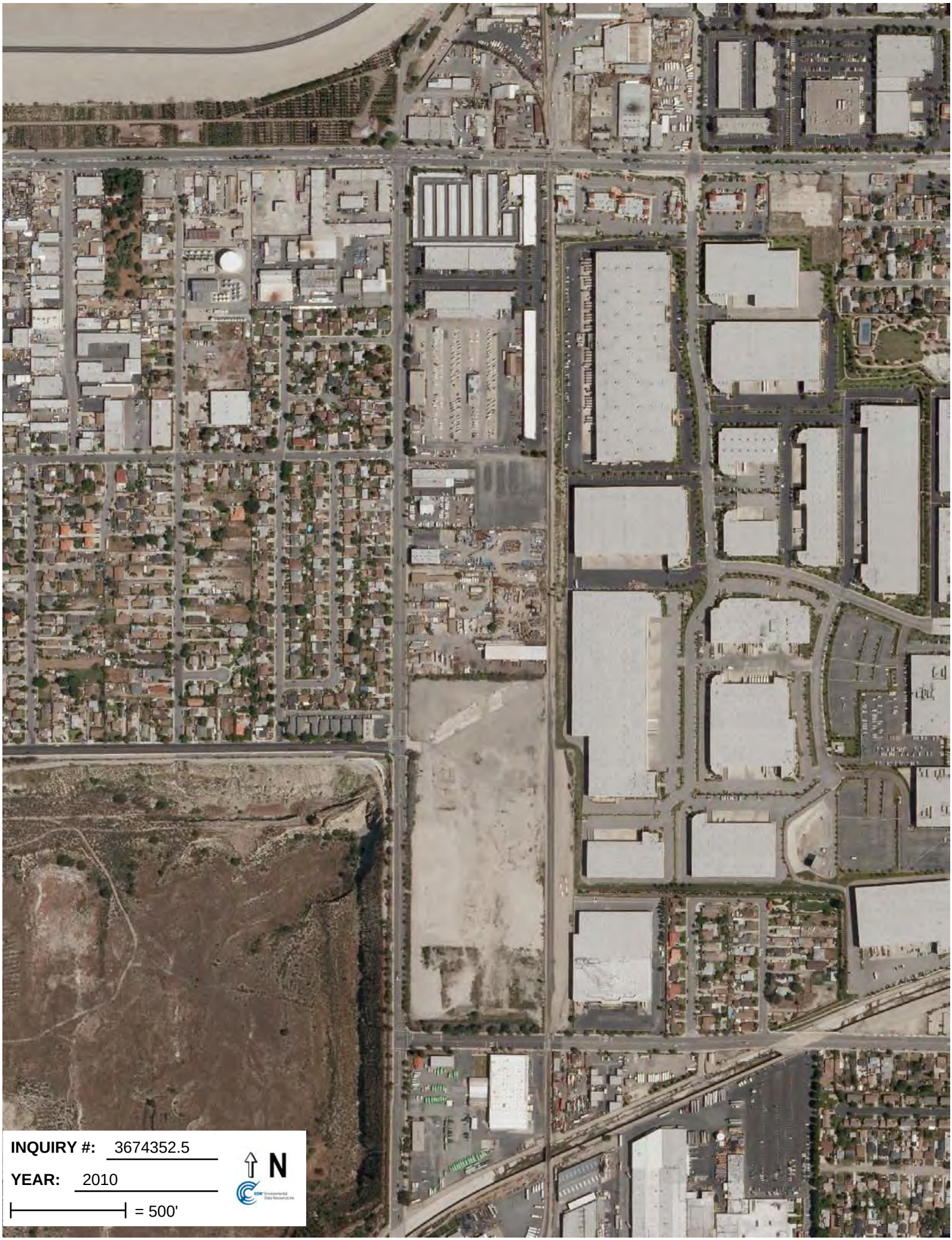
INQUIRY #: 3674352.5
YEAR: 1976
= 500'
N


INQUIRY #: 3674352.5
YEAR: 1989
= 500'
N

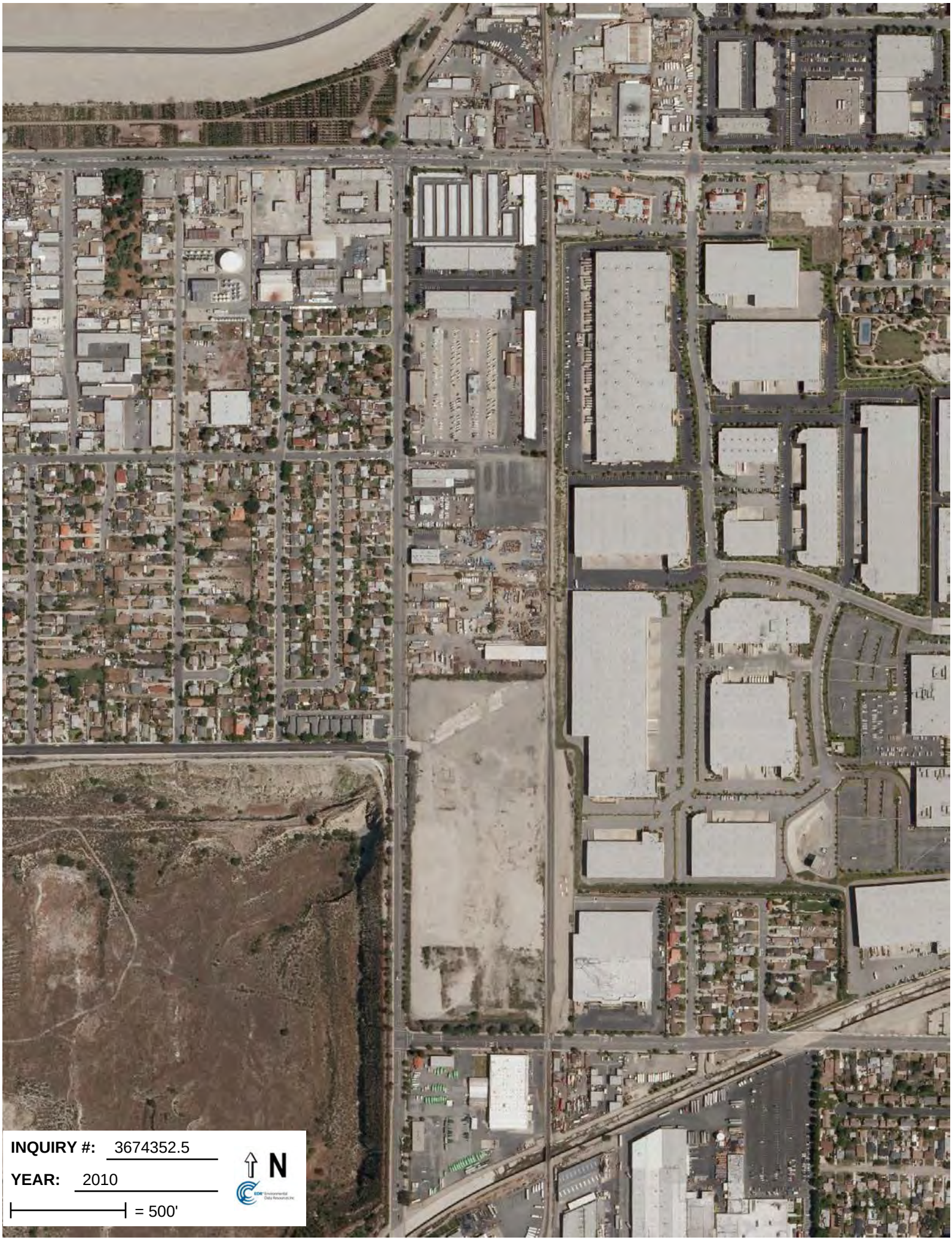
INQUIRY #: 3674352.5
YEAR: 1994,1995 (DOQQ)
= 500'
N

INQUIRY #: 3674352.5
YEAR: 2005
= 500'
N

INQUIRY #: 3674352.5
YEAR: 2009
= 500'
N


INQUIRY #: 3674352.5
YEAR: 2010
= 500'
N

INQUIRY #: 3674352.5
YEAR: 2012
= 500'
N


INQUIRY #: 3674352.5
YEAR: 2010
= 500'
N

INQUIRY #: 3674352.5
YEAR: 2012
= 500'
N

APPENDIX F

City Directory Abstract

4848 Azusa Canyon Road
4848 Azusa Canyon Road
Baldwin Park, CA 91706

Inquiry Number: 3674352.6
July 24, 2013

The EDR-City Directory Abstract

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

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

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2012. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2012	Cole Information Services	-	X	X	-
	Cole Information Services	X	X	X	-
2007	Cole Information Services	-	X	X	-
	Cole Information Services	X	X	X	-
2006	Haines Company	-	-	-	-
2004	Haines Company	-	-	-	-
2003	Haines & Company	X	X	X	-
2001	Haines & Company, Inc.	-	-	-	-
2000	Haines & Company	-	-	-	-
1999	Haines Company	-	-	-	-
1996	GTE	-	-	-	-
1995	Pacific Bell	X	X	X	-
1992	PACIFIC BELL WHITE PAGES	-	-	-	-
1991	Pacific Bell	-	-	-	-
1990	Pacific Bell	-	-	-	-
1986	Pacific Bell	-	-	-	-
1985	Pacific Bell	-	X	X	-
	Pacific Bell	X	X	X	-
1981	Pacific Telephone	-	-	-	-
1980	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1976	R. L. Polk & Co.	-	-	-	-
1975	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1972	R. L. Polk & Co.	-	-	-	-
1971	R. L. Polk & Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1970	R. L. Polk & Co.	-	-	-	-
1969	Pacific Telephone	-	-	-	-
1967	Pacific Telephone	-	-	-	-
1966	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1965	R. L. Polk & Co.	-	-	-	-
1964	Pacific Telephone	-	-	-	-
1963	Pacific Telephone	-	-	-	-
1962	Pacific Telephone	-	-	-	-
1961	R. L. Polk & Co.	-	-	-	-
1960	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1958	Pacific Telephone	-	-	-	-
1957	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1956	R. L. Polk & Co.	-	-	-	-
1955	R. L. Polk & Co.	-	-	-	-
1954	R. L. Polk & Co.	-	-	-	-
1952	Los Angeles Directory Co.	-	-	-	-
1951	R. L. Polk & Co.	-	-	-	-
1950	Pacific Telephone	-	-	-	-
1949	Los Angeles Directory Co.	-	-	-	-
1948	Los Angeles Directory Co.	-	-	-	-
1947	Los Angeles Directory Co.	-	-	-	-
1946	Los Angeles Directory Co.	-	-	-	-
1945	R. L. Polk & Co.	-	-	-	-
1944	R. L. Polk & Co.	-	-	-	-
1942	Los Angeles Directory Co.	-	-	-	-
1940	Los Angeles Directory Co.	-	-	-	-
1939	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Co.	-	-	-	-
1937	Los Angeles Directory Co.	-	-	-	-
1936	Los Angeles Directory Co.	-	-	-	-
1935	Los Angeles Directory Co.	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1933	Los Angeles Directory Co.	-	-	-	-
1932	Los Angeles Directory Co.	-	-	-	-
1931	Los Angeles Directory Co.	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1929	Los Angeles Directory Co.	-	-	-	-
1928	Los Angeles Directory Co.	-	-	-	-
1927	Los Angeles Directory Co.	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-
1925	Los Angeles Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1924	Los Angeles Directory Co.	-	-	-	-
1923	Los Angeles Directory Co.	-	-	-	-
1921	Los Angeles Directory Co.	-	-	-	-
1920	Los Angeles Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

MAP INFORMATION

The Overview Map provides information on nearby property parcel boundaries. Properties on this map that were selected for research are listed below the map.

SELECTED ADDRESSES

The following addresses were selected by the client. Detailed findings are contained in the findings section. An "X" indicates where information was identified.

Address	***Type***	***Findings***
4848 Azusa Canyon Road	Map ID: 1	X
4906 AZUSA CANYON RD	Map ID: 10	X
4832 AZUSA CANYON RD	Map ID: 11	X
4910 AZUSA CANYON RD	Map ID: 2	X
4850 AZUSA CANYON RD	Map ID: 3	X
4854 AZUSA CANYON RD	Map ID: 4	X
4900 AZUSA CANYON RD	Map ID: 5	X

EXECUTIVE SUMMARY

Address	***Type***	***Findings***
4858 AZUSA CANYON RD	Map ID: 6	X
4838 AZUSA CANYON RD	Map ID: 8	X

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

4848 Azusa Canyon Road
Baldwin Park, CA 91706

FINDINGS DETAIL

Target Property research detail.

AZUSA CANYON RD

4832 AZUSA CANYON RD

Year	Uses	Source
2003	JONES Lisa	Haines & Company
	JONES Lisa	Haines & Company
1980	ROSALES ROMAN AZUSA CANYON RD IRWINDALE	Pacific Telephone
	ROSALES ROMAN AZUSA CANYON RD IRWINDALE	Pacific Telephone
1966	ANIKA JOHN	Pacific Telephone
1960	ANIKA JOHN	Pacific Telephone
1957	ANIKA JOHN	Pacific Telephone

4838 AZUSA CANYON RD

Year	Uses	Source
1980	LOPEZ MARY HELEN AZUSA CANYON RD IRWINDALE	Pacific Telephone
	LOPEZ MARY HELEN AZUSA CANYON RD IRWINDALE	Pacific Telephone
1957	GRAY LOLETA	Pacific Telephone

4848 AZUSA CANYON RD

Year	Uses	Source
2012	ACTIVE AIRCRAFT WELDING INC	Cole Information Services
	ANOTHER PALLET COMPANY	Cole Information Services
	SIERRA PALLET	Cole Information Services
2007	ACTIVE AIRCRAFT WELDING INC	Cole Information Services
	CERTIFIED METAL SERVICE	Cole Information Services
	GLOBAL STEEL IMPORTS INC	Cole Information Services
	SIERRA PALLET	Cole Information Services
2003	ACTIVE AIRCRAFT	Haines & Company
	DIVISION TIMELY PROCESSED	Haines & Company

FINDINGS

Year	Uses	Source
2003	STEEL	Haines & Company
	WELDING INC MISSION STEEL	Haines & Company
1995	Active Aircraft Welding Inc	Pacific Bell
	J B Roofing Supply	Pacific Bell
	JB Tax Service Whit	Pacific Bell
	MIS S ION S UPE R HARDW ARE	Pacific Bell
	Mission Steel Corporation	Pacific Bell

4850 AZUSA CANYON RD

Year	Uses	Source
2003	XXXX	Haines & Company
	XXXX	Haines & Company
1966	SCHROEDLE ROBT W	Pacific Telephone
1960	WRIGHT RAYMOND	Pacific Telephone
1957	MOCK WINTON L	Pacific Telephone

4854 AZUSA CANYON RD

Year	Uses	Source
2003	0 EGGERS Linda	Haines & Company
	HERNANDEZ Salcador	Haines & Company
	0 EGGERS Linda	Haines & Company
	HERNANDEZ Salcador	Haines & Company
1985	UTILITY DISPOSAL	Pacific Bell
	UTILITY DISPOSAL	Pacific Bell
1966	MILLIGAN WM	Pacific Telephone
1960	MILLIGAN WM	Pacific Telephone
1957	MILLIGAN WM	Pacific Telephone

4858 AZUSA CANYON RD

Year	Uses	Source
2003	OHERNANDEZA	Haines & Company
	OHERNANDEZA	Haines & Company
1980	MILLIGAN WM AZUSA CANYON RD IRWINDALE	Pacific Telephone
	MILLIGAN WM AZUSA CANYON RD IRWINDALE	Pacific Telephone
1975	MILLIGAN WM	Pacific Telephone
	MILLIGAN WM	Pacific Telephone

FINDINGS

4900 AZUSA CANYON RD

Year	Uses	Source
2003	XXXX	Haines & Company
	XXXX	Haines & Company
1995	Barrios Leo & Sons	Pacific Bell
	Or	Pacific Bell
	Barrios Leo & Sons	Pacific Bell
	Or	Pacific Bell
1985	BARRIOS LEO & SONS	Pacific Bell
	L BARRIOS AND ASSOCIATES INC	Pacific Bell
	BARRIOS LEO & SONS	Pacific Bell
	L BARRIOS AND ASSOCIATES INC	Pacific Bell
1980	BARRIOS LEO & SONS GARDENERS AZUSA CANYON RD IRWINDALE	Pacific Telephone
	BARRIOS LEO & SONS GARDNRS AZUSA CANYON RD IRWINDALE	Pacific Telephone
	BARRIOS LEO & SONS GARDENERS AZUSA CANYON RD IRWINDALE	Pacific Telephone
	BARRIOS LEO & SONS GARDNRS AZUSA CANYON RD IRWINDALE	Pacific Telephone
1975	5TH AVE VENDING	Pacific Telephone
	BARRIOS LEO & SONS GARDENERS	Pacific Telephone
	BARRIOS LEO & SONS GARDNRS	Pacific Telephone
	SOUTHWESTERN LANDSCAPING	Pacific Telephone
	5TH AVE VENDING	Pacific Telephone
	BARRIOS LEO & SONS GARDENERS	Pacific Telephone
	BARRIOS LEO & SONS GARDNRS	Pacific Telephone
	SOUTHWESTERN LANDSCAPING	Pacific Telephone
1966	SOLIZ JESUS	Pacific Telephone

4906 AZUSA CANYON RD

Year	Uses	Source
2003	R&JMOULDINGS	Haines & Company
	SCHMORANGER Frank	Haines & Company
	R&JMOULDINGS	Haines & Company
	SCHMORANGER Frank	Haines & Company
1995	Green Gables lamp shd frms	Pacific Bell
	The Frame Shop	Pacific Bell
	Green Gables lamp shd frms	Pacific Bell
	The Frame Shop	Pacific Bell
1985	CAL WEST TRANSMISSION PARTS	Pacific Bell

FINDINGS

Year	Uses	Source
1985	CALIFORNIA TRANSMISSIONS	Pacific Bell
	CAL WEST TRANSMISSION PARTS	Pacific Bell
	CALIFORNIA TRANSMISSIONS	Pacific Bell
1980	CALIFORNIA TRANSMISSIONS AZUSA CANYON RD IRWINDALE	Pacific Telephone
	CALIFORNIA TRANSMISSIONS AZUSA CANYON RD IRWINDALE	Pacific Telephone
1966	HEYS GEO N	Pacific Telephone
1960	MCCANN JAS L	Pacific Telephone
	MCCANN JAS L	Pacific Telephone
1957	ALDRIDGE ERNEST R	Pacific Telephone

4910 AZUSA CANYON RD

Year	Uses	Source
1995	Harpeng Match Plate Co	Pacific Bell
	Harper A	Pacific Bell
	Harpeng Match Plate Co	Pacific Bell
	Harper A	Pacific Bell
1985	HARPENG MATCH PLATE CO	Pacific Bell
	HARPENG MATCH PLATE CO	Pacific Bell
1980	HARPENG MATCH PLATE CO AZUSA CANYON RD IRWINDALE	Pacific Telephone
	HARPENG MATCH PLATE CO AZUSA CANYON RD IRWINDALE	Pacific Telephone
1975	HARPENG MATCH PLATE CO	Pacific Telephone
	HARPENG MATCH PLATE CO	Pacific Telephone
1966	HARPENG MATCH PLATE CA	Pacific Telephone
1960	HARPENG MATCH PLATE CO	Pacific Telephone
1957	HARPENG MATCH PLATE CO	Pacific Telephone

Azusa Canyon Road

4848 Azusa Canyon Road

Year	Uses	Source
2003	ACTIVE AIRCRAFT	Haines & Company
	DIVISION TIMELY PROCESSED	Haines & Company
	STEEL	Haines & Company
	WELDING INC MISSION STEEL	Haines & Company
1995	Active Aircraft Welding Inc	Pacific Bell
	J B Roofing Supply	Pacific Bell
	JB Tax Service Whit	Pacific Bell

FINDINGS

Year	Uses	Source
1995	MIS S ION S UPE R HARDW ARE	Pacific Bell
	Mission Steel Corporation	Pacific Bell

N AZUSA CANYON RD

4832 N AZUSA CANYON RD

Year	Uses	Source
1966	ANIKA JOHN	Pacific Telephone
1960	ANIKA JOHN	Pacific Telephone
1957	ANIKA JOHN	Pacific Telephone

4838 N AZUSA CANYON RD

Year	Uses	Source
1957	GRAY LOLETA	Pacific Telephone

4850 N AZUSA CANYON RD

Year	Uses	Source
1966	SCHROEDLE ROBT W	Pacific Telephone
1960	WRIGHT RAYMOND	Pacific Telephone
1957	MOCK WINTON L	Pacific Telephone

4854 N AZUSA CANYON RD

Year	Uses	Source
1966	MILLIGAN WM	Pacific Telephone
1960	MILLIGAN WM	Pacific Telephone
1957	MILLIGAN WM	Pacific Telephone

4900 N AZUSA CANYON RD

Year	Uses	Source
1966	SOLIZ JESUS	Pacific Telephone

4906 N AZUSA CANYON RD

Year	Uses	Source
1966	HEYS GEO N	Pacific Telephone
1957	ALDRIDGE ERNEST R	Pacific Telephone

4910 N AZUSA CANYON RD

Year	Uses	Source
1966	HARPENG MATCH PLATE CA	Pacific Telephone
1960	HARPENG MATCH PLATE CO	Pacific Telephone
1957	HARPENG MATCH PLATE CO	Pacific Telephone

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

ANNISTN AVE

4957 ANNISTN AVE

Year	Uses	Source
1995	ISRAEL LOURDES	Pacific Bell

ANNISTON AVE

4824 ANNISTON AVE

Year	Uses	Source
2003	SALGUERO Sigfredo	Haines & Company

4830 ANNISTON AVE

Year	Uses	Source
2003	ULLOA Ramon	Haines & Company
1985	ULLOA RAMON	Pacific Bell
1980	ULLOA RAMON ANNISTON AVE BALDWIN PARK	Pacific Telephone
1975	ULLOA RAMON BALDWIN PARK	Pacific Telephone

4836 ANNISTON AVE

Year	Uses	Source
1985	CAMARGO NICK	Pacific Bell
1980	CAMARGO NICK ANNISTON AVE BALDWIN PARK	Pacific Telephone

4840 ANNISTON AVE

Year	Uses	Source
1985	MAGANA GAVINO	Pacific Bell
1980	MAGANA GAVINO ANNISTON AVE BALDWIN PARK	Pacific Telephone

4846 ANNISTON AVE

Year	Uses	Source
1985	ROUSSIN JOHN H	Pacific Bell
1980	ROUSSIN JOHN ANNISTON AVE BALDWIN PARK	Pacific Telephone

FINDINGS

4848 ANNISTON AVE

Year	Uses	Source
2003	TRUJILLO Salvador	Haines & Company
1995	Quezada Valentin	Pacific Bell
1975	CHAPMAN ROBERT	Pacific Telephone

4852 ANNISTON AVE

Year	Uses	Source
2003	MANZOJesus	Haines & Company
1995	Oliver Patricia	Pacific Bell

4853 ANNISTON AVE

Year	Uses	Source
2003	RODRIGUEZ Eduarda	Haines & Company
1980	OCHOA GEO ANNISTON AVE BALDWIN PARK	Pacific Telephone

4858 ANNISTON AVE

Year	Uses	Source
2003	NGUYENChuyen	Haines & Company
1995	I Nguyen Chuyen	Pacific Bell
	I Nguyen Clandy W Cov n	Pacific Bell
1985	NGUYEN CHUYEN	Pacific Bell

4859 ANNISTON AVE

Year	Uses	Source
2003	GARCIA Ennque	Haines & Company
1975	RODRIQUEZ RAYMOND	Pacific Telephone

4861 ANNISTON AVE

Year	Uses	Source
2003	MEDINA Rafael	Haines & Company

4864 ANNISTON AVE

Year	Uses	Source
2003	4 ABREU Jose	Haines & Company

4870 ANNISTON AVE

Year	Uses	Source
2003	CAMARGO Joe	Haines & Company

FINDINGS

4871 ANNISTON AVE

Year	Uses	Source
2003	GAMBOAMiguel	Haines & Company
1985	LADD RICHARD B	Pacific Bell
1980	LADD RICHARD B ANNISTON AVE BALDWIN PARK	Pacific Telephone
1975	LADD RICHARD B	Pacific Telephone

4902 ANNISTON AVE

Year	Uses	Source
2003	AUBRY Albert	Haines & Company
1975	AUBRY ALBERT BALDWIN PARK	Pacific Telephone

4903 ANNISTON AVE

Year	Uses	Source
2003	NUNEZ Emesto	Haines & Company
1980	CAMACHO NACHO ANNISTON AVE BALDWIN PARK	Pacific Telephone

4907 ANNISTON AVE

Year	Uses	Source
2003	PACHECO Fermnin	Haines & Company

4908 ANNISTON AVE

Year	Uses	Source
2003	GOMEZ Mana	Haines & Company
1985	HANSEN GUNNAR	Pacific Bell
1980	HANSEN GUNNAR ANNISTON AVE BALDWIN PARK	Pacific Telephone
1975	HANSEN GUNNAR	Pacific Telephone

4912 ANNISTON AVE

Year	Uses	Source
2003	DOMINGUEZJoe	Haines & Company
	GONZALEZ Ivan	Haines & Company
	DELGADO Anibal	Haines & Company
	CEJA Adolfo	Haines & Company
	MILLER Marlene	Haines & Company
	MILLER Ronald	Haines & Company
	PRECIADOJorge	Haines & Company
	ALONZO Alan	Haines & Company
	APARTMENTS BAUTISTA Adolofo	Haines & Company

FINDINGS

Year	Uses	Source
2003	JAUREGUI Juan	Haines & Company
	ESPARZAJaviar	Haines & Company
	MAGALLON Martini	Haines & Company
	BONILLA Lillian	Haines & Company
	AMAYA Nelson	Haines & Company
	MENDEZ Patricio	Haines & Company
	MONTIELDavid	Haines & Company
	SARALEGUI H	Haines & Company
	GARCIA Juan Luis	Haines & Company
	BAUTISTA Maria	Haines & Company
	BAUTISTA Ena	Haines & Company
	RUELAS Bemardo	Haines & Company
1995	be La Mora Michael	Pacific Bell
1985	DE LA MORA MICHAEL	Pacific Bell

4913 ANNISTON AVE

Year	Uses	Source
1985	SESSUMS JULIE	Pacific Bell
1975	OJEDA BERNARD	Pacific Telephone

4925 ANNISTON AVE

Year	Uses	Source
1995	California Drain Cleaning & Plumbing	Pacific Bell

4934 ANNISTON AVE

Year	Uses	Source
1995	Miller Ronald & Marlene	Pacific Bell
1985	WOODS MARLENE	Pacific Bell
1980	AL ROOFING ANNISTON AVE BALDWIN PARK	Pacific Telephone
	AL ROOFING & SIDING CO ANNISTON AVE BALDWIN PARK	Pacific Telephone

4935 ANNISTON AVE

Year	Uses	Source
1995	Preciado Jorge	Pacific Bell

4940 ANNISTON AVE

Year	Uses	Source
1980	GUTIERREZ RAY ANNISTON AVE BALDWIN PARK	Pacific Telephone

Year	Uses	Source
1980	FLORES ADELA ANNISTON AVE BALDWIN PARK	Pacific Telephone

4941 ANNISTON AVE

Year	Uses	Source
1985	CALDERON HERMINIO	Pacific Bell
1980	CALDERON HERMINIO ANNISTON AVE BALDWIN PARK	Pacific Telephone
1975	LANE RONALD	Pacific Telephone

4945 ANNISTON AVE

Year	Uses	Source
1980	DELLARIPA NICHOLAS A ANNISTON AVE BALDWIN PARK	Pacific Telephone
1975	DELLARIPA VICTOR A	Pacific Telephone

4946 ANNISTON AVE

Year	Uses	Source
1985	MEYERS MICHAEL	Pacific Bell
1980	MEYERS MICHAEL ANNISTON AVE BALDWIN PARK	Pacific Telephone
1975	MEYERS MICHAEL	Pacific Telephone

AZUSA CANYON RD

4800 AZUSA CANYON RD

Year	Uses	Source
2012	HUY FONG	Cole Information Services
2003	CWIKR	Haines & Company
1995	Davalos Mack F Trucking	Pacific Bell
	Cwikray Inc	Pacific Bell

4811 AZUSA CANYON RD

Year	Uses	Source
2012	DONLENS MARKET JR	Cole Information Services
2007	DONLENS JR MARKET	Cole Information Services
2003	DONLENSJRMARKET	Haines & Company
1995	Donlens Jr Market	Pacific Bell
1985	DONLENS SANDWICH SHOPPE I	Pacific Bell
	DONLENS JR MARKET	Pacific Bell
1980	DONLENS JR MARKET AZUSA CANYON RD BALDWIN PARK	Pacific Telephone

FINDINGS

Year	Uses	Source
1980	DONLENS SANDWICH SHOPPE AZUSA CANYON RD BALDWIN PARK	Pacific Telephone
1975	TOMICK S LIQUOR STORE	Pacific Telephone

4829 AZUSA CANYON RD

Year	Uses	Source
2003	CAZARES Andres	Haines & Company
1995	Cazares Andres	Pacific Bell
1985	CAZARES ANDRES	Pacific Bell
1980	BROKATE STEVEN AZUSA CANYON RD BALDWIN PARK	Pacific Telephone

4831 AZUSA CANYON RD

Year	Uses	Source
2003	CARRILLO Efrain	Haines & Company
1985	RAY DANL JR	Pacific Bell
	WHEELER PAM	Pacific Bell
1980	WILLIAMS JERRY PLASTERING AZUSA CANYON RD BALDWIN PARK	Pacific Telephone
1975	RAY DAN L PLASTERING	Pacific Telephone
1966	RAY DAN L PLASTRNG	Pacific Telephone

4839 AZUSA CANYON RD

Year	Uses	Source
2003	8 SI LVACesar	Haines & Company
1985	BLEVINS LEO A	Pacific Bell
1980	BLEVINS LEO A AZUSA CANYON RD BALDWIN PARK	Pacific Telephone
1975	BLEVINS LEO A	Pacific Telephone

4840 AZUSA CANYON RD

Year	Uses	Source
1995	i Jims Roofing Materials	Pacific Bell

4841 AZUSA CANYON RD

Year	Uses	Source
2003	OVILLASENOR Richard 00 O	Haines & Company
1980	OCEGURA GRACE AZUSA CANYON RD BALDWIN PARK	Pacific Telephone

FINDINGS

4846 AZUSA CANYON RD

Year	Uses	Source
2003	XXXX	Haines & Company
1985	MISSION STEEL CORPORATION	Pacific Bell
1980	VILLEGAS VALERIE AZUSA CANYON RD IRWINDALE	Pacific Telephone
	MISSION STEEL CORPORATION AZUSA CANYON RD IRWINDALE	Pacific Telephone
1975	MISSION STEEL CORPORATION	Pacific Telephone

4851 AZUSA CANYON RD

Year	Uses	Source
2003	MARQUEZ Salvador	Haines & Company
	:SILVA Eloisa	Haines & Company
	S 1 LVAE	Haines & Company
1985	SILVA BENJAMIN	Pacific Bell

4853 AZUSA CANYON RD

Year	Uses	Source
2003	BLANCOJose	Haines & Company

4857 AZUSA CANYON RD

Year	Uses	Source
2003	ORTIZ Pablo	Haines & Company
1995	Ortlz Pablo	Pacific Bell
1980	VIVEROS ROBERTO AZUSA CANYON RD BALDWIN PARK	Pacific Telephone

4863 AZUSA CANYON RD

Year	Uses	Source
2003	ORTIZ Hectr	Haines & Company
	DORADO Socorro	Haines & Company
	TOPETE Mar	Haines & Company
1995	Topete Maria	Pacific Bell
1975	RAMOS JOAQUIN	Pacific Telephone

4903 AZUSA CANYON RD

Year	Uses	Source
2003	CHAVEZAguila Araceli	Haines & Company
	RENTERIA Raul	Haines & Company

FINDINGS

4907 AZUSA CANYON RD

Year	Uses	Source
2003	a LEPE Santiago	Haines & Company
	CAMARENAJorge	Haines & Company
1985	BARRAGON JULIA R	Pacific Bell
1980	BARRAGNON JULIA R AZUSA CANYON RD BALDWIN PARK	Pacific Telephone
1975	BARRAGON JULIA R	Pacific Telephone
1966	DOWNING PAULINE	Pacific Telephone

4913 AZUSA CANYON RD

Year	Uses	Source
2003	TAPIA Ramon	Haines & Company
1975	GLASS MICHAEL J	Pacific Telephone

4917 AZUSA CANYON RD

Year	Uses	Source
2003	GUTIERREZ Luis	Haines & Company
	GIL Francisco J	Haines & Company
1985	PINTO GUADALUPE	Pacific Bell
1966	DUNWOODY BENNIE	Pacific Telephone

4923 AZUSA CANYON RD

Year	Uses	Source
2003	HAMMOND Tommy	Haines & Company

4926 AZUSA CANYON RD

Year	Uses	Source
2012	MALCOLM DRILLING	Cole Information Services
2007	MALCOLM DRILLING CO INC	Cole Information Services
2003	COMPANY INC V G Z ENTERPRISES	Haines & Company
	MALCOLM DRILLING	Haines & Company
1995	Zonver Drilling Co Inc	Pacific Bell
	CMZ Co Inc	Pacific Bell
	Zook BJ Mon	Pacific Bell
1980	SELMAN S MACHINERY SERVICES AZUSA CANYON RD IRWINDALE	Pacific Telephone
1975	SELMAN S MACHINERY SERVICES	Pacific Telephone

4929 AZUSA CANYON RD

Year	Uses	Source
2003	SLOCUM Patrick	Haines & Company

FINDINGS

Year	Uses	Source
1975	JIMENEZ DANL B	Pacific Telephone

4935 AZUSA CANYON RD

Year	Uses	Source
2003	ANDRADE Manuel	Haines & Company
	GARCIA Celn	Haines & Company
1985	MONTERO F A	Pacific Bell
	HUNTER FRED J	Pacific Bell
1980	MONTERO F A AZUSA CANYON RD BALDWIN PARK	Pacific Telephone
	HUNTER FRED J AZUSA CANYON RD BALDWIN PARK	Pacific Telephone
1975	HUNTER FRED J	Pacific Telephone
	MONTERO F A BALDWIN PARK	Pacific Telephone

4936 AZUSA CANYON RD

Year	Uses	Source
2003	XXXX	Haines & Company

4938 AZUSA CANYON RD

Year	Uses	Source
2012	AAG ICE CREAM	Cole Information Services
2007	SOUTHWEST COAST TOWING	Cole Information Services
	MR BOOZA	Cole Information Services
	AAG ICE CREAM	Cole Information Services
2003	LOPEZGuslavo	Haines & Company
1995	Rodriguez JG Trucking	Pacific Bell
1985	RODRIGUEZ J G TRUCKING	Pacific Bell
1980	BICE D L TRUCKING CO AZUSA CANYON RD IRWINDALE	Pacific Telephone
	BICE D L TRUCKING CO AZUSA CANYON RD IRWINDALE	Pacific Telephone
1975	BICE D L TRUCKING CO	Pacific Telephone
	BICE D L TRUCKING CO	Pacific Telephone

4939 AZUSA CANYON RD

Year	Uses	Source
2003	RODRIGUEZ Jorge	Haines & Company

4945 AZUSA CANYON RD

Year	Uses	Source
1985	CLEGG ALBERT C & SONS	Pacific Bell

FINDINGS

Year	Uses	Source
1980	CLEGG ALBERT C & SONS AZUSA CANYON RD BALDWIN PARK	Pacific Telephone
1975	CLEGG ALBERT	Pacific Telephone

4946 AZUSA CANYON RD

Year	Uses	Source
2012	ARROW ENGINEERING	Cole Information Services
2007	ARROW ENGINEERING	Cole Information Services
2003	XXXX	Haines & Company
1995	Hager D	Pacific Bell
	Arrow Engineering	Pacific Bell
	Hager Construction	Pacific Bell
1985	HAGER CONSTRUCTION	Pacific Bell
	ARROW ENGINEERING	Pacific Bell
1980	ARROW ENGINEERING AZUSA CANYON RD IRWINDALE	Pacific Telephone
	SRCO INC AZUSA CANYON RD IRWINDALE	Pacific Telephone
	SRCO INC AZUSA CANYON RD IRWINDALE	Pacific Telephone
1975	ABJ ENTERPRISES	Pacific Telephone

4951 AZUSA CANYON RD

Year	Uses	Source
2003	DELARA Socorro	Haines & Company
1975	RAWLS M BALDWIN PARK	Pacific Telephone

4954 AZUSA CANYON RD

Year	Uses	Source
2012	SAMS FOREIGN & DOMESTIC AUTO CENTER	Cole Information Services
2007	SAMS FOREIGN & DOMESTIC AUTO CENTER	Cole Information Services
1980	IMCO-INMAN MARINE CORP AZUSA CANYON RD IRWINDALE	Pacific Telephone
	C M C ENGINEERING AZUSA CANYON RD IRWINDALE	Pacific Telephone

4957 AZUSA CANYON RD

Year	Uses	Source
1995	Capacete Jesus	Pacific Bell
1985	CAPACETE JESUS	Pacific Bell

FINDINGS

Year	Uses	Source
1980	CAPACETE JESUS AZUSA CANYON RD BALDWIN PARK	Pacific Telephone

LA SENA AVE

4803 LA SENA AVE

Year	Uses	Source
2003	MARTINEZJuan	Haines & Company
1985	GARCIA THOS M & MARIA	Pacific Bell
1980	GARCIA THOS M & MARIA LA SENA AVE BALDWIN PARK	Pacific Telephone
1975	ESCUADRO ELMER E	Pacific Telephone

4809 LA SENA AVE

Year	Uses	Source
2003	AVALOS Oscar	Haines & Company
	RODRIGUEZ F	Haines & Company

4815 LA SENA AVE

Year	Uses	Source
2003	SANDOVALCelia	Haines & Company
1975	WALDEN CECIL M	Pacific Telephone

4821 LA SENA AVE

Year	Uses	Source
2003	HERNANDEZDebbie	Haines & Company
	8 HERNANDEZDavid	Haines & Company

4825 LA SENA AVE

Year	Uses	Source
2003	OCALERO Maria	Haines & Company
1995	RBDRLGUEZ JAVIER	Pacific Bell
	Rbdrlguez Javier	Pacific Bell

4830 LA SENA AVE

Year	Uses	Source
2003	RICO Femando	Haines & Company
1995	Gonzalez Paul Glandra	Pacific Bell
	Gonzalez Patty	Pacific Bell

FINDINGS

4831 LA SENA AVE

Year	Uses	Source
2003	ACUNA Rosario	Haines & Company
1975	ACUNA ERNEST L	Pacific Telephone

4836 LA SENA AVE

Year	Uses	Source
2003	XXXX	Haines & Company
1995	f Sada Christella	Pacific Bell
1985	MONTOYA FRANCISCA R	Pacific Bell

4837 LA SENA AVE

Year	Uses	Source
2003	ORTEGA Lorena	Haines & Company
1985	PONCE ARTURO V	Pacific Bell
1980	PONCE ARTURO V LA SENA AVE BALDWIN PARK	Pacific Telephone
1975	VACELLI ANTHONY	Pacific Telephone

4840 LA SENA AVE

Year	Uses	Source
2003	SENA Virginia	Haines & Company

4843 LA SENA AVE

Year	Uses	Source
2003	SALDANAJose	Haines & Company
1995	Saldana Rafael	Pacific Bell
	SALDANA RAFAEL	Pacific Bell
1985	OSBORNE JOHN W & RUTH B	Pacific Bell
1980	OSBORNE JOHN W & RUTH B LA SENA AVE BALDWIN PARK	Pacific Telephone

4846 LA SENA AVE

Year	Uses	Source
2003	MURCIA Manuel	Haines & Company
1985	MARTIN EDWIGES	Pacific Bell
1980	MARTIN EDWIGES LA SENA AVE BALDWIN PARK	Pacific Telephone

4849 LA SENA AVE

Year	Uses	Source
2003	HUDSONJoan	Haines & Company

FINDINGS

4852 LA SENA AVE

Year	Uses	Source
2003	PADILLAJavier	Haines & Company

4856 LA SENA AVE

Year	Uses	Source
2003	OLIVARES David	Haines & Company
1985	RADECKER CHRISTINE	Pacific Bell
1980	LUETH LEONARD LA SENA AVE BALDWIN PARK	Pacific Telephone
1975	SNEARY HARLAN BALDWIN PARK	Pacific Telephone

4859 LA SENA AVE

Year	Uses	Source
2003	BAUTISTA Lorenzo	Haines & Company
1995	I Bautista M	Pacific Bell
	BAUTISTA LORENZO	Pacific Bell
	Bautista M Whit	Pacific Bell
	Bautista Lorenzo	Pacific Bell
1985	BAUTISTA LORENZO	Pacific Bell
1980	BAUTISTA LORENZO LA SENA AVE BALDWIN PARK	Pacific Telephone
1975	JEPPESEN BETTY J	Pacific Telephone

4902 LA SENA AVE

Year	Uses	Source
2003	DUBON Maria	Haines & Company

4905 LA SENA AVE

Year	Uses	Source
2003	ENRIQUEZ Venancio	Haines & Company
1985	VALENZUELA GLORIA	Pacific Bell

4908 LA SENA AVE

Year	Uses	Source
2003	VELACASTRO Cecil	Haines & Company
	CASTRO David	Haines & Company
1995	VELA-CASTRO CECLLIA	Pacific Bell

4911 LA SENA AVE

Year	Uses	Source
2003	MURILLOVidal	Haines & Company

FINDINGS

4912 LA SENA AVE

Year	Uses	Source
2003	DELGADO Noelia	Haines & Company
	CORTEZAngel	Haines & Company

4917 LA SENA AVE

Year	Uses	Source
2003	AGUINAGA Nelson	Haines & Company

N AZUSA CANYON RD

4823 N AZUSA CANYON RD

Year	Uses	Source
1960	DUNKLE ARNOLD	Pacific Telephone
1957	DUNKLE ARNOLD	Pacific Telephone

4829 N AZUSA CANYON RD

Year	Uses	Source
1966	BASHAM W E	Pacific Telephone
1960	BASHAM W E	Pacific Telephone

4831 N AZUSA CANYON RD

Year	Uses	Source
1957	THOMPSON RICHARD R	Pacific Telephone

4839 N AZUSA CANYON RD

Year	Uses	Source
1957	BLEVINS LEO A JR	Pacific Telephone

4841 N AZUSA CANYON RD

Year	Uses	Source
1960	HALL CHAS A	Pacific Telephone

4846 N AZUSA CANYON RD

Year	Uses	Source
1966	O KELLEY ECCLES CO CONCRETE PRODS IRWINDALE	Pacific Telephone
	CHALEY CO	Pacific Telephone
1960	O KELLEY-ECCLES CO CONCRETE PRODS	Pacific Telephone
	SHALE-LITE CORP	Pacific Telephone
1957	O KELLEY-ECCLES CO CONCRETE PRODS BALDWIN PARK	Pacific Telephone

FINDINGS

4851 N AZUSA CANYON RD

Year	Uses	Source
1966	LOWERY THURMAN A	Pacific Telephone
1960	LOWERY THURMAN A	Pacific Telephone
1957	ROSSI ALEX	Pacific Telephone

4853 N AZUSA CANYON RD

Year	Uses	Source
1966	GUERRA PEDRO G	Pacific Telephone
1960	STANDIFER FRED E	Pacific Telephone
	LOFTY CHAS E	Pacific Telephone
1957	REITZ EUGENE H	Pacific Telephone

4863 N AZUSA CANYON RD

Year	Uses	Source
1966	MAINEZ NARCIZO	Pacific Telephone

4903 N AZUSA CANYON RD

Year	Uses	Source
1966	MEIJER RENE L	Pacific Telephone
1957	CLARIDGE RONALD E	Pacific Telephone

4907 N AZUSA CANYON RD

Year	Uses	Source
1960	BAXLEY FULTON A	Pacific Telephone

4913 N AZUSA CANYON RD

Year	Uses	Source
1966	EHLERS MARY JANE	Pacific Telephone
1960	BELLEAU HENRY C	Pacific Telephone
1957	BELLEAU HENRY C	Pacific Telephone

4917 N AZUSA CANYON RD

Year	Uses	Source
1966	MONTEY EDW J	Pacific Telephone
1960	CRIDER RALPH	Pacific Telephone
1957	MONTEY EDW J	Pacific Telephone

4923 N AZUSA CANYON RD

Year	Uses	Source
1966	PEREZ GREGORIO M	Pacific Telephone

FINDINGS

4926 N AZUSA CANYON RD

Year	Uses	Source
1985	CROWELL & LARSON CONTR	Pacific Bell
1980	CROWELL & LARSON CONTR N AZUSA CANYON RD BALDWIN PARK	Pacific Telephone
1966	CROWELL & LARSON CONTRS	Pacific Telephone
1960	CROWELL & LARSON CONTRS	Pacific Telephone
1957	CROWELL & LARSON CONTR	Pacific Telephone

4929 N AZUSA CANYON RD

Year	Uses	Source
1966	JIMENEZ DANL B	Pacific Telephone
1960	FLEMING JAS D	Pacific Telephone
1957	FLEMING JAS	Pacific Telephone

4935 N AZUSA CANYON RD

Year	Uses	Source
1966	HUNTER FRED J	Pacific Telephone
	MONTERO F A	Pacific Telephone
	MONTERO F A	Pacific Telephone
1960	MONTERO F A	Pacific Telephone
	MONTERO F A	Pacific Telephone
	HUNTER FRED J	Pacific Telephone
1957	MONTERO F A	Pacific Telephone
	HUNTER FRED J	Pacific Telephone

4945 N AZUSA CANYON RD

Year	Uses	Source
1966	YATES CHARIOTTE	Pacific Telephone
1960	YATES WARREN L	Pacific Telephone
1957	ORCUTT ROBT D	Pacific Telephone

N LA SENA AVE

4803 N LA SENA AVE

Year	Uses	Source
1960	SABADO AURELIO	Pacific Telephone
1957	SABADO AURELIO	Pacific Telephone

FINDINGS

4809 N LA SENA AVE

Year	Uses	Source
1966	GARCIA ISMAEL	Pacific Telephone
1960	GARCIA ISMAEL	Pacific Telephone
1957	HESS DONALD	Pacific Telephone

4815 N LA SENA AVE

Year	Uses	Source
1966	WALDEN CECIL M	Pacific Telephone
1960	WALDEN CECIL M	Pacific Telephone
1957	WALDEN CECIL M	Pacific Telephone

4821 N LA SENA AVE

Year	Uses	Source
1966	JENNINGS GEO H	Pacific Telephone
1957	JENNINGS GEO H	Pacific Telephone

4825 N LA SENA AVE

Year	Uses	Source
1960	KONE WM C	Pacific Telephone
1957	WEYANT DEE	Pacific Telephone

4830 N LA SENA AVE

Year	Uses	Source
1966	GOMEZ MANUEL B	Pacific Telephone
1960	MACKENZIE MILDRED L	Pacific Telephone
1957	MACKENZIE MILDRED L	Pacific Telephone

4831 N LA SENA AVE

Year	Uses	Source
1960	UTT LEO	Pacific Telephone

4836 N LA SENA AVE

Year	Uses	Source
1960	HAY R J	Pacific Telephone
1957	ANDERSON CLIFFORD J	Pacific Telephone

4837 N LA SENA AVE

Year	Uses	Source
1966	MCLENDON BOB S	Pacific Telephone
1960	GONZALES HERIBERTO	Pacific Telephone
1957	GONZALES HERIBERTO	Pacific Telephone

FINDINGS

4840 N LA SENA AVE

Year	Uses	Source
1957	HOY R J	Pacific Telephone

4843 N LA SENA AVE

Year	Uses	Source
1966	OSBORNE JOHN W	Pacific Telephone

4846 N LA SENA AVE

Year	Uses	Source
1960	PEET LYLE E	Pacific Telephone
1957	PEET LYLE E	Pacific Telephone

4855 N LA SENA AVE

Year	Uses	Source
1960	CLARY HERMAN G JR	Pacific Telephone
1957	CLARY HERMAN G JR	Pacific Telephone

4856 N LA SENA AVE

Year	Uses	Source
1966	BOYD ELWOOD R	Pacific Telephone
1957	GOMEZ RICHARD D	Pacific Telephone

4859 N LA SENA AVE

Year	Uses	Source
1966	JEPPESEN BETTY J	Pacific Telephone
1957	LUEBANO JESUS R	Pacific Telephone

4902 N LA SENA AVE

Year	Uses	Source
1966	MEDINA MERCED	Pacific Telephone
1960	FORBES BUFORD	Pacific Telephone
1957	FORBES BUFORD	Pacific Telephone

4905 N LA SENA AVE

Year	Uses	Source
1966	COTE DENNIS L BALDWIN PARK	Pacific Telephone
	COTE SHERRY	Pacific Telephone
1957	ROMERO ANITA	Pacific Telephone

FINDINGS

4908 N LA SENA AVE

Year	Uses	Source
1960	BURKHART CLYDE	Pacific Telephone
1957	RODRIGUEZ JESSIE	Pacific Telephone

4912 N LA SENA AVE

Year	Uses	Source
1966	BEAMER DEAN	Pacific Telephone
1957	PATTERSON RICHARD Y	Pacific Telephone

4917 N LA SENA AVE

Year	Uses	Source
1966	LADERACH RUDOLPH C	Pacific Telephone
1960	LADERACH RUDOLPH C	Pacific Telephone
1957	LADERACH RUDOLPH C	Pacific Telephone

OLIVE

15401 OLIVE

Year	Uses	Source
2003	XXXX	Haines & Company

15403 OLIVE

Year	Uses	Source
2003	XXXX	Haines & Company

15405 OLIVE

Year	Uses	Source
2003	XXXX	Haines & Company

15407 OLIVE

Year	Uses	Source
2003	A FELIX Leticia	Haines & Company
	LIN Htein	Haines & Company
1995	Ayala Eva	Pacific Bell
	Ayala F&M Pico Riv	Pacific Bell

15411 OLIVE

Year	Uses	Source
2003	CONTINO Eduardo	Haines & Company
	G PEREZSusana	Haines & Company
1995	Orozco Olga	Pacific Bell

FINDINGS

15415 OLIVE

Year	Uses	Source
2003	F ALVARADO Emilio	Haines & Company
	ORTIZCrecenciano	Haines & Company
1995	Ortiz Crecenclano	Pacific Bell

15421 OLIVE

Year	Uses	Source
2003	A OCHOA Francisco	Haines & Company
	D FIGUEROAAbel	Haines & Company
	DELGADO Maria	Haines & Company
1995	Cruz Luis Jose	Pacific Bell
	Cruz Luis & Juanita Hacienda Heights	Pacific Bell
	Gonzalez Miguel	Pacific Bell
	Cruz Luis Alexander	Pacific Bell

15427 OLIVE

Year	Uses	Source
2003	E CORTEZ Lorenzo	Haines & Company
	A ORTIZ Luis	Haines & Company
	D CHAVEZJuana	Haines & Company

15433 OLIVE

Year	Uses	Source
2003	AYALA Sandra	Haines & Company

OLIVE AVE

15427 OLIVE AVE

Year	Uses	Source
1995	GARCIA ROSENDO	Pacific Bell

OLIVE CT

15401 OLIVE CT

Year	Uses	Source
1985	LUCERO SHIRLEY	Pacific Bell

OLIVE ST

15411 OLIVE ST

Year	Uses	Source
2007	GOLD EDA INTERNATIONAL	Cole Information Services

OLIVE WAY

15401 OLIVE WAY

Year	Uses	Source
1980	ROSS DOUGLAS G OLIVE WY BALDWIN PARK	Pacific Telephone
1975	ROSS DOUGLAS G	Pacific Telephone

15403 OLIVE WAY

Year	Uses	Source
1980	ALDRETE RICHARD L OLIVE WY BALDWIN PARK	Pacific Telephone

15405 OLIVE WAY

Year	Uses	Source
1985	WEST ROBT A	Pacific Bell
1980	MC CRACKEN PAULINE OLIVE WY BALDWIN PARK	Pacific Telephone
1975	MC CRACKEN PAULINE	Pacific Telephone

15407 OLIVE WAY

Year	Uses	Source
1995	AYALAEVA	Pacific Bell
1980	BURNETT EVERETT OLIVE WY BALDWIN PARK	Pacific Telephone
1975	POMPEY C A	Pacific Telephone
	JORGENSON FRED	Pacific Telephone

15411 OLIVE WAY

Year	Uses	Source
1995	OROZCO OLGA	Pacific Bell
1980	KOHAGURA FRED OLIVE WY BALDWIN PARK	Pacific Telephone
1975	MC DANIEL M A	Pacific Telephone
	ROSALES ALFRED R	Pacific Telephone
	VANDERGRIFF BESS	Pacific Telephone

FINDINGS

15415 OLIVE WAY

Year	Uses	Source
1995	ORTIZ CRECENCLANO	Pacific Bell
1980	SCHALK LORI OLIVE WY BALDWIN PARK	Pacific Telephone
	ACEVEDO DANL OLIVE WY BALDWIN PARK	Pacific Telephone
1975	WITTICH KARL F	Pacific Telephone
	REPP RODNEY A	Pacific Telephone
	MULLER WALTER	Pacific Telephone
	BANKS R	Pacific Telephone
	ARRIETA JOSEPHINE	Pacific Telephone

15421 OLIVE WAY

Year	Uses	Source
1995	GONZALEZ MIGUEL	Pacific Bell
	CRUZ LUIS ALEXANDER	Pacific Bell
1985	NOKIELSKI MARY	Pacific Bell
	CRAMER L D	Pacific Bell
1980	LEE EUI SEOP OLIVE WY BALDWIN PARK	Pacific Telephone
1975	NESMITH C	Pacific Telephone
	BOZA ALFRED	Pacific Telephone

15427 OLIVE WAY

Year	Uses	Source
1985	SALGADO PABLO	Pacific Bell
	VILLA OSCAR	Pacific Bell
1980	PACHECO B OLIVE WY BALDWIN PARK	Pacific Telephone
1975	PASQUAL JOHNATHON	Pacific Telephone

15433 OLIVE WAY

Year	Uses	Source
1985	PREWITT LINDA	Pacific Bell
1975	MEDINA RAYMOND	Pacific Telephone
	BARNES GARY M	Pacific Telephone

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
4848 Azusa Canyon Road	2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
15401 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15401 OLIVE CT	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15401 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15403 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15403 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15405 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15405 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15407 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
15407 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15411 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15411 OLIVE ST	2012, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15411 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15415 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15415 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15421 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15421 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15427 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15427 OLIVE AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15427 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
15433 OLIVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
15433 OLIVE WAY	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4800 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4800 AZUSA CANYON RD	2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4803 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4803 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4809 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4809 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4811 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4811 AZUSA CANYON RD	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4815 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4815 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4821 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
4821 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4823 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4824 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4825 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4825 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4829 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4829 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4830 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4830 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4830 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4831 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4831 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
4831 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4831 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4836 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4836 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4836 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4837 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4837 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4839 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4839 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4840 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4840 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4840 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
4840 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4841 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4841 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4843 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4843 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4846 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4846 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4846 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4846 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4846 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4848 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4849 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
4851 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4851 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4852 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4852 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4853 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4853 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4853 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4855 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4856 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4856 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4857 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4858 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
4859 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4859 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4859 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4861 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4863 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4863 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4864 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4870 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4871 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4902 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4902 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4902 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
4903 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4903 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4903 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4905 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4905 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4907 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4907 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4907 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4908 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4908 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4908 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4911 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
4912 ANNISTON AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4912 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4912 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4913 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4913 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4913 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4917 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4917 LA SENA AVE	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4917 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4917 N LA SENA AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4923 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4923 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
4925 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4926 AZUSA CANYON RD	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4926 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4926 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4929 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4929 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4934 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4935 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4935 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4935 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4936 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4938 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
4938 AZUSA CANYON RD	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4939 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4940 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4941 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4945 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4945 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4945 N AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4946 ANNISTON AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4946 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4946 AZUSA CANYON RD	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4951 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4954 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
4954 AZUSA CANYON RD	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4957 ANNISTN AVE	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
4957 AZUSA CANYON RD	2012, 2007, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

APPENDIX G

Sanborn Map Report

4848 Azusa Canyon Road
4848 Azusa Canyon Road
Baldwin Park, CA 91706

Inquiry Number: 3674352.3
July 24, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

7/24/13

Site Name:
4848 Azusa Canyon Road
4848 Azusa Canyon Road
Baldwin Park, CA 91706

EDR Inquiry # 3674352.3

Client Name:
AMEC Environment &
121 Innovation Drive, Suite 200
Irvine, CA 92617-0000

Contact: Ellen Smith

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by AMEC Environment & Infrastructure were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name:	4848 Azusa Canyon Road
Address:	4848 Azusa Canyon Road
City, State, Zip:	Baldwin Park, CA 91706
Cross Street:	
P.O. #	NA
Project:	IR13164070
Certification #	B190-466D-821C

Sanborn® Library search results
Certification # B190-466D-821C

UNMAPPED PROPERTY

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

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

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APPENDIX H

Site Reconnaissance Photographs

Residence, 4838 Azusa Canyon Road

Residence, 4838 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **1 & 2**

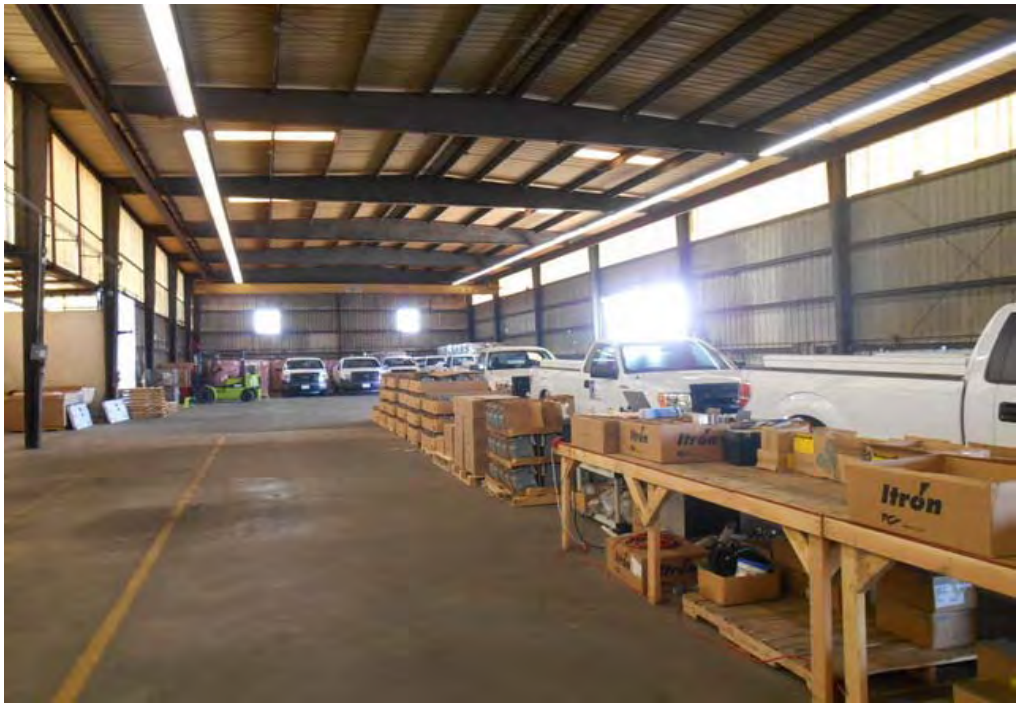
View South From Alley South of 4850

View East from Alley South of 4850

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **3 & 4**

Warehouse at 4848 Azusa Canyon Road



Warehouse Interior, 4848 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **5 & 6**

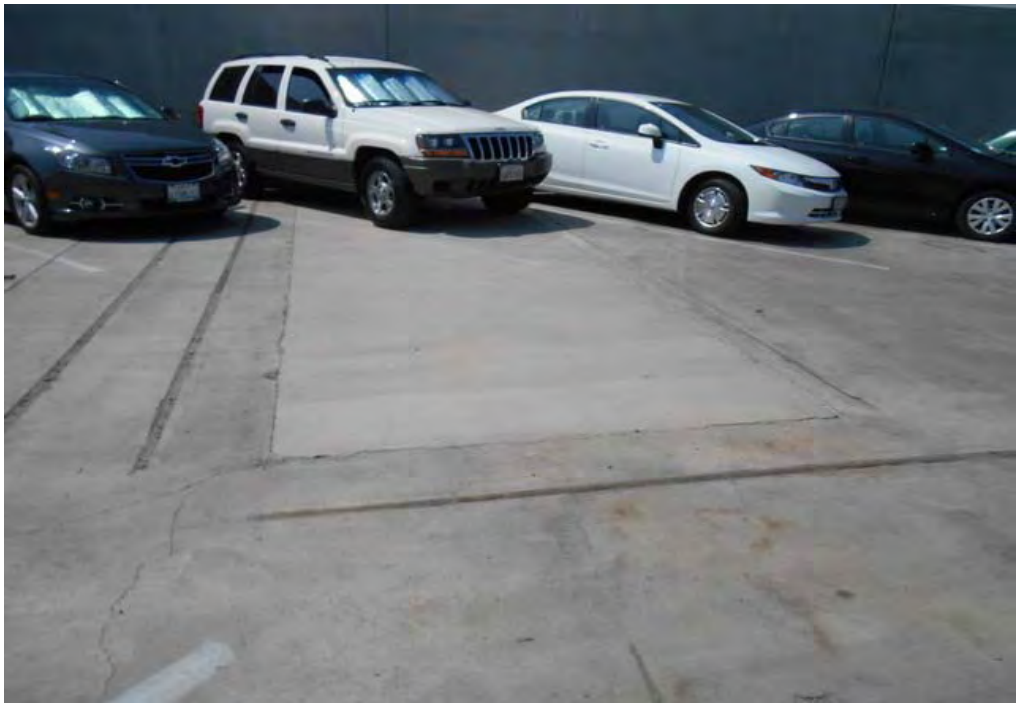
Minor Staining on Concrete in Northeast Corner of Warehouse, 4848 Azusa Canyon Road

Interior View of Warehouse Showing Concrete Patch, 4848 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **7 & 8**

North of Warehouse, 4848 Azusa Canyon Road, Showing Metal Vault in Subsurface



Concrete Patch South Side of Warehouse, 4848 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **9 & 10**

Concrete Patch South of Warehouse, 4848 Azusa Canyon Road

Quonset Hut Northeast of Warehouse, 4848 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road
Irwindale, California

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **11 & 12**

Pallets Stored in Yard, Eastern Portion of 4848 Azusa Canyon Road

Office Building East of 4850 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **13 & 14**

Two Metal Grates Covering Concrete Lined Holes With Metal Vaults Inside, Located East of Office Building

Inside Metal Covers East of Office Building

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **15 & 16**

South Side of 4850 Azusa Canyon Road, Owner Residence

View of Storage Yard, 4900 Azusa Canyon Road, Showing Freight Containers on Left, Refrigerant Containers and Cylinders

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **17 & 18**

Quonset Hut at 4910, Cylinders, Refrigerant, Unlabeled Containers

Lithium Bromide Label on Totes, 4900 and 4910 Azusa Canyon Road

Phase I Environmental Site Assessment 4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910 Azusa Canyon Road		
By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **19 & 20**

View North Near Quonset Hut, Large Cylinders Chlorodiflouromethane, 4900 and 4910 Azusa Canyon Road

Hand Written Non-Haz Lithium on 55 Gallon Drum in Yard, 4910 Azusa Canyon Road

Phase I Environmental Site Assessment 4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910 Azusa Canyon Road		
By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **21 & 22**

Lithium Bromide Drums in Yard, 4900 and 4910 Azusa Canyon Road

Cylinders, Drums, Some Unlabeled, in and Outside Metal Building, 4910 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **23 & 24**

Cylinders Outside West Side of Quonset Hut, 4910 Azusa Canyon Road

Inaccessible Freight Storage Containers Located in Yard, 4848 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **25 & 26**

Miscellaneous Containers Near Quonset Hut, 4900 Azusa Canyon Road

Containers and Totes in Yard, 4900 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **27 & 28**

Totes in Yard, 4900 Azusa Canyon Road

Refrigerant in Containers, 4900 and 4910 Azusa Canyon Road

Phase I Environmental Site Assessment 4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910 Azusa Canyon Road		
By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **29 & 30**

Typical Lithium Bromide Container, Black Plastic, Some Bulging, 4900 and 4910 Azusa Canyon Road

Storage Yard, 4910 and 4900 Azusa Canyon Road, Showing Low Spot on Unpaved Surface

Phase I Environmental Site Assessment 4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910 Azusa Canyon Road		
By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **31 & 32**

Surface Staining In Southwest Portion of 4900 Azusa Canyon Road

Glass Containers In Northwest Corner of 4900 Azusa Canyon Road

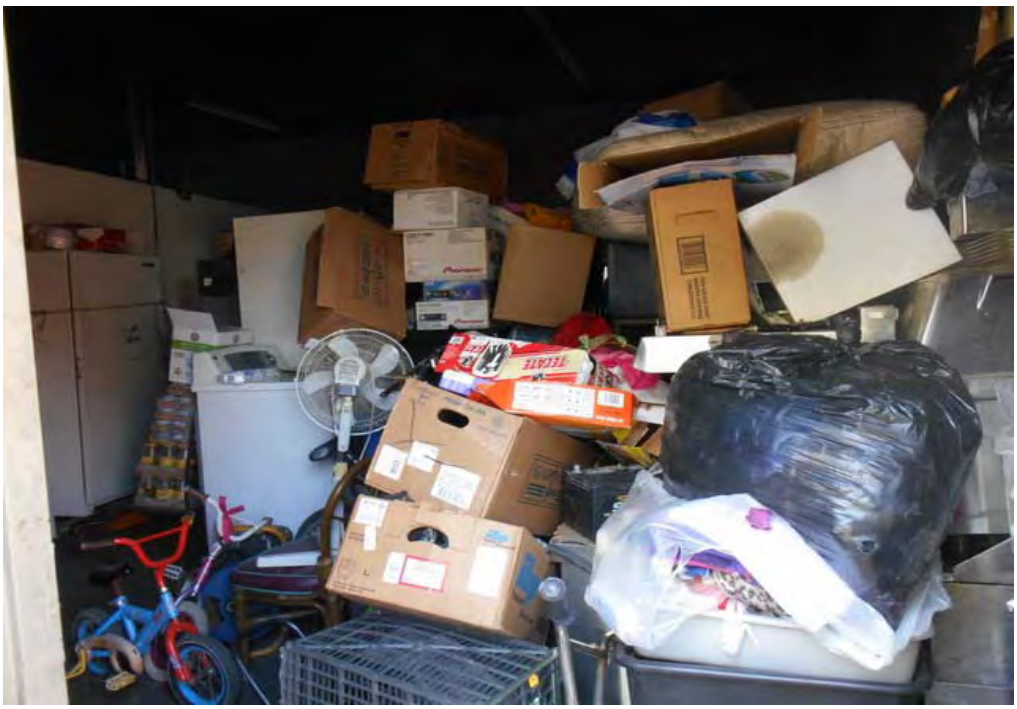
Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **33 & 34**

View of North Side of Warehouse at 4906 Azusa Canyon Road.

Interior Unit of Warehouse, 4906 Azusa Canyon Road

Phase I Environmental Site Assessment 4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910 Azusa Canyon Road		
By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **35 & 36**



Interior of Unit A, 4906 Azusa Canyon Road

Phase I Environmental
Site Assessment
4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910
Azusa Canyon Road

By: crb	Date: 10/09/2013	Project No.: IR13164320
amec		Photos **37**

APPENDIX I

Owner Questionnaire

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
Property Owner/Representative or Facility Manager

Subject Property: 4832, 4838, 4850, 4854, 4858, 4900, 4906, 4910 Azusa Canyon Road, and one property (no address) located between 4850 and 4838 Azusa Canyon Road, Irwindale, California

Project: Phase I Environmental Site Assessment

Introduction: The following questionnaire has been prepared in accordance with the U.S. EPA All Appropriate Inquiries (AAI) Final Rule and ASTM International (ASTM) Standard E1527-05, Standard Practice for Environmental Site Assessments, adopted by the ASTM as part of the Phase I Environmental Site Assessment standard process.

Questionnaire Purpose: AMEC Geomatrix, Inc. (AMEC) has been retained to conduct an environmental site assessment of the subject property. The purpose of the assessment is to evaluate the property for evidence of hazardous waste or hazardous material releases to the environment. As the property owner, owner's representative, or current or past lessee/tenant, your input in the assessment is requested to collect information that is not found in the public record or is not visually apparent. Please answer the following questions by circling the appropriate response. If an employee has better knowledge of property history related to hazardous waste or hazardous material releases, please have him or her complete a copy of the questionnaire by circling the appropriate answer to each of the following questions. The completed questionnaire should be signed by the preparer and returned to AMEC. You may send the completed questionnaire to:

AMEC
121 Innovation Drive, Suite 200
Irvine, CA 92617
Attention: Ellen Smith

or by facsimile to (949) 642-4474

or by email to ellen.smith@amec.com

QUESTIONNAIRE PART I: ESA BACKGROUND INFORMATION

A. Please provide current and historical addresses for the subject property:
4832, 4838, 4844, 4848, 4850, 4858, 4900, 4906, 4910 and firelane.

B. Please provide a brief chronology of the subject property ownership and history:
1971 or 1972 - kiln was onsite at approx 2-2½ acres in back of property - owned by estate. Stored equipment on site + inside several bldgs which dont exist anymore. Had rabbit + chicken hutches in corner (SEC). Offered $80 or $82K which was accepted. Hired staff to clean out existing bldgs + took to dump. Then had metal bldg constructed onsite for my steel business. Built half of plant with crane

overhead - 10 or 12' from South edge of Kiln & covered it. About 70! Then expanded plant clear to east boundary (railroad tracks) & added another overhead crane. This was over 10-12 year period. Sold company & leased bldg to Ornamental Iron company around 1986-1988. Then Active Aircraft leased bldg until Aug/Sept 2011.

4832 Azusa Canyon - house had real estate sign (±1972, Mexican family lived there. ~~From~~ I bought it for $8K - $10K.

4838 Azusa Canyon - bought this house next. Improved & added on. Lived there for awhile

4844 - owned by Mayor of Azusa. He wanted (house) to sell so ~~I bought~~ I bought and tore down house (±1977).

4850 Azusa Cyn (house) - couple lived here and retired & moved to Oregon so I bought house around 1982.

4900 Azusa Cyn - was a nursery & towing company (Budget Towing) bought property from Budget Towing & leased back to them. They went out of business and nursery moved. Don't remember year.

~~4910~~ Azusa Cyn - bought from Frank Bohmoranzer.

4906 Used as Warehouse.

4910 Azusa Cyn - Includes quonset huts. Owner built plastic products. Sold property to me & moved to Oregon.

4958 Azusa Cyn - house I bought from Sal Hernandez.

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
Property Owner/Representative or Facility Manager

QUESTIONNAIRE PART II: ENVIRONMENTAL QUESTIONS

A. To your knowledge, is the subject property and/or adjoining property used or have/has been used in the past in the following manner:

1. Any industrial use
2. Gasoline station
3. Motor or equipment repair facility
4. Commercial printing facility
5. Dry cleaners
6. Photo developing laboratory
7. Junkyard or landfill
8. A waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

☒ Yes (Circle all that apply) ☐ No ☐ Unknown

Comments: _____

B. Are there currently or have there been in the past any of the following materials stored at, used at, or brought onto the subject property or facility and/or adjoining property or facility (if applicable, identify which):

1. Automotive or industrial batteries
2. Pesticides
3. Paint
4. Other chemicals
5. Fill dirt originated from a contaminated site or of an unknown origin (if applicable, identify which)?

☐ Yes (Circle all that apply) ☒ No ☐ Unknown

Comments: _____

C. Are there currently or have there been in the past any of the following features located on the property and/or adjoining property:

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
Property Owner/Representative or Facility Manager

1. Pits
2. Lagoons or ponds
3. Clarifiers or sumps
4. Stained soil
5. Registered or unregistered storage tanks (above or underground) (if applicable, identify which)?

☒ Yes (Circle all that apply) ☐ No ☐ Unknown

Comments: fuel
One tank located north of kiln about 20' and almost on line with front. I knew there was tank there because part was exposed Used by brick company for their commercial vehicles

D. To your knowledge, are there currently or have there been in the past any of the following objects or evidence located on the property or adjacent to any structure located on the property and/or adjoining property:

1. Vent pipes
2. Fill pipes
3. Access ways indicating a fill pipe protruding from the ground
4. Leaks, spill, or staining by substances other than water (if applicable, identify which)
5. Foul odors associated with any flooring, drains, walls, ceilings, or exposed ground (if applicable, identify which)?

☐ Yes (Circle all that apply) ☒ No ☐ Unknown

Comments:

E. If the property and/or adjoining property is served by a private well or non-public water system, do you have any knowledge that:

1. Contaminants have been identified in the well or system that exceed guidelines applicable to the water system

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
Property Owner/Representative or Facility Manager

2. The well has been designated by any government environmental/health agency as being contaminated?

☐ Yes (Circle all that apply) ☐ No ☐ Unknown

Comments: N/A

Property is serviced by Baldwin Park Water Company

F. With respect to the property or any facility located on the property and/or adjoining property, do you have any knowledge of or have you been informed of:

1. Past or current existence of hazardous substances or petroleum products.
2. Past or current existence of environmental violations
3. Any permits, orders, or waste discharge requirements issued by or requested from any environmental regulatory agency in relation to the properties.
4. Any environmental assessment indicating the presence or contamination of hazardous substances or petroleum products or recommended further assessment
5. Any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products?

☒ Yes (Circle all that apply) ☐ No ☐ Unknown

Comments: Only ~~the~~ Refrigerant Exchange and I have no idea what the chemical is that Dennis is storing.

G. Has the property and/or adjoining property discharged, dumped above grade, buried and/or burned any of the following materials on or adjacent to the property and/or into a storm water or sanitary sewer system (if applicable, identity which):

1. Wastewater (not including sanitary waste or storm water)
2. Any hazardous substances or petroleum products

3. Unidentified waste materials
4. Tires
5. Automotive or industrial batteries
6. Any other waste materials?

☐ Yes (Circle all that apply) ☐ No ☐ Unknown

Comments:
I have septic tanks for all units in back, one for plant, one for Sierra Pallet's office, one for 4910 Azusa Canyon. There might be a septic tank where Sierra Pallet had bldg that burned down.

H. Are there or have there been any of the following equipment for which there are any records indicating the presence of polychlorinated biphenyls (PCBs)?

1. Transformer
2. Capacitor
3. Any hydraulic equipment?

☐ Yes (Circle all that apply) ☒ No ☐ Unknown

Comments:
Active Aircraft had operating machinery with hydraulics.

I. To your knowledge, have any environmental or geotechnical assessments of the property and/or adjoining property been conducted? Please provide the nature and dates of these assessments, if known.

1. Environmental
2. Geotechnical
3. Other?

☒ Yes (Circle all that apply) ☐ No ☐ Unknown

I know of no adverse reports

Comments:
as such.
The existing tenant Refrigerant Exchange, I may have performed operations on the property that may be questionable. It would have to be refrigerant material.

J. Are you aware of any environmental cleanup liens against the property, governmental orders, consent decrees, cleanup and abatement orders, or lawsuits that are filed or recorded under federal, state, tribal or local law?

☐ Yes ☒ No ☐ Unknown

Comments:

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
Property Owner/Representative or Facility Manager

K. Are you aware of any activity or land use limitations, such as engineering controls, land use restrictions or institutional controls, that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26)? Please provide the nature and dates of these assessments, if known.

1. Engineering Controls (e.g., engineered cap, subsurface barrier wall, etc.)
2. Land Use Restrictions (e.g., industrial only, no groundwater removal, etc.)
3. Institutional Controls (e.g., deed restrictions, financial assurances, etc.)

☐ Yes (Circle all that apply) ☒ No ☐ Unknown

Comments:

This questionnaire was completed by:

Name Frank Smith

Title Owner

Representing

Address 4850 Azusa Canyon Road

City, State, Zip Irwindale, CA 91706

Phone Number (626) 851-0902

Signature

Date 8-7-13

October 9, 2013

Mr. Lonnie Nadal
Shubin-Nadal Realty Investors, LLC
901 Dove Street, Suite 225
Newport Beach, California 92660

Re: Screening-Level Phase II Investigation Results
Azusa Canyon Road
Irwindale, California

Dear Mr. Nadal:

AMEC Environment & Infrastructure (AMEC) has prepared this letter to summarize the results of a screening-level Phase II investigation (Phase II) conducted at 4832, 4838, 4848, 4850, 4854, 4858, 4900, 4906, and 4910 Azusa Canyon Road and adjoining alleys/yards in Irwindale, California (the "site" or "subject property"; Figures 1 and 2). The Phase II activities were conducted at the request of Shubin-Nadal Realty Investors (SNRI) in areas of recognized environmental conditions (RECs) and potential environmental concerns (PECs), as presented in a Phase I Environmental Site Assessment (ESA) update report for the site (AMEC, 2013). The screening-level Phase II was performed to provide additional environmental information to SNRI during their due diligence period for the acquisition for redevelopment of the subject property.

The screening-level Phase II included a 1) geophysical survey to clear utilities and to assess potential suspect underground storage tank (UST) locations, and a 2) soil vapor survey and soil investigation to assess potential releases at the subject property (Figure2, Table 1). The sample locations are shown on Figure 2 and the target features are summarized in Table 1. The methods and results of the screening-level Phase II investigation are summarized below.

Geophysical Survey

On August 16, 2013, Subsurface Surveys & Associates, Inc. (SSA) conducted a geophysical survey at the subject property using a combination of electromagnetic induction (EM), magnetometry, and ground penetrating radar (GPR). A utility locator with line tracing capabilities was also used at selected locations. The purpose of the geophysical survey was to locate and identify, if possible, buried features or utilities (anomalies) that may be present at the sampling locations and to assess suspect locations that may have contained the former USTs (see Figure 2). Details of the survey are presented in Appendix A of this letter.

According to SSA, most surface obstructions were removed from the survey areas; however, some survey areas were in close proximity to reinforced concrete, above ground debris or other above ground metallic objects conflicted with the survey. In these areas (5 feet and closer to any structure) the GPR and the line tracer were the main tools applied to the search. In addition, local conditions at the site were unfavorable for radar penetration due to the nature of the soil and materials covering the survey areas, as such, the radar penetration extended to a depth of approximately 2.0 feet below ground surface (bgs).

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An anomaly (possible area of disturbed soil or a backfilled excavation-like image) was observed in the vicinity of three sample locations SB2, SV8, and SV9, located east, and south of the Quonset hut at 4910 Azusa Canyon Road (Figure 2). Within the marked boundaries of this anomaly, there were no detectable underground metallic objects.

In addition to utility clearance, SSA assessed four suspect areas for the presence of USTs or for subsurface features that may suggest an area of disturbed soil that may be indicative of a backfilled excavation. Three GPR anomalies were detected in the vicinity of sample locations SV22 and SV23 (Figure 2), in areas where relatively newer concrete patches were observed. These sample locations and corresponding anomalies were located inside, and southwest of, the warehouse at 4848 Azusa Canyon Road. SSA reported that the radar system did not show a backfilled excavation-like image in these three areas.

Soil Vapor Sampling

From August 20 through 22, 2013, AMEC collected soil vapor samples from 23 locations (SV1 through SV24; except SV14, which was not included in the sample sequence), and soil samples from 11 locations (SV-7 through SV-10, SV-16, SV-18, SV-20, SB-1 through SB-4) as shown on Figure 2 and summarized in Table 1.

Soil vapor probe installation, sampling, and analyses were conducted in accordance with California Environmental Protection Agency, Department of Toxic Substance Control (DTSC) Los Angeles Regional Water Quality Control Board and San Francisco Regional Water Quality Control Board - Active Soil Gas Investigations (Advisory; DTSC, 2012). Soil vapor probes were installed using a direct-push dual tube system. Each soil vapor probe was installed at approximately 5 feet bgs.

The soil vapor probes consisted of disposable soil vapor filters approximately 6 inches long, and 0.25-inch outside diameter Teflon tubing. The soil vapor filters were encased in approximately 1-foot thick sand pack and connected to the surface with the Teflon tubing. Hydrated granular bentonite was placed above the sand pack to approximately 6 inches below ground surface (bgs). Each probe was left undisturbed for a minimum of 2 hours prior to sample collection. After the minimum wait, each probe was purged at approximately 200 milliliters per minute (mL/m). A paper towel soaked with isopropyl alcohol was placed near the tubing and hydrated bentonite interface to check for ambient air leaks during sampling. In accordance with the Advisory, a purge volume test was conducted at SV10. One, three and ten purge volume samples from SV10 were collected and analyzed at the mobile laboratory for volatile organic compounds (VOCs) and gasoline range hydrocarbons. Calculation of one purge volume included the sum of the inside volume of the tubing used and void space volume of the sand pack. The three purge volume samples resulted in optimum VOC concentrations, and the remaining soil vapor samples were collected after purging three volumes. After purging, soil vapor samples were collected in laboratory cleaned glass syringes. Soil vapor samples were analyzed at the mobile laboratory within 30 minutes of collection.

Soil vapor sample locations were based on areas showing potential environmental concerns as follows:

1. the cylinder and drum chemical storage areas generally located at 4848, 4900 and 4910 Azusa Canyon Road;
2. surface staining area at 4848 Azusa Canyon Road;
3. suspect UST locations at 4848 Azusa Canyon Road;
4. suspect septic tank locations at 4848 Azusa Canyon Road; and
5. a low point (potential area for ponding) located at 4848 Azusa Canyon Road.

Soil vapor sample results are summarized in Table 2. Laboratory reports are included in Appendix B. The soil vapor samples collected from SV1, SV7, SV11, SV12, and SV15 through SV24 were reported as non-detect for all VOCs. One or more analytes consisting of 4-isopropyltoluene, acetone, carbon tetrachloride, chloroform, m,p-xylenes, tetrachloroethene (PCE), toluene, trichlorofluoromethane, and gasoline range organic compounds were detected in one or more soil vapor samples collected at SV2, SV3, SV4, SV5, SV6, SV8, SV9, SV10, and SV13.

Reported concentrations of detected analytes were below their respective industrial and residential California Human Health Screening Levels (CHHSLs) for soil vapor[1], except for carbon tetrachloride. Carbon tetrachloride concentrations exceed the residential and commercial CHHSLs at four sample locations (SV3, SV8, SV9, and SV10) within the central portion of the subject property. The concentrations of carbon tetrachloride in these soil vapor samples ranged from 0.11 to 5.9 µg/L, with the highest concentration detected in soil vapor at SV10 located near a drum storage area (Figure 2). At this location, the concentrations of carbon tetrachloride in soil vapor exhibited a decreasing trend north of SV10 at sample locations SV9, SV8 and SV3, respectively. This compound was not detected in the other soil vapor sample locations to the west, south and east of SV10. Although carbon tetrachloride was detected above the CHHSLs, only one sample (SV10) exhibited a concentration above a calculated industrial risk-based screening level of 0.58 µg/L (based on the indoor air Regional Screening Level[2] for this compound).

Based on the low concentrations of VOCs detected in soil vapor, it appears that some volatile chemicals have been released to the ground at relatively low concentrations in the areas where cylinders and drums are stored and where stained soil was observed.

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[1] California Human Health Screening Levels (CHHSLs) in Evaluation for Contaminated Properties [California Environmental Protection Agency (Cal/EPA, 2005 and 2010)] for residential and commercial/industrial land use screening criteria

[2] USEPA Region 9 Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites for residential and industrial soils (EPA, 2012).

Shallow Soil Investigation

On August 20 and 21, 2013, AMEC collected soil samples from 10 locations (SV7, SV8, SV10, SV16, SV20, SV22, and SB1 through SB4), shown on Figure 2, Table 1). Soil sample locations were based on areas showing potential environmental concerns identified in AMEC's Phase I ESA update report (October 2013) as follows:

1. the cylinder and drum chemical storage areas generally located at 4848, 4900 and 4910 Azusa Canyon Road;
2. surface staining area at 4848 Azusa Canyon Road;
3. suspect for UST locations at 4848 Azusa Canyon Road;
4. suspect septic tank locations at 4848 Azusa Canyon Road;
5. a low point (potential area for ponding) located at 4848 Azusa Canyon Road;
6. four areas were sampled and analyzed for pesticides/herbicides; and,
7. six samples were analyzed for perchlorate.

Soil samples were collected at approximate depths of 1, 3 or 5 feet bgs. Soil samples were collected using either a macrocore sampler or a dual tube direct-push soil sampling system. Sample depths varied based on the sample location (Table 1). Soil samples were analyzed for VOCs using EPA Method 8260B/5035; total petroleum hydrocarbons (TPHcc) by EPA Method 8015M carbon chain (cc) range; polychlorinated biphenyls (PCBs) using EPA Method 8082; and, Title 22 Metals using EPA Method 6010B/7471A. Soil samples SV7 and SV10 were analyzed for Lithium (EPA Method 6010B) and Bromide (EPA Method 300.0). Soil samples SB1 through SB4 were analyzed for pesticides and herbicides using EPA Method 8081A/8141A/8151A. Soil samples SV10, SV16, SV18, SV22, and SB1 were analyzed for perchlorate using EPA Method 314.0.

Soil sample results are summarized in Tables 3 and 4. In general, laboratory results showed some relatively low detections of heavy hydrocarbons at sample locations SV10 and SV18; a low concentration of one VOC (2-butanone in SV22); and metals concentrations generally consistent with background and below screening criteria (with the exception of arsenic, discussed below). In addition, lithium and bromide were detected in the soil samples analyzed for these constituents (at SV7 and SV10). PCBs, pesticides/herbicides, and perchlorate were not detected above laboratory reporting limits in the soil samples analyzed for these constituents.

VOCs (Samples SV8, SV9, SV10, SV16, SV18, SV20 and SV22):

VOCs were not detected above laboratory reporting limits in the soil samples analyzed for these constituents with the exception of one compound (2-butanone; also know as methyl ethyl ketone). 2-butanone was detected in shallow soil at SV22 at a concentration of 84 micrograms per kilogram [ug/kg]). This concentration is orders of magnitude below screening level.

Total Petroleum Hydrocarbons (Samples SV8, SV9, SV10, SV16, SV18 and SV20):

Concentrations of TPHcc (Table 3) were non-detect in the soil samples with the exception of two shallow soil samples collected at a depth of 1 foot bgs at sample locations SV10 and SV18. Total TPH (cc range C6-C44) at SV10 was 9 mg/kg; at SV18, heavier hydrocarbons were detected at a concentration of 223 milligrams per kilogram (mg/kg; with total TPHcc of 240 mg/kg). These levels are below typical regulatory concerns[3], especially for groundwater deeper than 160 feet bgs as is expected at the subject property.

Metals Results (Samples SV8, SV9, SV10, SV16, SV18, SV20):

Metals concentrations in soil samples SV8, SV9, SV10, SV16, SV18, SV20 (Table 4) were generally consistent with typical background levels and below screening levels with one exception; arsenic. Arsenic was detected in soil samples at concentrations ranging between 1.30 and 5.86 mg/kg. Although the concentrations are above screening levels (0.61 mg/kg for residential screening levels and 2.4 mg/kg for commercial screening levels), the results are below the typical background range for arsenic (up to 12 mg/kg).[4]

Lithium and Bromide (Samples SV7 and SV10):

Lithium concentrations in soil samples from SV7 at 1 foot bgs and SV10 at 1 and 5 feet bgs ranged from 2.0 to 760 mg/kg. These concentrations exceed the residential screening level (0.91 mg/kg) and, in some instances, exceed the commercial screening level (4.1 mg/kg). Bromide concentrations at SV7 and SV10 range from 8.07 to 27.2 mg/kg. These concentrations do not exceed the commercial screening level for bromide (200 mg/kg[5]); however the 1 foot sample from SV10 exceeds the residential screening level (16 mg/kg).

Summary of Results and Conclusions

The geophysical survey was inconclusive with regards to the suspect UST locations. At the locations surveyed, metallic objects indicative of a buried UST(s) were not identified. One area exhibited disturbed soil that may be indicative of a backfilled excavation near the Quonset hut at

[3] California Regional Water Quality Control Board, Los Angeles Region (LARWQCB), 2006, Maximum Soil Screening Levels for TPH, BTEX and MTBE above Drinking Water Aquifers, September
[4] DTSC, 2008, Determination of a Southern California Regional Background Arsenic Concentration in Soil, March,
[5] The screening level for bromate was used as a surrogate for bromide.

4910 Azusa Canyon Road. In this area, VOCs associated with fuels (such as benzene) were not detected in the shallow soil vapor samples collected at SV8 and SV9.

The soil vapor data suggest that some volatile chemicals occur in shallow soil at relatively low concentrations in the vicinity of sample locations SV2, SV3, SV4, SV5, SV6, SV8, SV9, SV10, and SV13. For the most part, the soil vapor data do not suggest a significant release has occurred at the subject property. However, the detection of carbon tetrachloride in soil vapor above the screening levels at SV10 would warrant further consideration as part of the site redevelopment, and appropriate measures should be taken by the tenant(s) to remove and dispose of the drums, cylinders and other miscellaneous chemicals storage containers (whether empty or containing chemicals) from the subject property and in the vicinity of SV10. Once removed, surface soils should be evaluated for staining and soil sampling should be conducted by the tenant(s) in these areas to confirm that residual impacts are not present. If impacted soil is identified during confirmation sampling, soil removal may be warranted.

Soil sample data suggest metals are consistent with typical background concentrations and are not indicative of environmental impact. One VOC (2-butanone) was detected in one shallow soil sample (SV22 at 3 feet) at a low concentration, and the soil sample at 5 feet bgs (SV22 at 5 feet) was non-detect indicating the occurrence is relatively shallow. Heavier ended hydrocarbons were detected in two shallow soil samples (SV10 and SV18, both at a depth of 1 foot), whereas the 5 foot samples at both locations were non-detect for TPH. As such, the TPH-impacted soils are likely isolated in occurrence and do not suggest significant impacts are present in the areas investigated; however, the presence of surface staining at these locations and in other areas of the subject property may warrant further consideration or removal and should be addressed by the tenant(s).

Lithium and bromide were detected in soil samples at concentrations above the screening levels at sample locations SV7 (a low point at the subject property) and SV10 (chemical drum storage area). As noted above, it is recommended that all chemical storage containers (whether empty or containing chemicals) be appropriately removed from the subject property. Afterwards, the surface soils should be evaluated for staining and stained soils should be tested and/or removed by the tenant(s). Additionally, soil impacted with lithium and bromide at SV7 and SV10 should be removed by the tenant and soil confirmation samples should be collected to verify removal.

User Reliance and Limitations

The screening-level Phase II has been completed for the use of SNRI. No other person or organization shall rely upon any part of the report without the prior written consent of AMEC. SNRI may not release parts of the report but may release the whole report to third parties; however, in doing so, SNRI shall indemnify and defend AMEC from and against all claims arising out of or in conjunction with such use or reliance by a third party. Additionally, any third party in using this report agrees that it shall have no legal recourse against AMEC.

This letter report is intended to provide AMEC's interpretation of the data derived from samples collected for this project at specific locations and times. The findings presented herein do not constitute a warranty, guarantee, or positive assertion as to the presence, absence, or extent of hazardous materials at the subject property.

Please call the undersigned at (949) 642-0245 if you have any questions or if you would like additional information.

Sincerely yours,
AMEC

Ellen Smith
Technical Professional - Geology

Linda Conlan, PG
Principal Geologist

Attachments

Figure 1 – Site Location Map
Figure 2 – Soil and Soil Vapor Sample Location Map
Table 1 – Sampling and Analysis Program
Table 2 – Summary of Soil Vapor Results
Table 3 – Summary of Organic Compounds Results for Soil Samples
Table 4 – Inorganic Results for Soil Samples
Appendix A – Geophysical Report
Appendix B – Laboratory Data

FIGURES

Path: Y:\IR13164320\esri\Site Location Map-Phase 2.mxd

N

0 500 1,000

Approximate Scale in Feet

Basemap modified from aerial photograph from
Eagle Aerial Imaging, Inc., dated February 28, 2011.

SITE LOCATION MAP
Phase II Investigation
4832, 4838, 4848, 4850, 4854, 4858,
4900, 4906, and 4910 Azusa Canyon Road
Irwindale, California

By: pah	Date: October 9, 2013	Project No. IR13164320
amec		Figure 1

Explanation

- Soil sampling location
- Soil vapor sampling location
- Soil and soil vapor sampling location
- Background soil boring for pesticides/herbicides
- Suspect former UST location
- Suspect septic tank location
- Approximate site limits

N

0 30 60

Approximate Scale in Feet

Aerial photograph from Eagle Aerial, February, 28, 2011

SOIL AND SOIL VAPOR
SAMPLING LOCATION MAP
Phase II Investigation
4832, 4838, 4848, 4850, 4854, 4858,
4900, 4906, and 4910 Azusa Canyon Road
Irwindale, California

By: jbd	Date: October 9, 2013	Project No. IR13164320
amec		Figure 2

Plot Date: 10/17/2013 11:28:46 AM, Plotted by: pat.herring Drawing Path: Y:\IR13164320\ACAD_TB-001_SAMPLE LOCATION MAP.DWG, Figure 2_Sample Location Plan

TABLES

TABLE 1

SAMPLING AND ANALYSIS PROGRAM
Azusa Canyon Road
Irwindale, California

Sample Location	Target Feature	Sample ID	Sample Date		Sample Depth (ft bgs)	VOCs	VOCs	TPHcc	Metals	PCBs	Pest/ Herb	Li	Br	Perchlorate
			SV	S		SV	S							
SV1	General Storage Area	SV1-5 PV3	8/22/2013		5	X								
SV2	General Storage Area	SV2-5 PV3	8/22/2013		5	X								
SV3	Cylinder and Drum Storage Area (Quonset Hut)	SV3-5 PV3	8/22/2013		5	X								
SV4	Cylinder and Drum Storage Area (Quonset Hut)	SV4-5 PV3	8/22/2013		5	X								
SV5	Storage Area	SV5-5 PV3	8/21/2013		5	X								
SV6	Storage Area	SV6-5 PV3	8/22/2013		5	X								
SV7	Low Point (Potential Area for Ponding)	SV7-1		8/20/2013	1							X	X	
		SV7-5	8/21/2013	8/20/2013	5							X	X	
		SV7-5 PV3	8/21/2013		5	X								
SV8	Cylinder and Drum Storage Area (Quonset Hut)	SV8-1		8/20/2013	1		X	X	X	X				
		SV8-5 PV3	8/21/2013		5	X								
SV9	Cylinder and Drum Storage Area (Quonset Hut)	SV9-5	8/21/2013		5		X	X	X	X				
		SV9-5 PV3	8/21/2013		5	X								
SV10	Drum Storage Area and Surface Staining	SV10-1		8/20/2013	1		X	X	X	X		X	X	
		SV10-5	8/21/2013	8/20/2013	5		X	X	X	X		X	X	X
		SV10-5 PV3	8/21/2013		5	X								
SV11	Suspect Septic Tank Location	SV11-6 PV3	8/22/2013		5	X								
SV12	Suspect Septic Tank Location	SV12-5 PV3	8/22/2013		5	X								
SV13	Suspect Septic Tank Location	SV13-5 PV3	8/22/2013		5	X								
SV15	Cylinder and Container Storage Area	SV15-5 PV3	8/21/2013		5	X								
SV16	Cylinder and Container Storage Area and Suspect UST Location	SV16-1		8/20/2013	1		X	X	X	X				
		SV16-5	8/21/2013	8/20/2013	5		X	X	X	X				X
		SV16-5 PV3	8/21/2013		5	X								
SV17	Cylinder and Container Storage Area	SV17-5 PV3	8/21/2013		5	X								
SV18	Cylinder and Container Storage Area	SV18-1		8/20/2013	1		X	X	X	X				
		SV18-5	8/22/2013	8/20/2013	5		X	X	X	X				X
		SV18-5 PV3	8/22/2013		5	X								
SV19	Suspect Septic Tank Location	SV19-5 PV3	8/22/2013		5	X								

TABLE 1

SAMPLING AND ANALYSIS PROGRAM
Azusa Canyon Road
Irwindale, California

Sample Location	Target Feature	Sample ID	Sample Date		Sample Depth (ft bgs)	VOCs	VOCs	TPHcc	Metals	PCBs	Pest/ Herb	Li	Br	Perchlorate
			SV	S		SV	S							
SV20	Cylinder and Container Storage Area	SV20-1		8/20/2013	1		X	X	X	X				
		SV20-5	8/21/2013	8/20/2013	5		X	X	X	X				X
		SV20-5 PV3	8/21/2013		5	X								
SV21	Storage Area	SV21-5 PV3	8/21/2013		5	X								
SV22	Suspect UST Locations	SV22-3		8/21/2013	3		X							
		SV22-5	8/21/2013	8/21/2013	5									X
		SV22-5 PV3	8/21/2013		5	X								
SV23	Suspect UST Locations	SV23-5 PV3	8/21/2013		5	X								
SB1	Background for Pesticides and Herbicides	SB1-1		8/21/2013	1						X			
		SB1-3		8/21/2013	3						X			X
SB2	Background for Pesticides and Herbicides	SB2-1		8/20/2013	1						X			
		SB2-3		8/20/2013	3						X			
SB3	Background for Pesticides and Herbicides	SB3-1		8/20/2013	1						X			
		SB3-3		8/20/2013	3						X			
SB4/SV24	Background for Pesticides and Herbicides	SB4-1		8/21/2013	1						X			
		SB4-3		8/21/2013	3						X			
	Background	SV24-5 PV3	8/21/2013		5	X					X			

Abbreviations
SV= Soil vapor.
S = Soil.
SB = Soil boring.
PV = Pore vapor.

VOCs = Volatile organic compounds.
TPHcc = Total petroleum hydrocarbons (carbon chain range).
PCBs = Polychlorinated biphenyls.
Pest/Herb = Pesticides and herbicides.

Li = Lithium.
Br = Bromide.

TABLE 2

SUMMARY OF SOIL VAPOR RESULTS
Azusa Canyon Road
Irwindale, California

Results reported in micrograms per liter (ug/L)

Sample Location	Sample ID	Sample Date	4-Isopropyltoluene	Acetone	Carbon Tetrachloride	Chloroform	Gasoline Range Organics (GRO)	m,p-Xylenes	Tetrachloroethene (PCE)	Toluene	Trichlorofluoromethane (R11)
CHHSLs	Residential		NA	NA	0.025	NA	NA	320	0.18	140	NA
	Commercial		NA	NA	0.085	NA	NA	890	0.60	380	NA
	Ambient Air	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
	Ambient Air	8/22/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV1	SV1-5 PV3	8/22/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV2	SV2-5 PV3	8/22/2013	<0.10	**1.6**	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV3	SV3-5 PV3	8/22/2013	<0.10	**1.6**	**0.11**	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV4	SV4-5 PV3	8/22/2013	<0.10	**1.1**	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV5	SV5-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	**0.24**	<0.10	**0.16**
	SV5-5DUP PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	0.23	<0.10	**0.14**
SV6	SV6-5 PV3	8/22/2013	**0.93**	**1.3**	<0.040	<0.10	**11**	<0.10	<0.10	<0.10	<0.10
SV7	SV7-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV8	SV8-5 PV3	8/21/2013	<0.10	<1.0	**0.31**	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV9	SV9-5 PV3	8/21/2013	<0.10	<1.0	**0.33**	<0.10	<10	<0.10	<0.10	<0.10	<0.10
	SV9-5DUP PV3	8/21/2013	<0.10	<1.0	**0.30**	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV10	SV10-5 PV1	8/21/2013	<0.10	<1.0	**3.1**	**0.32**	<10	<0.10	<0.10	<0.10	<0.10
	SV10-5 PV3	8/21/2013	**0.25**	<1.0	**5.9**	**0.59**	**12**	**0.14**	<0.10	**0.10**	**0.16**
	SV10-5 PV10	8/21/2013	**0.26**	<1.0	**5.6**	**0.60**	**11**	**0.14**	<0.10	<0.10	**0.15**
SV11	SV11-5 PV3	8/22/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV12	SV12-5 PV3	8/22/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
	SV12-5DUP PV3	8/22/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV13	SV13-5 PV3	8/22/2013	<0.10	<1.0	<0.040	<0.10	<10	**0.16**	<0.10	<0.10	<0.10
SV15	SV15-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV16	SV16-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV17	SV17-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV18	SV18-5 PV3	8/22/2013	0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV19	SV19-5 PV3	8/22/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV20	SV20-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV21	SV21-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV22	SV22-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV23	SV23-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10
SV24	SV24-5 PV3	8/21/2013	<0.10	<1.0	<0.040	<0.10	<10	<0.10	<0.10	<0.10	<0.10

Notes
Detected concentrations are in **BOLD.**
Concentrations above screening levels are shaded gray.

Abbreviations
CHHSLs = California Human Health Screening Levels.
NA = Not available.
< = Not detected.

TABLE 3

SUMMARY OF ORGANIC COMPOUNDS RESULTS FOR SOIL SAMPLES[1]
Azusa Canyon Road
Irwindale, California

Concentrations reported in micrograms per kilogram (ug/kg) unless otherwise noted

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs)	VOCs	Total Petroleum Hydrocarbons[1] (mg/kg)						PCBs	Organochlorine Pesticides	Organophosphrous Pesticides (mg/kg)	Chlorinated Herbicides	Perchlorate
					Others	C29-C32	C33-C36	C37-C40	C41-C44	C6-C44 Total					
			U. S. EPA Method	8260B	8015M						8082	8081A	8141A	8151A	314.0 (M)
SV7	SV7-1	08/20/13	1	--[2]	--	--	--	--	--	--	--	--	--	--	--
	SV7-5	08/20/13	5	--	--	--	--	--	--	--	--	--	--	--	--
SV8	SV8-1	08/20/13	1	ND	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--	--
SV9	SV9-5	08/20/13	5	ND	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--	--
SV10	SV10-1	08/20/13	1	ND	<5.0	<5.0	<5.0	<5.0	<5.0	**9.0**	<50	--	--	--	--
	SV10-5	08/20/13	5	ND	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--	<20
SV16	SV16-1	08/20/13	1	ND	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--	--
	SV16-5	08/20/13	5	ND	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--	<20
SV18	SV18-1	08/20/13	1	ND	<25	**53**	65	**65**	**40**	**240**	<50	--	--	--	--
	SV18-5	08/20/13	5	ND	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--	<20
SV20	SV20-1	08/20/13	1	ND	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--	--
	SV20-5	08/20/13	5	ND	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	--	--	--	--
SV22	SV22-3	08/21/13	3	**2-butanone (84)**	--	--	--	--	--	--	--	--	--	--	--
	SV22-5	08/21/13	5	--	--	--	--	--	--	--	--	--	--	--	<20
SB1	SB1-1	08/21/13	1	--	--	--	--	--	--	--	--	ND	ND	ND	--
	SB1-3	08/21/13	3	--	--	--	--	--	--	--	--	ND	ND	ND	<20
SB2	SB2-1	08/20/13	1	--	--	--	--	--	--	--	--	ND	ND	ND	--
	SB2-3	08/20/13	3	--	--	--	--	--	--	--	--	ND	ND	ND	--
SB3	SB3-1	08/20/13	1	--	--	--	--	--	--	--	--	ND	ND	ND	--
	SB3-3	08/20/13	3	--	--	--	--	--	--	--	--	ND	ND	ND	--
SB4/SV24	SB4-1	08/21/13	1	--	--	--	--	--	--	--	--	ND	ND	ND	--
	SB4-3	08/21/13	3	--	--	--	--	--	--	--	--	ND	ND	ND	--

Notes
1. See laboratory report for detailed analyses and laboratory reporting limits.
2. Not analyzed.

Detected concentrations are in **BOLD**.

Abbreviations
VOCs = Volatile organic compounds.
ft bgs = Feet below ground surface.
PCBs = Polychlorinated biphenyls.
mg/kg = Milligrams per kilogram.
ND = Not detected at or above laboratory reporting limits. See laboratory report for list of analytes and reporting limits.
< = Not detected.

TABLE 4

INORGANIC RESULTS FOR SOIL SAMPLES
Azusa Canyon Road
Irwindale, California

Concentrations reported in milligrams per kilogram (mg/kg) unless otherwise noted

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs)	Bromide	Lithium	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			EPA Method	300.0	6010B	6010B/7471A																
SV7	SV7-1	08/20/13	1	2.0	11.3	--[1]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SV7-5	08/20/13	5	<1.0[2]	8.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SV8	SV8-1	08/20/13	1	--	--	<0.750	**4.52**	**125**	**0.315**	<0.500	**20.4**	**11.2**	**25.9**	**11.9**	<0.0835	<0.250	**16.6**	<0.750	<0.250	<0.750	**32.3**	**75.9**
SV9	SV9-5	08/20/13	5	--	--	<0.750	**1.55**	**60.3**	<0.250	<0.500	**10.2**	**5.90**	**10.8**	**1.27**	<0.0835	<0.250	**8.10**	<0.750	<0.250	<0.750	**15.7**	**29.3**
SV10	SV10-1	08/20/13	1	760	27.2	<0.750	**1.33**	**60.6**	<0.250	<0.500	**7.93**	**6.83**	**5.98**	**1.52**	<0.0835	<0.250	**7.48**	<0.750	<0.250	<0.750	**20.1**	**31.4**
	SV10-5	08/20/13	5	24	9.38	<0.750	**1.30**	**63.8**	<0.250	<0.500	**13.4**	**6.34**	**14.1**	**1.62**	<0.0835	**0.538**	**8.66**	<0.750	<0.250	<0.750	**17.5**	**30.1**
SV16	SV16-1	08/20/13	1	--	--	<0.750	**2.43**	**80.2**	<0.250	<0.500	**12.8**	**7.73**	**14.1**	**1.79**	<0.0835	<0.250	**10.6**	<0.750	<0.250	<0.750	**20.8**	**34.8**
	SV16-5	08/20/13	5	--	--	<0.750	**1.39**	**71.3**	<0.250	<0.500	**7.83**	**5.36**	**12.8**	**1.66**	<0.0835	<0.250	**5.81**	<0.750	<0.250	<0.750	**14.4**	**31.0**
SV18	SV18-1	08/20/13	1	--	--	<0.750	**5.86**	**127**	**0.285**	<0.500	**23.4**	**7.88**	**27.0**	**48.3**	<0.0835	**1.37**	**14.6**	<0.750	<0.250	<0.750	**25.2**	**78.0**
	SV18-5	08/20/13	5	--	--	<0.750	**1.43**	**61.4**	<0.250	<0.500	**10.0**	**7.00**	**8.87**	**2.10**	<0.0835	<0.250	**8.33**	<0.750	<0.250	<0.750	**19.2**	**31.7**
SV20	SV20-1	08/20/13	1	--	--	<0.750	**4.34**	**115**	**0.314**	<0.500	**19.3**	**10.5**	**23.3**	**114**	<0.0835	<0.250	**15.9**	<0.750	<0.250	<0.750	**30.8**	**102**
	SV20-5	08/20/13	5	--	--	**0.877**	**3.61**	**136**	0.372	<0.500	**22.0**	**12.7**	**25.0**	**8.54**	<0.0835	<0.250	**18.1**	<0.750	<0.250	<0.750	**38.4**	**67.2**
SB4/SV24	SB4-1	08/21/13	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB4-3	08/21/13	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Region 9 Screening Levels			Residential	0.91[3]	16	3.1	0.61	1500	16	7	12000	2.3	310	400	1.0	39	150	39	39	0.078	39	2300
			Commercial	4.1[3]	200	41	2.4	19000	200	80	150000	30	4100	800	4.3	510	2000	510	510	1.0	510	31000
CHHSL			Residential	NA	NA	30	0.07	5200	16	1.7	100000	660	3800	80	18	380	1600	380	380	5.0	530	23000
			Commercial	NA	NA	380	0.24	63000	190	7.5	100000	3200	38000	320	180	4800	16000	4800	4800	63.0	6700	100000

Notes
1. Not analyzed.
2. Not detected at or above reporting limit shown.
3. Screening level for bromate.

Detected concentrations are in **BOLD.**
Concentrations above screening levels are shaded gray.

Abbreviations
ft bgs = Feet below ground surface.
< = Not detected.
NA = Not available.

APPENDIX A

Geophysical Report

SubSurface Surveys
& Associates, Inc.
An Applied Geophysical Company

2075 Corte Del Nogal, Suite W
Carlsbad, California 92011

Office: (760) 476-0492
Fax: (760) 476-0493

August 27th, 2013

AMEC
510 Superior Avenue
Suite 200
Newport Beach, California 92663

Project Number: 13-354

Attn: **Thet Naing**

Re: Geophysical Survey, 21 Boreholes, 4848 Azusa Canyon Rd, Baldwin Park, California.

This report is to present the results of our geophysical survey carried out over portions of property located at 4848 Azusa Canyon Road in Baldwin Park, California (Figure 1), on August 16th, 2013. Purpose of the survey was to locate and identify, insofar as possible, piping, conduit, and other buried features that may exist in the vicinity of twenty-one (21) specific locations designated for future drilling activities.

A combination of electromagnetic induction (EM), magnetometry, and ground penetrating radar (GPR) were applied to the search. A utility locator with line tracing capabilities was also brought to the field and used where risers exist onto which a signal could be impressed and traced.

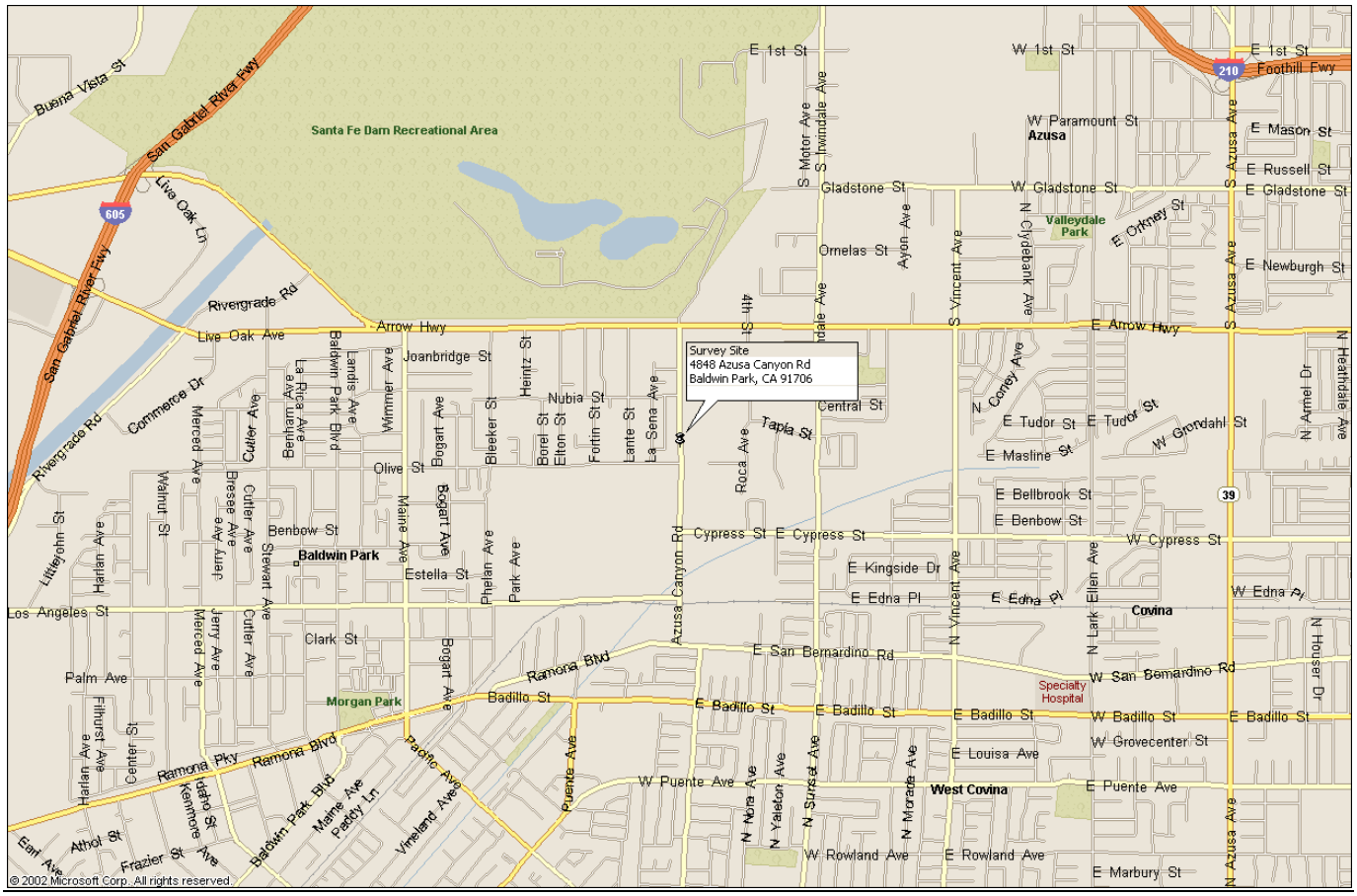

FIGURE 1 –Site Location Map

Survey Design – The area to be surveyed, along with the specific borehole locations, were indicated in the field by the client. The magnetic gradiometer, line tracer, EM61, M-Scope and GPR were traversed systematically over each borehole along the eight lines of the standard search pattern (Figure 2), wherein, there are two sets of three parallel lines, mutually orthogonal, and two diagonals, all centered on the marked drill location. Adjacent parallel lines are approximately 5 feet apart, and each line is approximately 20 feet long, access permitting. Other traverses were taken, access permitting, for detailing and confirmation where anomalous conditions were found.

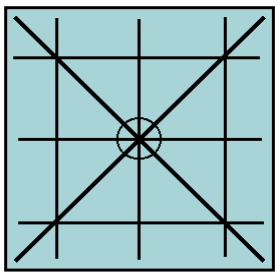

Figure 2: Standard search pattern around target

Hard copy of the EM data was not acquired, that is, discrete readings on the nodes of a grid were not recorded that could be put into a contoured map format. Rather, the instruments' meters were read continuously, and in real-time, during each traverse. This free-traversing method allowed for immediate detection of anomalous objects and facilitated the opportunity to investigate them further, without first having to download data in the office. The lack of hard copy for EM data sets does not degrade the quality of the survey in any way. Hard copy merely provides a basis for report documentation of these geophysical fields, if such documentation is needed.

The line tracers were used to impress signals onto pipes, generally through accessible risers and tracer wires when present, to delineate the lines' locations and orientations. The instruments were also used in passive mode, configured to detect 60 Hz electrical signals and other common radio-frequency signals.

A Geonic's model EM61 and a Fischer M-Scope was used for the EM sampling. A Sensors and Software Noggin Ground Penetrating Radar unit with a 500 MHz antenna produced the radar images. The magnetic gradiometer was a Schonstedt GA-52, and a Metrotech 9890 and RIDGID SR-60 SeekTech utility locator rounded out the tools applied.

Brief Description of the Geophysical Methods Applied - The line locator is used to passively detect energized high voltage electric lines and electrical conduit (50-60 Hz), VLF signals (14-22 kHz), as well as to actively trace other utilities. Where risers are present, the utility locator transmitter can be connected directly to the object, and a signal (9.8-82 kHz) is sent traveling along the conductor, pipe, conduit, etc. In the absence of a riser, the transmitter can be used to impress an input signal on the utility by induction. In either case, the receiver unit is tuned to the input signal, and is used to actively trace the signal along the pipe's surface projection.

The magnetic gradiometer has two flux gate magnetic fixed sensors that are passed closely to and over the ground. When not in close proximity to a magnetic object, that is, only in the earth's field, the instrument emits a sound signal at a low frequency. When the instrument passes over a buried iron or steel object, so that locally there is a high magnetic gradient, the frequency of the emitted sound increases. The frequency is a function of the gradient between the two sensors.

The EM61 instrument is a high resolution, time-domain device for detecting buried conductive objects. It consists of a powerful transmitter that generates a pulsed primary magnetic field when its coils are energized, which induces eddy currents in nearby conductive objects. The decay of the eddy currents, following the input pulse, is measured by the coils, which in turn serve as receiver coils. The decay rate is measured for two coils, mounted concentrically, one above the other. By making the measurements at a relatively long time interval (measured in milliseconds) after termination of the primary pulse, the response is nearly independent of the electrical conductivity of the ground. Thus, the instrument is a super-sensitive metal detector. Due to its unique coil arrangement, the response curve is a single well-defined positive peak directly over a buried conductive object. This facilitates quick and accurate location of targets.

The GPR instrument beams energy into the ground from its transducer/antenna, in the form of electromagnetic waves. A portion of this energy is reflected back to the antenna at a boundary in the subsurface across which there is an electrical contrast. The instrument produces a continuous record of the reflected energy as the antenna is traversed across the ground surface. The greater the electrical contrast, the higher the amplitude of the returned energy. The radar wave travels at a velocity unique to the material properties of the ground being investigated, and when these velocities are known, the two-way travel times can be converted to depth. The depth of penetration and image resolution produced are a function of ground electrical conductivity and dielectric constant.

The M-Scope device energizes the ground by producing an alternating primary magnetic field with AC current in a transmitting coil. If conducting materials are within the area of influence of the primary field, AC eddy currents are induced to flow in the conductors. A receiving coil senses the secondary magnetic field produced by these eddy currents, and outputs the response to a meter in the form of ground conductivity values for the M-Scope. The strength of the secondary field is a function of the conductivity of the object, say a pipe, tank or cluster of drums, its size, and its depth and position relative to the instrument's two coils. Conductive objects, to a depth of approximately 7 feet for the M-Scope are sensed. The devices are also somewhat focused; that is, they are more sensitive to conductors below the instrument than they are to conductors off to the side.

Interpretation and Conclusions - The interpretation took place in real time as the survey progressed, and accordingly, the findings of our investigation were marked on the ground cover with spray chalk paint at the site, and further documented with site photographs of each surveyed area (Figures 3-31).

The EM and magnetic instruments were effective at locating and delineating metallic objects and utilities over the search area. Most obstructions were removed from the site; however, there were still some areas of the survey that were in close proximity to reinforced concrete, above ground debris or other above ground metallic objects. In these areas (five feet and closer to any structure) the GPR and the line tracer were the main tools applied to the search.

GPR was useful at detecting both metallic and non-metallic lines and utilities. According to principles of physics, radar penetration is a function of soil conductivity and dielectric constant. At this site, local conditions were unfavorable for radar penetration due to the nature of the soil and materials covering the survey areas. This resulted in radar penetration down to approximately 2.0 feet bgs.

Piping and utilities detected during the survey were marked with spray chalk paint on the ground cover, using green for sanitary sewer/storm drain, blue for water, orange for anomaly, red for electric, yellow for gas and white for lines of unknown utility type.

Once all detectable buried cultural objects were marked and accounted for, our findings were discussed in the field with the client, at the conclusion of the survey. After our findings were discussed each borehole was then marked cleared by Subsurface Surveys and Associates with a white circle and a yellow "SSS".

There was a possible backfilled excavation in the vicinity of the boreholes shown in Figures 6, 7 and 8. These boreholes were located around the outer perimeter of a storage shed. As the radar system was traversed toward the building the underground soil conditions changed similarly to backfilled excavation-like images. Within the marked boundaries of this anomaly, there were no detectable underground metallic objects.

There were three additional GPR Anomalies detected within the surveyed areas (Figures 22, 24 and 25). As per information provided in the field by the client these anomalous conditions are the locale of three former underground storage tanks. A backfilled excavation-like image was not observed with the radar system however, the newer concrete pad is suggestive of previous construction and/or digging activities. Boreholes were positioned near and around these marked out anomalies. Please refer to the photographs along with the markings in the field for a better representation of our findings.

Limitations and Further Recommendations - It should be understood that limitations inherent in geophysical instruments and/or surveying techniques exist at all sites, and nearly all sites exhibit conditions under which instruments might not perform optimally. Consequently, the detection of buried objects in all circumstances **cannot be guaranteed**. Such limitations are numerous and include, but are not limited to, rebar-reinforced ground cover, abrupt changes in ground cover type, above-ground obstacles preventing full traverses or traverses in one direction only, above-ground conductive objects interfering with instrument signal, nearby powerlines or EM transmitters, highly conductive background soil conditions, limiting GPR penetration, non-metallic targets, shallower or larger objects shielding deeper or smaller targets, tracing signal jumping from one line to another, and inaccessible risers, cleanouts, valve boxes, and manholes. If one or more geophysical instrument is rendered ineffective and cannot be utilized, the quality of the survey can be somewhat degraded.

For the above reasons, and in the interest of maximum safety, we encourage our clients to take advantage of Underground Service Alert (USA), Dig Alert, or other similar services, when possible. Furthermore, we recommend hand-auguring and the use of a drilling method known as air knifing and vacuum extraction, when feasible or if applicable to this project. These methods may significantly limit damage to underground pipes, conduits, and utilities that might not have been detectable during the course of this survey. Please bear in mind, that geophysical surveying is only one of several levels of protection that is available to our clients.

SubSurface Surveys may include maps in some reports. While they are an accurate general representation of the site and our findings, they are not of engineering quality (i.e., measured and mapped by a licensed land surveyor).

SubSurface Surveys and Associates makes no guarantee either expressed or implied regarding the accuracy of the findings and interpretations present. And, in no event will SubSurface Surveys and Associates be liable for any direct, indirect, special, incidental, or consequential damages resulting from interpretations and opinions presented herewith.

All data acquired in these surveys are in confidential file in this office, and are available for review by your staff, or by us at your request, at any time. We appreciate the opportunity to participate in this project. Please call, if there are questions.

Bret Herman
Staff Geophysicist

Travis Crosby, GP# 1044
Staff Geophysicist

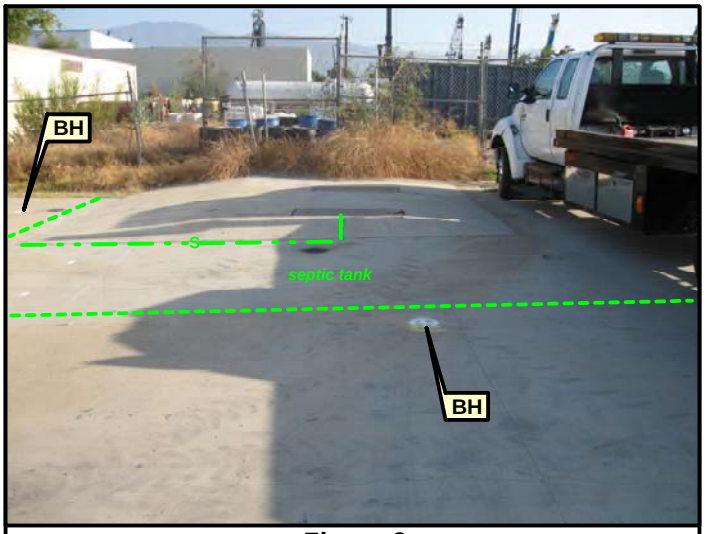

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8

Sub Surface Surveys	SITE: **4848 Azusa Canyon Road** **Baldwin Park, California**	TITLE: **Site Photographs** PREPARED FOR: **AMEC**	SURVEY DATE: **August 16th, 2013** SSS PROJECT NO: **13-354**

Figure 9

Figure 10

Figure 11

Figure 12

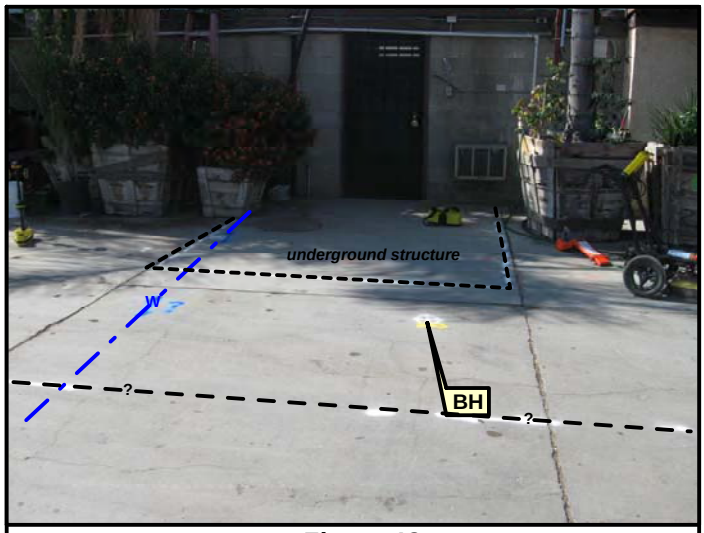

Figure 13

Figure 14

Sub Surface Surveys	SITE: **4848 Azusa Canyon Road** **Baldwin Park, California**	TITLE: **Site Photographs**	SURVEY DATE: **August 16th, 2013**
		PREPARED FOR: **AMEC**	SSS PROJECT NO: **13-354**

Figure 15

Figure 16

Figure 17

Figure 18

Figure 19

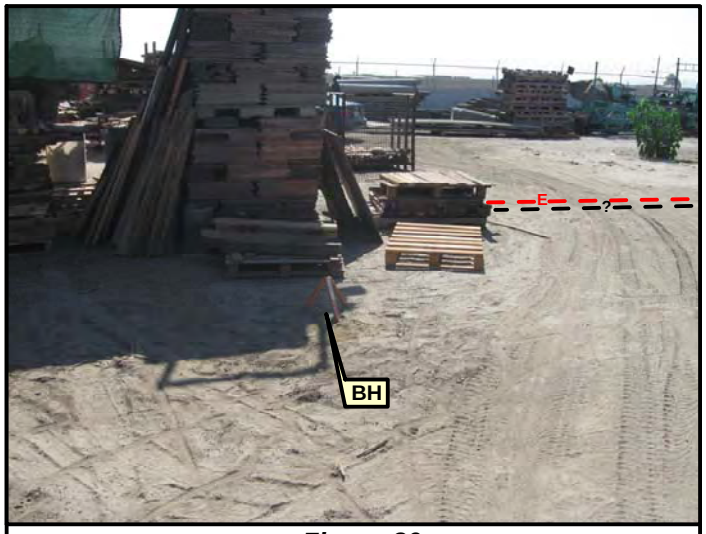

Figure 20

Sub Surface Surveys	SITE: **4848 Azusa Canyon Road** **Baldwin Park, California**	TITLE: **Site Photographs**	SURVEY DATE: **August 16th, 2013**
		PREPARED FOR: **AMEC**	SSS PROJECT NO: **13-354**

Figure 21

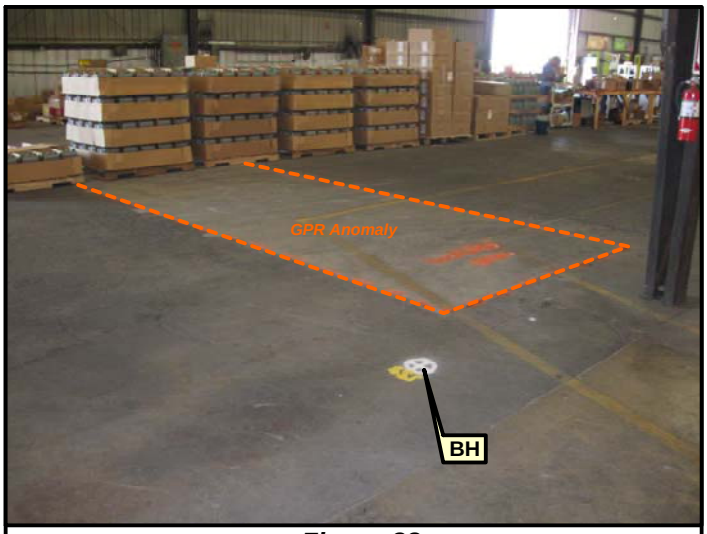

Figure 22

Figure 23

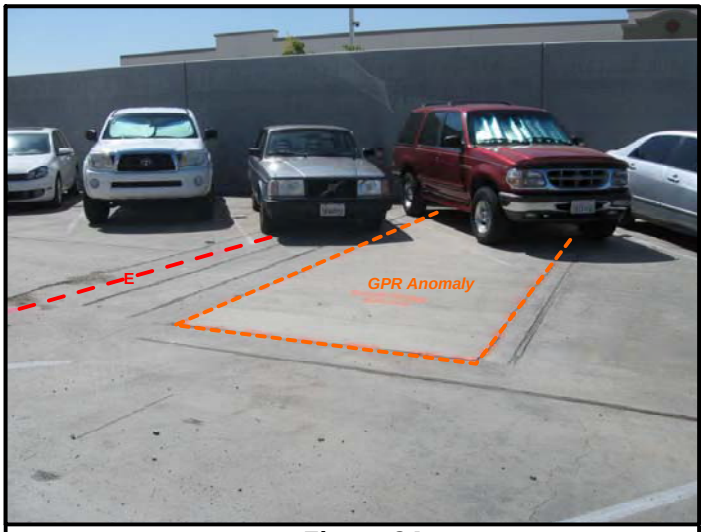

Figure 24

Figure 25

Figure 26

Sub Surface Surveys	SITE: **4848 Azusa Canyon Road** **Baldwin Park, California**	TITLE: **Site Photographs**	SURVEY DATE: **August 16th, 2013**
		PREPARED FOR: **AMEC**	SSS PROJECT NO: **13-354**

Figure 27

Figure 28

Figure 29

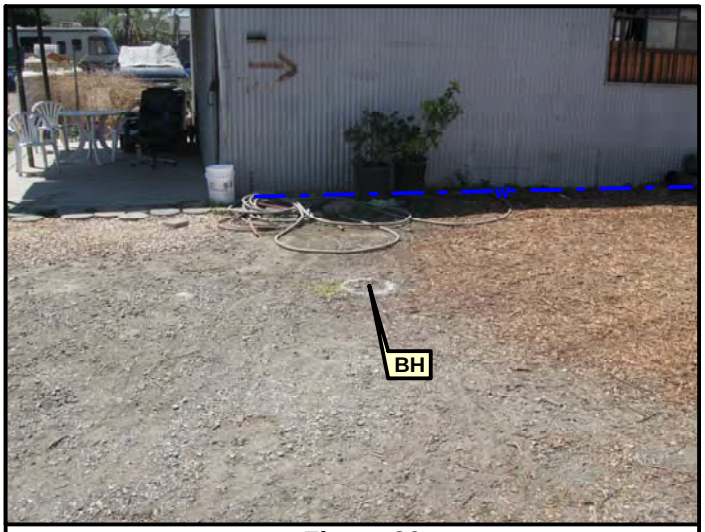

Figure 30

Figure 31

NO PHOTO

Sub Surface Surveys	SITE: **4848 Azusa Canyon Road Baldwin Park, California**	TITLE: **Site Photographs**	SURVEY DATE: **August 16th, 2013**
		PREPARED FOR: **AMEC**	SSS PROJECT NO: **13-354**

APPENDIX B

Laboratory Data

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 13-08-1572

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Phase I Update - Irwindale / IR13164320

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 09/27/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Phase I Update - Irwindale / IR13164320
Work Order Number: 13-08-1572

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4 Quality Control Sample Data. 6
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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-08-1572 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 08/22/13. They were assigned to Work Order 13-08-1572.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-08-1572
		Project Name:	Phase I Update - Irwindale / IR13164320
		PO Number:	C013101359
		Date/Time Received:	08/22/13 15:18
		Number of Containers:	73
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SV8-1	13-08-1572-1	08/20/13 08:50	4	Solid
SV9-5	13-08-1572-2	08/20/13 09:10	4	Solid
SB2-1	13-08-1572-3	08/20/13 09:45	1	Solid
SB2-3	13-08-1572-4	08/20/13 09:50	1	Solid
SV7-1	13-08-1572-5	08/20/13 10:00	4	Solid
SV7-5	13-08-1572-6	08/20/13 10:05	4	Solid
SV10-1	13-08-1572-7	08/20/13 11:30	4	Solid
SV10-5	13-08-1572-8	08/20/13 11:35	4	Solid
SB3-1	13-08-1572-9	08/20/13 13:10	1	Solid
SB3-3	13-08-1572-10	08/20/13 13:15	1	Solid
SV18-1	13-08-1572-11	08/20/13 13:40	4	Solid
SV18-5	13-08-1572-12	08/20/13 13:45	4	Solid
SV20-1	13-08-1572-13	08/20/13 14:40	4	Solid
SV20-5	13-08-1572-14	08/20/13 14:45	5	Solid
SV16-1	13-08-1572-15	08/20/13 15:30	5	Solid
SV16-5	13-08-1572-16	08/20/13 15:45	5	Solid
QCTB-082013	13-08-1572-17	08/20/13 15:50	2	Aqueous
QCEB-082013	13-08-1572-18	08/20/13 16:00	3	Aqueous
SB4-1	13-08-1572-19	08/21/13 09:40	1	Solid
SB4-3	13-08-1572-20	08/21/13 09:45	1	Solid
SV22-3	13-08-1572-21	08/21/13 10:40	5	Solid
SV22-5	13-08-1572-22	08/21/13 10:45	1	Solid
SB1-1	13-08-1572-23	08/21/13 13:10	1	Solid
SB1-3	13-08-1572-24	08/21/13 13:15	1	Solid
QCEB-082113	13-08-1572-25	08/21/13 15:00	3	Aqueous

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	Cartridge
		Method:	EPA 314.0 (M)
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV7-5	**13-08-1572-6-A**	**08/20/13 10:05**	**Solid**	**IC 13**	**09/17/13**	**09/21/13 17:54**	**130921L01**

Parameter	Result	RL	DF	Qualifiers
Perchlorate	ND	20	1	

Parameter	Result	RL	DF	Qualifiers
Perchlorate	ND	20	1	

Parameter	Result	RL	DF	Qualifiers
Perchlorate	ND	20	1	

Parameter	Result	RL	DF	Qualifiers
Perchlorate	ND	20	1	

Parameter	Result	RL	DF	Qualifiers
Perchlorate	ND	20	1	

Parameter	Result	RL	DF	Qualifiers
Perchlorate	ND	20	1	

Parameter	Result	RL	DF	Qualifiers
Perchlorate	ND	20	1	

Parameter	Result	RL	DF	Qualifiers
Perchlorate	ND	20	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	Cartridge
		Method:	EPA 314.0 (M)
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV7-5	**Solid**	**IC 13**	**09/17/13**	**09/21/13 19:35**	**130921S01A**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Perchlorate	ND	500.0	483.0	97	488.3	98	80-120	1	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	Cartridge
		Method:	EPA 314.0 (M)
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-05-205-809	**Solid**	**IC 13**	**09/21/13 14:32**	**130921L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Perchlorate	250.0	253.4	101	85-115	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-08-1572

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 314.0 (M)	Cartridge	877	IC 13	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-08-1572

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 26670

PROJECT NAME: Phase I update - Irwindale			DATE: 08/20/13 PAGE 1 OF 2
PROJECT NUMBER: IR 13164320	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Sampler drop off at lab	LABORATORY CONTACT: Stephen Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	VOCs (8260B)	TPHcc (8015)*	Metals (6010B/7471A)	PCBs (8082)		Lithium		Bromide			Pesticides/Herbicides (8081/8141/8151)			Perchlorate (314.0) TN 9/17/13	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
08/20/13	850	SV8-1	X	X	X		X										5035kit, 8 oz jar	S		**	✓		4	
	910	SV9-5	X	X	X		X										↓	S		**	✓		4	
	945	SB2-1											X				8 oz jar	S		–	✓		1	
	950	SB2-3											X				↓	S		–	✓		1	
	1000	SV7-1						X		X					TN 9/17		5035 kit 8 oz jar	S		**	✓		4	
	1005	SV7-5						X		X						X		S		**	✓		4	
	1130	SV10-1	X	X	X		X	X		X					TN 9/17			S		**	✓		4	
	1135	SV10-5	X	X	X		X	X		X						X	↓	S		**	✓		4	
	1310	SB3-1											X				4 oz jars	S		–	✓		1	
	1315	SB3-3											X				↓	S		–	✓		1	
	1340	SV18-1	X	X	X		X								TN 9/17		5035kit, 8 oz jar	S		**	✓		4	
	1345	SV18-5	X	X	X		X									X	↓	S		**	✓		4	
	1440	SV20-1	X	X	X		X								TN 9/17		5035kit, 4 oz jars	S		**	✓		4	
	1445	SV20-5	X	X	X		X									X	5035kit, 4 oz jars	S		**	✓		5	
	1530	SV16-1*	X	X	X		X										↓			**	✓		5	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	08/22/13	15:18	SIGNATURE:	8/22/13	1518
PRINTED NAME:			PRINTED NAME:		
COMPANY: AMEC			COMPANY: CEL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 50

SAMPLING COMMENTS:

* TPH as carbon chain full range

** 5035 kit: 2 - NaHSO4 preserved 40 ml VOAs, 1 - MeOH preserved 40 ml VOA

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CHAIN-OF-CUSTODY RECORD

NB 26671

PROJECT NAME: Phase I update - Irvindale			DATE: 08/20/2013 PAGE 2 OF 2
PROJECT NUMBER: IR 131164320	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS:
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Sampler drop off at lab	LABORATORY CONTACT: Stephen Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	VOCs (SPA 8260B)	TPHcc (8015) *	Metals (6010B)	7471A		PCBs (8082)		Lithium		Bromide	HOLD		Pesticides/Herbicides	8081/8141/8151	Perchlorate (314.0) 9/17/13	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
08/20/13	1545	~~SV16-2~~ SV16-5	X	X	X			X		X	TN					TN 9/17	X	5035 Kit 4 oz jar	S		* *	✓		5	
	1550	QCTB-082013											X					40mL VOA	W		HCL	✓		2	
	1600	QCEB-082013											X					↓	W		HCL	✓		3	
08/21/2013	940	SB4-1													X			4 oz jar	S		-	✓		1	
	945	SB4-3													X			↓	S		-	✓		1	
	1040	SV22-3	X													TN 9/17		5035 Kit, 4 oz jar	S		* *	✓		5	
	1045	SV22-5											X				X	4 oz jar	S		-	✓		1	
	1310	SB1-1													X			4 oz jar	S		-	✓		1	
	1315	SB1-3													X	TN 9/17	X	4 oz jar	S		-	✓		1	
↓	1500	QCEB-082113											X					40 mL VOA	W	–	HCL	✓		3	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	8/22/13	15:18	SIGNATURE: [signature]	8/22/13	1518
PRINTED NAME: Thor Nding			PRINTED NAME: Yau Liao		
COMPANY: AMEC			COMPANY: CTL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 23

SAMPLING COMMENTS:

* & ** : See page 1

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CHAIN-OF-CUSTODY RECORD

NB 26670

PROJECT NAME: Phase I update - Irwindale

DATE: 08/20/13 PAGE 1 OF 2

PROJECT NUMBER: IR 13164320

RESULTS TO: Linda Conlan

TURNAROUND TIME: Standard

SAMPLE SHIPMENT METHOD: Sampler drop off at lab

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Stephen Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS: 13-08-1572

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	VOCs (8260B)	TPHcc (8015)*	Metals (6010B/7471A)	PCBs (8082)		Lithium		Bromide			Pesticides/Herbicides (8081/8141/8151)			CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	08/20/13	850	SV8-1	X	X	X		X									5035kit, 8oz jar	S		**	✓		4	
2		910	SV9-5	X	X	X		X									↓	S		**	✓		4	
3		945	SB2-1											X			8oz jar	S		–	✓		1	
4		950	SB2-3											X			↓	S		–	✓		1	
5		1000	SV7-1						X		X						5035kit 8oz jar	S		**	✓		4	
6		1005	SV7-5						X		X						↓	S		**	✓		4	
7		1130	SV10-1	X	X	X		X		X		X					↓	S		**	✓		4	
8		1135	SV10-5	X	X	X		X		X		X					↓	S		**	✓		4	
9		1310	SB3-1											X			4oz jars	S		–	✓		1	
10		1315	SB3-3											X			↓	S		–	✓		1	
11		1340	SV18-1	X	X	X		X									5035kit, 8oz jar	S		**	✓		4	
12		1345	SV18-5	X	X	X		X									↓	S		**	✓		4	
13		1440	SV20-1	X	X	X		X									5035kit, 8oz jars	S		**	✓		4	
14		1445	SV20-5	X	X	X		X									5035kit, 4oz jars	S		**	✓		5	
15		1530	SV16-1	X	X	X		X									↓			**	✓		5	

TOTAL NUMBER OF CONTAINERS: 50

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	08/22/13	15:18	SIGNATURE:	8/22/13	1518
PRINTED NAME: Thet Naing			PRINTED NAME: Yau Liang		
COMPANY: AMEC			COMPANY: CCL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

SAMPLING COMMENTS:

* TPH as carbon chain full range

** 5035 kit: 2 - NaHSO4 preserved 40mL VOAs, 1 - MeOH preserved 40 mL VOA

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CHAIN-OF-CUSTODY RECORD

NB 26671

PROJECT NAME: Phase I update - Irwindale			DATE: 08/20/2013 PAGE 2 OF 2
PROJECT NUMBER: IR131164320	LABORATORY NAME: Calscience	CLIENT INFORMATION:	REPORTING REQUIREMENTS: 1572
RESULTS TO: Linda Conlan	LABORATORY ADDRESS:		
TURNAROUND TIME: Standard			
SAMPLE SHIPMENT METHOD: Sampler dropped at lab	LABORATORY CONTACT: Stephen Nowak		GEOTRACKER REQUIRED YES NO
	LABORATORY PHONE NUMBER:		SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	VOCs (SPA8260B) *	TPHcc (8015)	Metals (6010B)	7471A	PCBs (8082)	Lithium		Bromide	HOLD	Pesticides/Herbicides	8081/8141/8151	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	08/20/13	1545	~~SV16-2~~ SV16-5	X	X	X		X	X	TN					5035Kit, 4oz jar	S		**	✓		5	
17		1550	QCTB-082013									X			40mL VOA	W		HCL	✓		2	
18		1600	QCEB-082013									X			↓	W		HCL	✓		3	
19	08/21/2013	940	SB4-1										X		4oz jar	S		-	✓		1	
20		945	SB4-3										X		↓	S		-	✓		1	
21		1040	SV22-3	X											5035Kit, 4oz jar	S		**	✓		5	
22		1045	SV22-5									X			4oz jar	S		-	✓		1	
23		1310	SB1-1										X		4oz jar	S		-	✓		1	
24		1315	SB1-3										X		4oz jar	S		-	✓		1	
25	✓	1500	QCEB-082113									X			40mL VOA	W	-	HCL	✓		3	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	08/22/13	15:18	SIGNATURE: [signature]	8/22/13	1518
PRINTED NAME: Mat Naing			PRINTED NAME: Yan Liao		
COMPANY: AMEC			COMPANY: CA		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 23

SAMPLING COMMENTS:

* & ** : See page 1

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-08-1572

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 08/22/13

TEMPERATURE: Thermometer ID: SC3 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.0 °C - 0.2 °C (CF) = 2.8 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: YL

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: YL

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: [illegible]

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑ 4ozCGJ (2) ☑ 8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☑ TerraCores® (3) ☐_____

Aqueous: ☐VOA ☑ VOAh (3) ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:** 130812A **Labeled/Checked by:** [illegible]

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** [illegible]

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** [illegible]

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Chatsworth
California 91311
Tel: (818) 998-5547
Fax: (818) 998-7258

August 28, 2013

Rose Williams

InterPhase Environmental, Inc.

6200 Peachtree St.

Los Angeles, CA 90040

Re : Irwindale

MB53964 / 3H23002

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 08/21/13 09:00 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Allen Aminian

QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
VOCs by GC/MS Vapor - FIELD					
Ambient Air	3H23002-01	Vapor	0	08/21/13 09:00	08/21/13 09:00
SV10-5 PV1	3H23002-02	Vapor	0	08/21/13 09:25	08/21/13 09:00
SV10-5 PV3	3H23002-03	Vapor	0	08/21/13 09:55	08/21/13 09:00
SV10-5 PV10	3H23002-04	Vapor	0	08/21/13 10:20	08/21/13 09:00
SV21-5 PV3	3H23002-05	Vapor	0	08/21/13 10:48	08/21/13 09:00
SV23-5 PV3	3H23002-06	Vapor	0	08/21/13 11:21	08/21/13 09:00
SV9-5 PV3	3H23002-07	Vapor	0	08/21/13 11:45	08/21/13 09:00
SV9-5DUP PV3	3H23002-08	Vapor	0	08/21/13 11:45	08/21/13 09:00
SV24-5 PV3	3H23002-09	Vapor	0	08/21/13 12:43	08/21/13 09:00
SV22-5 PV3	3H23002-10	Vapor	0	08/21/13 13:10	08/21/13 09:00
SV8-5 PV3	3H23002-11	Vapor	0	08/21/13 13:35	08/21/13 09:00
SV7-5 PV3	3H23002-12	Vapor	0	08/21/13 14:05	08/21/13 09:00
SV17-5 PV3	3H23002-13	Vapor	0	08/21/13 14:28	08/21/13 09:00
SV16-5 PV3	3H23002-14	Vapor	0	08/21/13 14:58	08/21/13 09:00
SV15-5 PV3	3H23002-15	Vapor	0	08/21/13 15:23	08/21/13 09:00
SV20-5 PV3	3H23002-16	Vapor	0	08/21/13 15:48	08/21/13 09:00
SV5-5 PV3	3H23002-17	Vapor	0	08/21/13 16:20	08/21/13 09:00
SV5-5DUP PV3	3H23002-18	Vapor	0	08/21/13 16:20	08/21/13 09:00
Ambient Air	3H23002-19	Vapor	0	08/22/13 08:35	08/21/13 09:00

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
SV18-5 PV3	3H23002-20	Vapor	0	08/22/13 09:00	08/21/13 09:00
SV19-5 PV3	3H23002-21	Vapor	0	08/22/13 09:28	08/21/13 09:00
SV6-5 PV3	3H23002-22	Vapor	0	08/22/13 09:52	08/21/13 09:00
SV13-5 PV3	3H23002-23	Vapor	0	08/22/13 10:18	08/21/13 09:00
SV11-5 PV3	3H23002-24	Vapor	0	08/22/13 10:45	08/21/13 09:00
SV12-5 PV3	3H23002-25	Vapor	0	08/22/13 11:10	08/21/13 09:00
SV12-5DUP PV3	3H23002-26	Vapor	0	08/22/13 11:10	08/21/13 09:00
SV1-5 PV3	3H23002-27	Vapor	0	08/22/13 12:00	08/21/13 09:00
SV4-5 PV3	3H23002-28	Vapor	0	08/22/13 12:30	08/21/13 09:00
SV2-5 PV3	3H23002-29	Vapor	0	08/22/13 12:55	08/21/13 09:00
SV3-5 PV3	3H23002-30	Vapor	0	08/22/13 13:20	08/21/13 09:00

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

Ambient Air

3H23002-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

Ambient Air

3H23002-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

Ambient Air

3H23002-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

Ambient Air

3H23002-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	106 %	70-130
Dibromofluoromethane	110 %	70-130
Toluene-d8	103 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV1

3H23002-02 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.12	ug/L	0.60	<0.038	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	**3.1**	ug/L	0.40	**0.49**	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	**0.32**	ug/L	1.0	**0.066**	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV1

3H23002-02 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV1

3H23002-02 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV1

3H23002-02 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.040	ug/L	0.20	<0.016	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	101 %	70-130
Dibromofluoromethane	113 %	70-130
Toluene-d8	105 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV3

3H23002-03 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.12	ug/L	0.60	<0.038	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	**5.9**	ug/L	0.40	**0.94**	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	**0.59**	ug/L	1.0	**0.12**	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV3

3H23002-03 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	**12**	ug/L	100	**2.9**	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV3

3H23002-03 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	**0.25**	ug/L	1.0	**0.046**	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	**0.10**	ug/L	1.0	**0.027**	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	**0.16**	ug/L	1.0	**0.028**	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV3

3H23002-03 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.040	ug/L	0.20	<0.016	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	**0.14**	ug/L	1.0	**0.032**	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	105 %	70-130
Dibromofluoromethane	111 %	70-130
Toluene-d8	106 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV10

3H23002-04 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.12	ug/L	0.60	<0.038	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	**5.6**	ug/L	0.40	**0.89**	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	**0.60**	ug/L	1.0	**0.12**	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV10

3H23002-04 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	**11**	ug/L	100	**2.7**	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV10

3H23002-04 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	**0.26**	ug/L	1.0	**0.047**	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	**0.15**	ug/L	1.0	**0.027**	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV10-5 PV10

3H23002-04 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.040	ug/L	0.20	<0.016	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	**0.14**	ug/L	1.0	**0.032**	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	103 %	70-130
Dibromofluoromethane	114 %	70-130
Toluene-d8	104 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV21-5 PV3

3H23002-05 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV21-5 PV3

3H23002-05 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV21-5 PV3

3H23002-05 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV21-5 PV3

3H23002-05 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	103 %	70-130
Dibromofluoromethane	110 %	70-130
Toluene-d8	106 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV23-5 PV3

3H23002-06 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV23-5 PV3

3H23002-06 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV23-5 PV3

3H23002-06 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV23-5 PV3

3H23002-06 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	100 %	70-130
Dibromofluoromethane	101 %	70-130
Toluene-d8	99.6 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV9-5 PV3

3H23002-07 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	**0.33**	ug/L	0.40	**0.052**	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV9-5 PV3

3H23002-07 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV9-5 PV3

3H23002-07 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV9-5 PV3

3H23002-07 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	98.7 %	70-130
Dibromofluoromethane	115 %	70-130
Toluene-d8	99.7 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV9-5DUP PV3

3H23002-08 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	**0.30**	ug/L	0.40	**0.048**	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV9-5DUP PV3

3H23002-08 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV9-5DUP PV3

3H23002-08 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV9-5DUP PV3

3H23002-08 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	104 %	70-130
Dibromofluoromethane	106 %	70-130
Toluene-d8	101 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV24-5 PV3

3H23002-09 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV24-5 PV3

3H23002-09 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV24-5 PV3

3H23002-09 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV24-5 PV3

3H23002-09 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	108 %	70-130
Dibromofluoromethane	81.9 %	70-130
Toluene-d8	100 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV22-5 PV3

3H23002-10 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV22-5 PV3

3H23002-10 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV22-5 PV3

3H23002-10 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV22-5 PV3

3H23002-10 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	103 %	70-130
Dibromofluoromethane	111 %	70-130
Toluene-d8	101 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV8-5 PV3

3H23002-11 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	**0.31**	ug/L	0.40	**0.049**	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV8-5 PV3

3H23002-11 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV8-5 PV3

3H23002-11 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV8-5 PV3

3H23002-11 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	104 %	70-130
Dibromofluoromethane	108 %	70-130
Toluene-d8	100 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV7-5 PV3

3H23002-12 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV7-5 PV3

3H23002-12 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV7-5 PV3

3H23002-12 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV7-5 PV3

3H23002-12 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	104 %	70-130
Dibromofluoromethane	110 %	70-130
Toluene-d8	101 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV17-5 PV3

3H23002-13 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV17-5 PV3

3H23002-13 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV17-5 PV3

3H23002-13 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV17-5 PV3

3H23002-13 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	100 %	70-130
Dibromofluoromethane	106 %	70-130
Toluene-d8	102 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV16-5 PV3

3H23002-14 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV16-5 PV3

3H23002-14 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV16-5 PV3

3H23002-14 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV16-5 PV3

3H23002-14 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	103 %	70-130
Dibromofluoromethane	110 %	70-130
Toluene-d8	102 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV15-5 PV3

3H23002-15 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV15-5 PV3

3H23002-15 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV15-5 PV3

3H23002-15 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV15-5 PV3

3H23002-15 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	102 %	70-130
Dibromofluoromethane	113 %	70-130
Toluene-d8	106 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV20-5 PV3

3H23002-16 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV20-5 PV3

3H23002-16 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV20-5 PV3

3H23002-16 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV20-5 PV3

3H23002-16 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	99.3 %	70-130
Dibromofluoromethane	110 %	70-130
Toluene-d8	107 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV5-5 PV3

3H23002-17 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV5-5 PV3

3H23002-17 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV5-5 PV3

3H23002-17 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	**0.24**	ug/L	1.0	**0.035**	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	**0.16**	ug/L	1.0	**0.028**	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV5-5 PV3

3H23002-17 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	99.4 %	70-130
Dibromofluoromethane	109 %	70-130
Toluene-d8	100 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV5-5DUP PV3

3H23002-18 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV5-5DUP PV3

3H23002-18 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV5-5DUP PV3

3H23002-18 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	**0.23**	ug/L	1.0	**0.034**	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	**0.14**	ug/L	1.0	**0.025**	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/21/13
Dilution:	0.1	**Prepared:**	08/21/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/21/13

SV5-5DUP PV3

3H23002-18 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	99.7 %	70-130
Dibromofluoromethane	105 %	70-130
Toluene-d8	111 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

Ambient Air

3H23002-19 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

Ambient Air

3H23002-19 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

Ambient Air

3H23002-19 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

Ambient Air

3H23002-19 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	105 %	70-130
Dibromofluoromethane	115 %	70-130
Toluene-d8	110 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV18-5 PV3

3H23002-20 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV18-5 PV3

3H23002-20 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV18-5 PV3

3H23002-20 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	**0.10**	ug/L	1.0	**0.018**	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV18-5 PV3

3H23002-20 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	102 %	70-130
Dibromofluoromethane	118 %	70-130
Toluene-d8	99.4 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV19-5 PV3

3H23002-21 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV19-5 PV3

3H23002-21 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV19-5 PV3

3H23002-21 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV19-5 PV3

3H23002-21 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	104 %	70-130
Dibromofluoromethane	116 %	70-130
Toluene-d8	102 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV6-5 PV3

3H23002-22 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	**1.3**	ug/L	10	**0.55**	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV6-5 PV3

3H23002-22 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	**11**	ug/L	100	**2.7**	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV6-5 PV3

3H23002-22 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	**0.93**	ug/L	1.0	**0.17**	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV6-5 PV3

3H23002-22 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	97.8 %	70-130
Dibromofluoromethane	116 %	70-130
Toluene-d8	109 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV13-5 PV3

3H23002-23 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV13-5 PV3

3H23002-23 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV13-5 PV3

3H23002-23 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV13-5 PV3

3H23002-23 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	**0.16**	ug/L	1.0	**0.037**	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	101 %	70-130
Dibromofluoromethane	114 %	70-130
Toluene-d8	107 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV11-5 PV3

3H23002-24 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV11-5 PV3

3H23002-24 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV11-5 PV3

3H23002-24 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV11-5 PV3

3H23002-24 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	101 %	70-130
Dibromofluoromethane	111 %	70-130
Toluene-d8	115 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV12-5 PV3

3H23002-25 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV12-5 PV3

3H23002-25 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV12-5 PV3

3H23002-25 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV12-5 PV3

3H23002-25 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	102 %	70-130
Dibromofluoromethane	113 %	70-130
Toluene-d8	109 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV12-5DUP PV3

3H23002-26 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV12-5DUP PV3

3H23002-26 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV12-5DUP PV3

3H23002-26 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV12-5DUP PV3

3H23002-26 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	101 %	70-130
Dibromofluoromethane	111 %	70-130
Toluene-d8	103 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV1-5 PV3

3H23002-27 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	<1.0	ug/L	10	<0.42	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV1-5 PV3

3H23002-27 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV1-5 PV3

3H23002-27 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV1-5 PV3

3H23002-27 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	103 %	70-130
Dibromofluoromethane	116 %	70-130
Toluene-d8	107 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV4-5 PV3

3H23002-28 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	**1.1**	ug/L	10	**0.46**	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV4-5 PV3

3H23002-28 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV4-5 PV3

3H23002-28 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV4-5 PV3

3H23002-28 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	100 %	70-130
Dibromofluoromethane	115 %	70-130
Toluene-d8	107 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV2-5 PV3

3H23002-29 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	**1.6**	ug/L	10	**0.67**	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	<0.040	ug/L	0.40	<0.0064	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV2-5 PV3

3H23002-29 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV2-5 PV3

3H23002-29 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV2-5 PV3

3H23002-29 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	100 %	70-130
Dibromofluoromethane	115 %	70-130
Toluene-d8	107 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV3-5 PV3

3H23002-30 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Acetone	**1.6**	ug/L	10	**0.67**	ppmv	4.2
Benzene	<0.060	ug/L	0.60	<0.019	ppmv	0.19
Bromobenzene	<0.10	ug/L	1.0	<0.016	ppmv	0.16
Bromochloromethane	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Bromodichloromethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Bromoform	<0.10	ug/L	1.0	<0.0097	ppmv	0.097
Bromomethane	<0.10	ug/L	1.0	<0.026	ppmv	0.26
2-Butanone (MEK)	<1.0	ug/L	10	<0.34	ppmv	3.4
n-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
sec-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
tert-Butylbenzene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Carbon Disulfide	<0.10	ug/L	1.0	<0.032	ppmv	0.32
Carbon Tetrachloride	**0.11**	ug/L	0.40	**0.017**	ppmv	0.064
Chlorobenzene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Chloroethane	<0.10	ug/L	1.0	<0.038	ppmv	0.38
Chloroform	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Chloromethane	<0.10	ug/L	1.0	<0.048	ppmv	0.48
2-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
4-Chlorotoluene	<0.10	ug/L	1.0	<0.019	ppmv	0.19
1,2-Dibromo-3-chloropropane	<0.10	ug/L	1.0	<0.010	ppmv	0.10
Dibromochloromethane	<0.10	ug/L	1.0	<0.012	ppmv	0.12

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV3-5 PV3

3H23002-30 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,2-Dibromoethane (EDB)	<0.10	ug/L	1.0	<0.013	ppmv	0.13
Dibromomethane	<0.10	ug/L	1.0	<0.014	ppmv	0.14
1,3-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,2-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,4-Dichlorobenzene	<0.10	ug/L	1.0	<0.017	ppmv	0.17
Dichlorodifluoromethane (R12)	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,1-Dichloroethane	<0.020	ug/L	0.20	<0.0049	ppmv	0.049
1,2-Dichloroethane (EDC)	<0.10	ug/L	1.0	<0.025	ppmv	0.25
1,1-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
cis-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
trans-1,2-Dichloroethylene	<0.10	ug/L	1.0	<0.025	ppmv	0.25
2,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,2-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,3-Dichloropropane	<0.10	ug/L	1.0	<0.022	ppmv	0.22
trans-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
cis-1,3-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
1,1-Dichloropropylene	<0.10	ug/L	1.0	<0.022	ppmv	0.22
Ethylbenzene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Gasoline Range Organics (GRO)	<10	ug/L	100	<2.4	ppmv	24
Hexachlorobutadiene	<0.10	ug/L	1.0	<0.0094	ppmv	0.094
2-Hexanone (MBK)	<1.0	ug/L	10	<0.24	ppmv	2.4

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV3-5 PV3

3H23002-30 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Isopropylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
4-Isopropyltoluene	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Methyl-tert-Butyl Ether (MTBE)	<0.50	ug/L	5.0	<0.14	ppmv	1.4
Methylene Chloride	<0.50	ug/L	5.0	<0.14	ppmv	1.4
4-Methyl-2-pentanone (MIBK)	<1.0	ug/L	10	<0.24	ppmv	2.4
Naphthalene	<0.060	ug/L	0.60	<0.011	ppmv	0.11
n-Propylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Styrene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
1,1,2,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
1,1,1,2-Tetrachloroethane	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Tetrachloroethylene (PCE)	<0.10	ug/L	1.0	<0.015	ppmv	0.15
Toluene	<0.10	ug/L	1.0	<0.027	ppmv	0.27
1,2,4-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,2,3-Trichlorobenzene	<0.10	ug/L	1.0	<0.013	ppmv	0.13
1,1,2-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,1,1-Trichloroethane	<0.10	ug/L	1.0	<0.018	ppmv	0.18
Trichloroethylene (TCE)	<0.10	ug/L	1.0	<0.019	ppmv	0.19
Trichlorofluoromethane (R11)	<0.10	ug/L	1.0	<0.018	ppmv	0.18
1,2,3-Trichloropropane	<0.10	ug/L	1.0	<0.017	ppmv	0.17
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	ug/L	5.0	<0.065	ppmv	0.65

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13
Matrix:	Vapor	**Sampled:**	08/22/13
Dilution:	0.1	**Prepared:**	08/22/13
Method:	VOCs in Vapor by GC/MS - Field	**Analyzed:**	08/22/13

SV3-5 PV3

3H23002-30 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
1,3,5-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
1,2,4-Trimethylbenzene	<0.10	ug/L	1.0	<0.020	ppmv	0.20
Vinyl chloride	<0.020	ug/L	0.20	<0.0078	ppmv	0.078
o-Xylene	<0.10	ug/L	1.0	<0.023	ppmv	0.23
m,p-Xylenes	<0.10	ug/L	1.0	<0.023	ppmv	0.23
Isopropanol (IPA)	<1.0	ug/L	10	<0.41	ppmv	4.1

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	98.5 %	70-130
Dibromofluoromethane	115 %	70-130
Toluene-d8	107 %	70-130

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
Blank (B3H2306-BLK1)				Prepared & Analyzed: 08/21/13						
Acetone	<1.0	1.0	ug/L							
Benzene	<0.060	0.060	ug/L							
Bromobenzene	<0.10	0.10	ug/L							
Bromochloromethane	<0.10	0.10	ug/L							
Bromodichloromethane	<0.10	0.10	ug/L							
Bromoform	<0.10	0.10	ug/L							
Bromomethane	<0.10	0.10	ug/L							
2-Butanone (MEK)	<1.0	1.0	ug/L							
n-Butylbenzene	<0.10	0.10	ug/L							
sec-Butylbenzene	<0.10	0.10	ug/L							
tert-Butylbenzene	<0.10	0.10	ug/L							
Carbon Disulfide	<0.10	0.10	ug/L							
Carbon Tetrachloride	<0.040	0.040	ug/L							
Chlorobenzene	<0.10	0.10	ug/L							
Chloroethane	<0.10	0.10	ug/L							
Chloroform	<0.10	0.10	ug/L							
Chloromethane	<0.10	0.10	ug/L							
2-Chlorotoluene	<0.10	0.10	ug/L							
4-Chlorotoluene	<0.10	0.10	ug/L							
1,2-Dibromo-3-chloropropane	<0.10	0.10	ug/L							
Dibromochloromethane	<0.10	0.10	ug/L							
1,2-Dibromoethane (EDB)	<0.10	0.10	ug/L							
Dibromomethane	<0.10	0.10	ug/L							
1,3-Dichlorobenzene	<0.10	0.10	ug/L							
1,2-Dichlorobenzene	<0.10	0.10	ug/L							
1,4-Dichlorobenzene	<0.10	0.10	ug/L							
Dichlorodifluoromethane (R12)	<0.10	0.10	ug/L							
1,1-Dichloroethane	<0.020	0.020	ug/L							
1,2-Dichloroethane (EDC)	<0.10	0.10	ug/L							
1,1-Dichloroethylene	<0.10	0.10	ug/L							
cis-1,2-Dichloroethylene	<0.10	0.10	ug/L							
trans-1,2-Dichloroethylene	<0.10	0.10	ug/L							

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
Blank (B3H2306-BLK1) Continued				Prepared & Analyzed: 08/21/13						
2,2-Dichloropropane	<0.10	0.10	ug/L							
1,2-Dichloropropane	<0.10	0.10	ug/L							
1,3-Dichloropropane	<0.10	0.10	ug/L							
trans-1,3-Dichloropropylene	<0.10	0.10	ug/L							
cis-1,3-Dichloropropylene	<0.10	0.10	ug/L							
1,1-Dichloropropylene	<0.10	0.10	ug/L							
Ethylbenzene	<0.10	0.10	ug/L							
Hexachlorobutadiene	<0.10	0.10	ug/L							
2-Hexanone (MBK)	<1.0	1.0	ug/L							
Isopropylbenzene	<0.10	0.10	ug/L							
4-Isopropyltoluene	<0.10	0.10	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<0.50	0.50	ug/L							
Methylene Chloride	<0.50	0.50	ug/L							
4-Methyl-2-pentanone (MIBK)	<1.0	1.0	ug/L							
Naphthalene	<0.060	0.060	ug/L							
n-Propylbenzene	<0.10	0.10	ug/L							
Styrene	<0.10	0.10	ug/L							
1,1,2,2-Tetrachloroethane	<0.10	0.10	ug/L							
1,1,1,2-Tetrachloroethane	<0.10	0.10	ug/L							
Tetrachloroethylene (PCE)	<0.10	0.10	ug/L							
Toluene	<0.10	0.10	ug/L							
1,2,4-Trichlorobenzene	<0.10	0.10	ug/L							
1,2,3-Trichlorobenzene	<0.10	0.10	ug/L							
1,1,2-Trichloroethane	<0.10	0.10	ug/L							
1,1,1-Trichloroethane	<0.10	0.10	ug/L							
Trichloroethylene (TCE)	<0.10	0.10	ug/L							
Trichlorofluoromethane (R11)	<0.10	0.10	ug/L							
1,2,3-Trichloropropane	<0.10	0.10	ug/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	0.50	ug/L							
1,3,5-Trimethylbenzene	<0.10	0.10	ug/L							
1,2,4-Trimethylbenzene	<0.10	0.10	ug/L							

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
Blank (B3H2306-BLK1) Continued				Prepared & Analyzed: 08/21/13						
Vinyl chloride	<0.020	0.020	ug/L							
o-Xylene	<0.10	0.10	ug/L							
m,p-Xylenes	<0.10	0.10	ug/L							
Isopropanol (IPA)	<10	10	ug/L							
Surrogate: 4-Bromofluorobenzene	*52.1*		*ug/L*	*50*		*104*	*70-130*			
Surrogate: Dibromofluoromethane	*53.2*		*ug/L*	*50*		*106*	*70-130*			
Surrogate: Toluene-d8	*51.7*		*ug/L*	*50*		*103*	*70-130*			
LCS (B3H2306-BS1)				Prepared & Analyzed: 08/21/13						
Acetone	**16.4**	10	ug/L	20		81.9	75-125		30	
Benzene	**20.5**	0.60	ug/L	20		103	75-125		30	
Bromobenzene	**18.3**	1.0	ug/L	20		91.7	75-125		30	
Bromochloromethane	**18.7**	1.0	ug/L	20		93.4	75-125		30	
Bromodichloromethane	**23.1**	1.0	ug/L	20		115	75-125		30	
Bromoform	**22.5**	1.0	ug/L	20		112	75-125		30	
Bromomethane	**16.2**	1.0	ug/L	20		81.0	75-125		30	
2-Butanone (MEK)	**19.7**	10	ug/L	20		98.3	75-125		30	
n-Butylbenzene	**18.8**	1.0	ug/L	20		93.8	75-125		30	
sec-Butylbenzene	**17.8**	1.0	ug/L	20		89.0	75-125		30	
tert-Butylbenzene	**17.2**	1.0	ug/L	20		86.2	75-125		30	
Carbon Disulfide	**16.1**	1.0	ug/L	20		80.3	75-125		30	
Carbon Tetrachloride	**17.6**	0.40	ug/L	20		87.8	75-125		30	
Chlorobenzene	**18.8**	1.0	ug/L	20		93.8	75-125		30	
Chloroethane	**19.2**	1.0	ug/L	20		96.2	75-125		30	
Chloroform	**19.8**	1.0	ug/L	20		98.8	75-125		30	
Chloromethane	**17.5**	1.0	ug/L	20		87.4	75-125		30	
2-Chlorotoluene	**17.9**	1.0	ug/L	20		89.7	75-125		30	
4-Chlorotoluene	**18.9**	1.0	ug/L	20		94.4	75-125		30	
1,2-Dibromo-3-chloropropane	**23.3**	1.0	ug/L	20		117	75-125		30	
Dibromochloromethane	**19.9**	1.0	ug/L	20		99.5	75-125		30	
1,2-Dibromoethane (EDB)	**20.3**	1.0	ug/L	20		101	75-125		30	
Dibromomethane	**23.7**	1.0	ug/L	20		118	75-125		30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
LCS (B3H2306-BS1) Continued				Prepared & Analyzed: 08/21/13						
1,3-Dichlorobenzene	**20.3**	1.0	ug/L	20		102	75-125		30	
1,2-Dichlorobenzene	**20.7**	1.0	ug/L	20		103	75-125		30	
1,4-Dichlorobenzene	**18.4**	1.0	ug/L	20		91.8	75-125		30	
Dichlorodifluoromethane (R12)	**16.1**	1.0	ug/L	20		80.6	75-125		30	
1,1-Dichloroethane	**19.4**	0.20	ug/L	20		96.8	75-125		30	
1,2-Dichloroethane (EDC)	**22.4**	1.0	ug/L	20		112	75-125		30	
1,1-Dichloroethylene	**17.2**	1.0	ug/L	20		86.2	75-125		30	
cis-1,2-Dichloroethylene	**19.0**	1.0	ug/L	20		94.8	75-125		30	
trans-1,2-Dichloroethylene	**16.8**	1.0	ug/L	20		84.2	75-125		30	
2,2-Dichloropropane	**16.8**	1.0	ug/L	20		84.0	75-125		30	
1,2-Dichloropropane	**22.2**	1.0	ug/L	20		111	75-125		30	
1,3-Dichloropropane	**23.1**	1.0	ug/L	20		115	75-125		30	
trans-1,3-Dichloropropylene	**19.9**	1.0	ug/L	20		99.5	75-125		30	
cis-1,3-Dichloropropylene	**21.4**	1.0	ug/L	20		107	75-125		30	
1,1-Dichloropropylene	**18.3**	1.0	ug/L	20		91.4	75-125		30	
Ethylbenzene	**17.7**	1.0	ug/L	20		88.5	75-125		30	
Hexachlorobutadiene	**18.0**	1.0	ug/L	20		90.0	75-125		30	
2-Hexanone (MBK)	**21.8**	10	ug/L	20		109	75-125		30	
Isopropylbenzene	**17.1**	1.0	ug/L	20		85.6	75-125		30	
4-Isopropyltoluene	**17.5**	1.0	ug/L	20		87.6	75-125		30	
Methyl-tert-Butyl Ether (MTBE)	**21.7**	5.0	ug/L	20		109	75-125		30	
Methylene Chloride	**18.1**	5.0	ug/L	20		90.7	75-125		30	
4-Methyl-2-pentanone (MIBK)	**23.8**	10	ug/L	20		119	75-125		30	
Naphthalene	**24.8**	0.60	ug/L	20		124	75-125		30	
n-Propylbenzene	**18.0**	1.0	ug/L	20		89.8	75-125		30	
Styrene	**17.9**	1.0	ug/L	20		89.5	75-125		30	
1,1,2,2-Tetrachloroethane	**26.1**	1.0	ug/L	20		130	75-125		30	AA-C1
1,1,1,2-Tetrachloroethane	**19.2**	1.0	ug/L	20		95.9	75-125		30	
Tetrachloroethylene (PCE)	**17.7**	1.0	ug/L	20		88.6	75-125		30	
Toluene	**18.4**	1.0	ug/L	20		92.2	75-125		30	
1,2,3-Trichlorobenzene	**20.2**	1.0	ug/L	20		101	75-125		30	
1,1,2-Trichloroethane	**20.8**	1.0	ug/L	20		104	75-125		30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
LCS (B3H2306-BS1) Continued				Prepared & Analyzed: 08/21/13						
1,1,1-Trichloroethane	**18.4**	1.0	ug/L	20		91.8	75-125		30	
Trichloroethylene (TCE)	**19.2**	1.0	ug/L	20		95.8	75-125		30	
Trichlorofluoromethane (R11)	**17.0**	1.0	ug/L	20		85.0	75-125		30	
1,2,3-Trichloropropane	**22.4**	1.0	ug/L	20		112	75-125		30	
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	**18.8**	5.0	ug/L	20		94.0	75-125		30	
1,3,5-Trimethylbenzene	**17.9**	1.0	ug/L	20		89.5	75-125		30	
1,2,4-Trimethylbenzene	**21.8**	1.0	ug/L	20		109	75-125		30	
Vinyl chloride	**17.9**	0.20	ug/L	20		89.6	75-125		30	
o-Xylene	**17.9**	1.0	ug/L	20		89.5	75-125		30	
m,p-Xylenes	**37.0**	1.0	ug/L	40		92.6	75-125		30	
Surrogate: 4-Bromofluorobenzene	*47.3*		*ug/L*	*50*		*94.6*	*75-125*			
Surrogate: Dibromofluoromethane	*53.9*		*ug/L*	*50*		*108*	*75-125*			
Surrogate: Toluene-d8	*52.5*		*ug/L*	*50*		*105*	*75-125*			
LCS Dup (B3H2306-BSD1)				Prepared & Analyzed: 08/21/13						
Acetone	**19.0**	10	ug/L	20		95.2	75-125	15.1	30	
Benzene	**21.4**	0.60	ug/L	20		107	75-125	4.29	30	
Bromobenzene	**20.3**	1.0	ug/L	20		101	75-125	10.0	30	
Bromochloromethane	**19.2**	1.0	ug/L	20		96.0	75-125	2.80	30	
Bromodichloromethane	**23.1**	1.0	ug/L	20		115	75-125	0.00	30	
Bromoform	**21.9**	1.0	ug/L	20		109	75-125	2.66	30	
Bromomethane	**17.6**	1.0	ug/L	20		88.2	75-125	8.52	30	
2-Butanone (MEK)	**23.0**	10	ug/L	20		115	75-125	15.4	30	
n-Butylbenzene	**18.9**	1.0	ug/L	20		94.7	75-125	0.955	30	
sec-Butylbenzene	**19.1**	1.0	ug/L	20		95.6	75-125	7.04	30	
tert-Butylbenzene	**18.3**	1.0	ug/L	20		91.6	75-125	6.08	30	
Carbon Disulfide	**16.5**	1.0	ug/L	20		82.3	75-125	2.46	30	
Carbon Tetrachloride	**17.3**	0.40	ug/L	20		86.6	75-125	1.38	30	
Chlorobenzene	**19.3**	1.0	ug/L	20		96.7	75-125	2.99	30	
Chloroethane	**18.0**	1.0	ug/L	20		90.2	75-125	6.38	30	
Chloroform	**20.3**	1.0	ug/L	20		102	75-125	2.85	30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
LCS Dup (B3H2306-BSD1) Continued				Prepared & Analyzed: 08/21/13						
Chloromethane	**17.3**	1.0	ug/L	20		86.4	75-125	1.15	30	
2-Chlorotoluene	**19.6**	1.0	ug/L	20		97.8	75-125	8.59	30	
4-Chlorotoluene	**19.4**	1.0	ug/L	20		97.0	75-125	2.72	30	
1,2-Dibromo-3-chloropropane	**27.5**	1.0	ug/L	20		137	75-125	16.4	30	AA-C1
Dibromochloromethane	**20.5**	1.0	ug/L	20		103	75-125	3.02	30	
1,2-Dibromoethane (EDB)	**21.6**	1.0	ug/L	20		108	75-125	6.26	30	
Dibromomethane	**21.9**	1.0	ug/L	20		110	75-125	7.85	30	
1,3-Dichlorobenzene	**22.6**	1.0	ug/L	20		113	75-125	10.7	30	
1,2-Dichlorobenzene	**21.1**	1.0	ug/L	20		106	75-125	2.20	30	
1,4-Dichlorobenzene	**20.0**	1.0	ug/L	20		100	75-125	8.70	30	
Dichlorodifluoromethane (R12)	**16.8**	1.0	ug/L	20		84.0	75-125	4.07	30	
1,1-Dichloroethane	**19.5**	0.20	ug/L	20		97.6	75-125	0.823	30	
1,2-Dichloroethane (EDC)	**22.6**	1.0	ug/L	20		113	75-125	0.489	30	
1,1-Dichloroethylene	**19.0**	1.0	ug/L	20		94.9	75-125	9.61	30	
cis-1,2-Dichloroethylene	**19.6**	1.0	ug/L	20		97.8	75-125	3.17	30	
trans-1,2-Dichloroethylene	**17.1**	1.0	ug/L	20		85.6	75-125	1.71	30	
2,2-Dichloropropane	**16.4**	1.0	ug/L	20		81.8	75-125	2.59	30	
1,2-Dichloropropane	**23.6**	1.0	ug/L	20		118	75-125	6.15	30	
1,3-Dichloropropane	**22.9**	1.0	ug/L	20		115	75-125	0.608	30	
trans-1,3-Dichloropropylene	**19.1**	1.0	ug/L	20		95.6	75-125	3.95	30	
cis-1,3-Dichloropropylene	**21.5**	1.0	ug/L	20		107	75-125	0.140	30	
1,1-Dichloropropylene	**18.7**	1.0	ug/L	20		93.4	75-125	2.16	30	
Ethylbenzene	**17.4**	1.0	ug/L	20		86.9	75-125	1.82	30	
Hexachlorobutadiene	**18.6**	1.0	ug/L	20		92.8	75-125	3.01	30	
2-Hexanone (MBK)	**21.9**	10	ug/L	20		109	75-125	0.183	30	
Isopropylbenzene	**18.1**	1.0	ug/L	20		90.7	75-125	5.79	30	
4-Isopropyltoluene	**18.6**	1.0	ug/L	20		92.8	75-125	5.76	30	
Methyl-tert-Butyl Ether (MTBE)	**20.2**	5.0	ug/L	20		101	75-125	7.54	30	
Methylene Chloride	**18.4**	5.0	ug/L	20		92.0	75-125	1.48	30	
4-Methyl-2-pentanone (MIBK)	**25.8**	10	ug/L	20		129	75-125	7.91	30	AA-C1
Naphthalene	**27.0**	0.60	ug/L	20		135	75-125	8.42	30	AA-C1
n-Propylbenzene	**19.3**	1.0	ug/L	20		96.3	75-125	6.99	30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
LCS Dup (B3H2306-BSD1) Continued				Prepared & Analyzed: 08/21/13						
Styrene	**18.6**	1.0	ug/L	20		93.0	75-125	3.78	30	
1,1,2,2-Tetrachloroethane	**25.9**	1.0	ug/L	20		130	75-125	0.538	30	AA-C1
1,1,1,2-Tetrachloroethane	**19.4**	1.0	ug/L	20		96.9	75-125	1.04	30	
Tetrachloroethylene (PCE)	**17.0**	1.0	ug/L	20		85.1	75-125	4.03	30	
Toluene	**17.9**	1.0	ug/L	20		89.6	75-125	2.86	30	
1,2,3-Trichlorobenzene	**21.8**	1.0	ug/L	20		109	75-125	7.70	30	
1,1,2-Trichloroethane	**20.7**	1.0	ug/L	20		104	75-125	0.0964	30	
1,1,1-Trichloroethane	**18.4**	1.0	ug/L	20		92.0	75-125	0.218	30	
Trichloroethylene (TCE)	**19.2**	1.0	ug/L	20		96.2	75-125	0.417	30	
Trichlorofluoromethane (R11)	**16.2**	1.0	ug/L	20		81.1	75-125	4.75	30	
1,2,3-Trichloropropane	**24.8**	1.0	ug/L	20		124	75-125	10.1	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	**17.8**	5.0	ug/L	20		88.8	75-125	5.75	30	
1,3,5-Trimethylbenzene	**18.7**	1.0	ug/L	20		93.4	75-125	4.32	30	
1,2,4-Trimethylbenzene	**18.6**	1.0	ug/L	20		92.8	75-125	16.0	30	
Vinyl chloride	**17.7**	0.20	ug/L	20		88.6	75-125	1.12	30	
o-Xylene	**18.1**	1.0	ug/L	20		90.6	75-125	1.22	30	
m,p-Xylenes	**37.3**	1.0	ug/L	40		93.3	75-125	0.753	30	
Surrogate: 4-Bromofluorobenzene	*49.2*		*ug/L*	*50*		*98.5*	*75-125*			
Surrogate: Dibromofluoromethane	*53.5*		*ug/L*	*50*		*107*	*75-125*			
Surrogate: Toluene-d8	*48.6*		*ug/L*	*50*		*97.1*	*75-125*			
Duplicate (B3H2306-DUP1)			**Source: 3H23002-07**	Prepared & Analyzed: 08/21/13						
Acetone	**<1.0**	1.0	ug/L		<1.0				30	
Benzene	**<0.060**	0.060	ug/L		<0.060				30	
Bromobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Bromochloromethane	**<0.10**	0.10	ug/L		<0.10				30	
Bromodichloromethane	**<0.10**	0.10	ug/L		<0.10				30	
Bromoform	**<0.10**	0.10	ug/L		<0.10				30	
Bromomethane	**<0.10**	0.10	ug/L		<0.10				30	
2-Butanone (MEK)	**<1.0**	1.0	ug/L		<1.0				30	
n-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
Duplicate (B3H2306-DUP1) Continued				**Source: 3H23002-07**	Prepared & Analyzed: 08/21/13					
sec-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
tert-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Carbon Disulfide	**<0.10**	0.10	ug/L		<0.10				30	
Carbon Tetrachloride	**0.297**	0.040	ug/L		0.332			11.3	30	
Chlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Chloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Chloroform	**<0.10**	0.10	ug/L		<0.10				30	
Chloromethane	**<0.10**	0.10	ug/L		<0.10				30	
2-Chlorotoluene	**<0.10**	0.10	ug/L		<0.10				30	
4-Chlorotoluene	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dibromo-3-chloropropane	**<0.10**	0.10	ug/L		<0.10				30	
Dibromochloromethane	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dibromoethane (EDB)	**<0.10**	0.10	ug/L		<0.10				30	
Dibromomethane	**<0.10**	0.10	ug/L		<0.10				30	
1,3-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,4-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Dichlorodifluoromethane (R12)	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloroethane	**<0.020**	0.020	ug/L		<0.020				30	
1,2-Dichloroethane (EDC)	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	
cis-1,2-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	
trans-1,2-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	
2,2-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,3-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
trans-1,3-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
cis-1,3-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
Ethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Hexachlorobutadiene	**<0.10**	0.10	ug/L		<0.10				30	
2-Hexanone (MBK)	**<1.0**	1.0	ug/L		<1.0				30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
Duplicate (B3H2306-DUP1) Continued		**Source: 3H23002-07**	Prepared & Analyzed: 08/21/13							
Isopropylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
4-Isopropyltoluene	**<0.10**	0.10	ug/L		<0.10				30	
Methyl-tert-Butyl Ether (MTBE)	**<0.50**	0.50	ug/L		<0.50				30	
Methylene Chloride	**<0.50**	0.50	ug/L		<0.50				30	
4-Methyl-2-pentanone (MIBK)	**<1.0**	1.0	ug/L		<1.0				30	
Naphthalene	**<0.060**	0.060	ug/L		<0.060				30	
n-Propylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Styrene	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2,2-Tetrachloroethane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,1,2-Tetrachloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Tetrachloroethylene (PCE)	**<0.10**	0.10	ug/L		<0.10				30	
Toluene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,4-Trichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,3-Trichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2-Trichloroethane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,1-Trichloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Trichloroethylene (TCE)	**<0.10**	0.10	ug/L		<0.10				30	
Trichlorofluoromethane (R11)	**<0.10**	0.10	ug/L		<0.10				30	
1,2,3-Trichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	**<0.50**	0.50	ug/L		<0.50				30	
1,3,5-Trimethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,4-Trimethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Vinyl chloride	**<0.020**	0.020	ug/L		<0.020				30	
o-Xylene	**<0.10**	0.10	ug/L		<0.10				30	
m,p-Xylenes	**<0.10**	0.10	ug/L		<0.10				30	
Isopropanol (IPA)	**<10**	10	ug/L		<1.0					
Surrogate: 4-Bromofluorobenzene	*52.0*		*ug/L*	*50*		*104*	*70-130*			
Surrogate: Dibromofluoromethane	*53.0*		*ug/L*	*50*		*106*	*70-130*			
Surrogate: Toluene-d8	*50.6*		*ug/L*	*50*		*101*	*70-130*			
Duplicate (B3H2306-DUP2)		**Source: 3H23002-17**	Prepared & Analyzed: 08/21/13							

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
Duplicate (B3H2306-DUP2) Continued				**Source: 3H23002-17**	Prepared & Analyzed: 08/21/13					
Acetone	**<1.0**	1.0	ug/L		<1.0				30	
Benzene	**<0.060**	0.060	ug/L		<0.060				30	
Bromobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Bromochloromethane	**<0.10**	0.10	ug/L		<0.10				30	
Bromodichloromethane	**<0.10**	0.10	ug/L		<0.10				30	
Bromoform	**<0.10**	0.10	ug/L		<0.10				30	
Bromomethane	**<0.10**	0.10	ug/L		<0.10				30	
2-Butanone (MEK)	**<1.0**	1.0	ug/L		<1.0				30	
n-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
sec-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
tert-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Carbon Disulfide	**<0.10**	0.10	ug/L		<0.10				30	
Carbon Tetrachloride	**<0.040**	0.040	ug/L		<0.040				30	
Chlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Chloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Chloroform	**<0.10**	0.10	ug/L		<0.10				30	
Chloromethane	**<0.10**	0.10	ug/L		<0.10				30	
2-Chlorotoluene	**<0.10**	0.10	ug/L		<0.10				30	
4-Chlorotoluene	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dibromo-3-chloropropane	**<0.10**	0.10	ug/L		<0.10				30	
Dibromochloromethane	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dibromoethane (EDB)	**<0.10**	0.10	ug/L		<0.10				30	
Dibromomethane	**<0.10**	0.10	ug/L		<0.10				30	
1,3-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,4-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Dichlorodifluoromethane (R12)	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloroethane	**<0.020**	0.020	ug/L		<0.020				30	
1,2-Dichloroethane (EDC)	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	
cis-1,2-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	
trans-1,2-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
Duplicate (B3H2306-DUP2) Continued				**Source: 3H23002-17**	Prepared & Analyzed: 08/21/13					
2,2-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,3-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
trans-1,3-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
cis-1,3-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
Ethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Hexachlorobutadiene	**<0.10**	0.10	ug/L		<0.10				30	
2-Hexanone (MBK)	**<1.0**	1.0	ug/L		<1.0				30	
Isopropylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
4-Isopropyltoluene	**<0.10**	0.10	ug/L		<0.10				30	
Methyl-tert-Butyl Ether (MTBE)	**<0.50**	0.50	ug/L		<0.50				30	
Methylene Chloride	**<0.50**	0.50	ug/L		<0.50				30	
4-Methyl-2-pentanone (MIBK)	**<1.0**	1.0	ug/L		<1.0				30	
Naphthalene	**<0.060**	0.060	ug/L		<0.060				30	
n-Propylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Styrene	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2,2-Tetrachloroethane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,1,2-Tetrachloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Tetrachloroethylene (PCE)	**0.232**	0.10	ug/L		0.240			3.61	30	
Toluene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,4-Trichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,3-Trichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2-Trichloroethane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,1-Trichloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Trichloroethylene (TCE)	**<0.10**	0.10	ug/L		<0.10				30	
Trichlorofluoromethane (R11)	**0.142**	0.10	ug/L		0.164			14.1	30	
1,2,3-Trichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	**<0.50**	0.50	ug/L		<0.50				30	
1,3,5-Trimethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,4-Trimethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2306 - *** DEFAULT PREP ****										
Duplicate (B3H2306-DUP2) Continued		**Source: 3H23002-17**	Prepared & Analyzed: 08/21/13							
Vinyl chloride	**<0.020**	0.020	ug/L		<0.020				30	
o-Xylene	**<0.10**	0.10	ug/L		<0.10				30	
m,p-Xylenes	**<0.10**	0.10	ug/L		<0.10				30	
Isopropanol (IPA)	**<10**	10	ug/L		<1.0					
Surrogate: 4-Bromofluorobenzene	*49.9*		*ug/L*	*50*		*99.7*	*70-130*			
Surrogate: Dibromofluoromethane	*52.5*		*ug/L*	*50*		*105*	*70-130*			
Surrogate: Toluene-d8	*55.3*		*ug/L*	*50*		*111*	*70-130*			
*Batch B3H2308 - *** DEFAULT PREP ****										
Blank (B3H2308-BLK1)				Prepared & Analyzed: 08/22/13						
Acetone	<1.0	1.0	ug/L							
Benzene	<0.060	0.060	ug/L							
Bromobenzene	<0.10	0.10	ug/L							
Bromochloromethane	<0.10	0.10	ug/L							
Bromodichloromethane	<0.10	0.10	ug/L							
Bromoform	<0.10	0.10	ug/L							
Bromomethane	<0.10	0.10	ug/L							
2-Butanone (MEK)	<1.0	1.0	ug/L							
n-Butylbenzene	<0.10	0.10	ug/L							
sec-Butylbenzene	<0.10	0.10	ug/L							
tert-Butylbenzene	<0.10	0.10	ug/L							
Carbon Disulfide	<0.10	0.10	ug/L							
Carbon Tetrachloride	<0.040	0.040	ug/L							
Chlorobenzene	<0.10	0.10	ug/L							
Chloroethane	<0.10	0.10	ug/L							
Chloroform	<0.10	0.10	ug/L							
Chloromethane	<0.10	0.10	ug/L							
2-Chlorotoluene	<0.10	0.10	ug/L							
4-Chlorotoluene	<0.10	0.10	ug/L							
1,2-Dibromo-3-chloropropane	<0.10	0.10	ug/L							
Dibromochloromethane	<0.10	0.10	ug/L							
1,2-Dibromoethane (EDB)	<0.10	0.10	ug/L							

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
Blank (B3H2308-BLK1) Continued				Prepared & Analyzed: 08/22/13						
Dibromomethane	<0.10	0.10	ug/L							
1,3-Dichlorobenzene	<0.10	0.10	ug/L							
1,2-Dichlorobenzene	<0.10	0.10	ug/L							
1,4-Dichlorobenzene	<0.10	0.10	ug/L							
Dichlorodifluoromethane (R12)	<0.10	0.10	ug/L							
1,1-Dichloroethane	<0.020	0.020	ug/L							
1,2-Dichloroethane (EDC)	<0.10	0.10	ug/L							
1,1-Dichloroethylene	<0.10	0.10	ug/L							
cis-1,2-Dichloroethylene	<0.10	0.10	ug/L							
trans-1,2-Dichloroethylene	<0.10	0.10	ug/L							
2,2-Dichloropropane	<0.10	0.10	ug/L							
1,2-Dichloropropane	<0.10	0.10	ug/L							
1,3-Dichloropropane	<0.10	0.10	ug/L							
trans-1,3-Dichloropropylene	<0.10	0.10	ug/L							
cis-1,3-Dichloropropylene	<0.10	0.10	ug/L							
1,1-Dichloropropylene	<0.10	0.10	ug/L							
Ethylbenzene	<0.10	0.10	ug/L							
Hexachlorobutadiene	<0.10	0.10	ug/L							
2-Hexanone (MBK)	<1.0	1.0	ug/L							
Isopropylbenzene	<0.10	0.10	ug/L							
4-Isopropyltoluene	<0.10	0.10	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<0.50	0.50	ug/L							
Methylene Chloride	<0.50	0.50	ug/L							
4-Methyl-2-pentanone (MIBK)	<1.0	1.0	ug/L							
Naphthalene	<0.060	0.060	ug/L							
n-Propylbenzene	<0.10	0.10	ug/L							
Styrene	<0.10	0.10	ug/L							
1,1,2,2-Tetrachloroethane	<0.10	0.10	ug/L							
1,1,1,2-Tetrachloroethane	<0.10	0.10	ug/L							
Tetrachloroethylene (PCE)	<0.10	0.10	ug/L							
Toluene	<0.10	0.10	ug/L							
1,2,4-Trichlorobenzene	<0.10	0.10	ug/L							

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
Blank (B3H2308-BLK1) Continued				Prepared & Analyzed: 08/22/13						
1,2,3-Trichlorobenzene	<0.10	0.10	ug/L							
1,1,2-Trichloroethane	<0.10	0.10	ug/L							
1,1,1-Trichloroethane	<0.10	0.10	ug/L							
Trichloroethylene (TCE)	<0.10	0.10	ug/L							
Trichlorofluoromethane (R11)	<0.10	0.10	ug/L							
1,2,3-Trichloropropane	<0.10	0.10	ug/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	<0.50	0.50	ug/L							
1,3,5-Trimethylbenzene	<0.10	0.10	ug/L							
1,2,4-Trimethylbenzene	<0.10	0.10	ug/L							
Vinyl chloride	<0.020	0.020	ug/L							
o-Xylene	<0.10	0.10	ug/L							
m,p-Xylenes	<0.10	0.10	ug/L							
Isopropanol (IPA)	<10	10	ug/L							
Surrogate: 4-Bromofluorobenzene	*52.1*		*ug/L*	*50*		*104*	*70-130*			
Surrogate: Dibromofluoromethane	*53.5*		*ug/L*	*50*		*107*	*70-130*			
Surrogate: Toluene-d8	*58.0*		*ug/L*	*50*		*116*	*70-130*			
LCS (B3H2308-BS1)				Prepared & Analyzed: 08/22/13						
Acetone	**16.6**	10	ug/L	20		83.2	75-125		30	
Benzene	**23.1**	0.60	ug/L	20		116	75-125		30	
Bromobenzene	**20.5**	1.0	ug/L	20		102	75-125		30	
Bromochloromethane	**20.1**	1.0	ug/L	20		101	75-125		30	
Bromodichloromethane	**25.3**	1.0	ug/L	20		127	75-125		30	AA-C1
Bromoform	**24.6**	1.0	ug/L	20		123	75-125		30	
Bromomethane	**18.0**	1.0	ug/L	20		89.8	75-125		30	
2-Butanone (MEK)	**21.4**	10	ug/L	20		107	75-125		30	
n-Butylbenzene	**20.6**	1.0	ug/L	20		103	75-125		30	
sec-Butylbenzene	**20.2**	1.0	ug/L	20		101	75-125		30	
tert-Butylbenzene	**19.1**	1.0	ug/L	20		95.7	75-125		30	
Carbon Disulfide	**17.8**	1.0	ug/L	20		88.9	75-125		30	
Carbon Tetrachloride	**21.3**	0.40	ug/L	20		106	75-125		30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
LCS (B3H2308-BS1) Continued				Prepared & Analyzed: 08/22/13						
Chlorobenzene	**21.2**	1.0	ug/L	20		106	75-125		30	
Chloroethane	**22.2**	1.0	ug/L	20		111	75-125		30	
Chloroform	**23.1**	1.0	ug/L	20		116	75-125		30	
Chloromethane	**16.6**	1.0	ug/L	20		82.8	75-125		30	
2-Chlorotoluene	**21.3**	1.0	ug/L	20		107	75-125		30	
4-Chlorotoluene	**20.8**	1.0	ug/L	20		104	75-125		30	
1,2-Dibromo-3-chloropropane	**20.9**	1.0	ug/L	20		105	75-125		30	
Dibromochloromethane	**21.6**	1.0	ug/L	20		108	75-125		30	
1,2-Dibromoethane (EDB)	**21.7**	1.0	ug/L	20		108	75-125		30	
Dibromomethane	**25.4**	1.0	ug/L	20		127	75-125		30	AA-C1
1,3-Dichlorobenzene	**20.6**	1.0	ug/L	20		103	75-125		30	
1,2-Dichlorobenzene	**22.0**	1.0	ug/L	20		110	75-125		30	
1,4-Dichlorobenzene	**21.3**	1.0	ug/L	20		107	75-125		30	
Dichlorodifluoromethane (R12)	**17.6**	1.0	ug/L	20		87.8	75-125		30	
1,1-Dichloroethane	**21.7**	0.20	ug/L	20		109	75-125		30	
1,2-Dichloroethane (EDC)	**25.0**	1.0	ug/L	20		125	75-125		30	
1,1-Dichloroethylene	**16.4**	1.0	ug/L	20		82.0	75-125		30	
cis-1,2-Dichloroethylene	**20.4**	1.0	ug/L	20		102	75-125		30	
trans-1,2-Dichloroethylene	**17.8**	1.0	ug/L	20		89.2	75-125		30	
2,2-Dichloropropane	**18.7**	1.0	ug/L	20		93.4	75-125		30	
1,2-Dichloropropane	**26.3**	1.0	ug/L	20		131	75-125		30	AA-C1
1,3-Dichloropropane	**24.5**	1.0	ug/L	20		123	75-125		30	
trans-1,3-Dichloropropylene	**21.8**	1.0	ug/L	20		109	75-125		30	
cis-1,3-Dichloropropylene	**24.3**	1.0	ug/L	20		121	75-125		30	
1,1-Dichloropropylene	**20.6**	1.0	ug/L	20		103	75-125		30	
Ethylbenzene	**18.7**	1.0	ug/L	20		93.6	75-125		30	
Hexachlorobutadiene	**20.2**	1.0	ug/L	20		101	75-125		30	
2-Hexanone (MBK)	**23.7**	10	ug/L	20		118	75-125		30	
Isopropylbenzene	**19.2**	1.0	ug/L	20		96.0	75-125		30	
4-Isopropyltoluene	**19.6**	1.0	ug/L	20		98.2	75-125		30	
Methyl-tert-Butyl Ether (MTBE)	**20.9**	5.0	ug/L	20		105	75-125		30	
Methylene Chloride	**20.3**	5.0	ug/L	20		102	75-125		30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
LCS (B3H2308-BS1) Continued				Prepared & Analyzed: 08/22/13						
4-Methyl-2-pentanone (MIBK)	**27.4**	10	ug/L	20		137	75-125		30	AA-C1
Naphthalene	**24.6**	0.60	ug/L	20		123	75-125		30	
n-Propylbenzene	**20.3**	1.0	ug/L	20		101	75-125		30	
Styrene	**20.0**	1.0	ug/L	20		100	75-125		30	
1,1,2,2-Tetrachloroethane	**27.4**	1.0	ug/L	20		137	75-125		30	AA-C1
1,1,1,2-Tetrachloroethane	**20.6**	1.0	ug/L	20		103	75-125		30	
Tetrachloroethylene (PCE)	**18.5**	1.0	ug/L	20		92.4	75-125		30	
Toluene	**19.3**	1.0	ug/L	20		96.6	75-125		30	
1,2,3-Trichlorobenzene	**22.4**	1.0	ug/L	20		112	75-125		30	
1,1,2-Trichloroethane	**21.4**	1.0	ug/L	20		107	75-125		30	
1,1,1-Trichloroethane	**21.0**	1.0	ug/L	20		105	75-125		30	
Trichloroethylene (TCE)	**21.3**	1.0	ug/L	20		106	75-125		30	
Trichlorofluoromethane (R11)	**19.8**	1.0	ug/L	20		99.2	75-125		30	
1,2,3-Trichloropropane	**26.9**	1.0	ug/L	20		135	75-125		30	AA-C1
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	**19.1**	5.0	ug/L	20		95.7	75-125		30	
1,3,5-Trimethylbenzene	**19.9**	1.0	ug/L	20		99.6	75-125		30	
1,2,4-Trimethylbenzene	**19.8**	1.0	ug/L	20		98.8	75-125		30	
Vinyl chloride	**20.7**	0.20	ug/L	20		103	75-125		30	
o-Xylene	**20.1**	1.0	ug/L	20		101	75-125		30	
m,p-Xylenes	**39.6**	1.0	ug/L	40		99.1	75-125		30	
Surrogate: 4-Bromofluorobenzene	*48.4*		*ug/L*	*50*		*96.9*	*75-125*			
Surrogate: Dibromofluoromethane	*55.0*		*ug/L*	*50*		*110*	*75-125*			
Surrogate: Toluene-d8	*49.7*		*ug/L*	*50*		*99.3*	*75-125*			
LCS Dup (B3H2308-BSD1)				Prepared & Analyzed: 08/22/13						
Acetone	**16.8**	10	ug/L	20		83.8	75-125	0.599	30	
Benzene	**21.2**	0.60	ug/L	20		106	75-125	8.94	30	
Bromobenzene	**20.6**	1.0	ug/L	20		103	75-125	0.682	30	
Bromochloromethane	**18.0**	1.0	ug/L	20		90.0	75-125	11.1	30	
Bromodichloromethane	**23.4**	1.0	ug/L	20		117	75-125	7.71	30	
Bromoform	**23.1**	1.0	ug/L	20		115	75-125	6.54	30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
LCS Dup (B3H2308-BSD1) Continued				Prepared & Analyzed: 08/22/13						
Bromomethane	**19.0**	1.0	ug/L	20		95.2	75-125	5.89	30	
2-Butanone (MEK)	**21.9**	10	ug/L	20		109	75-125	2.08	30	
n-Butylbenzene	**19.4**	1.0	ug/L	20		97.0	75-125	5.90	30	
sec-Butylbenzene	**19.2**	1.0	ug/L	20		96.2	75-125	4.82	30	
tert-Butylbenzene	**18.7**	1.0	ug/L	20		93.4	75-125	2.49	30	
Carbon Disulfide	**16.2**	1.0	ug/L	20		81.0	75-125	9.30	30	
Carbon Tetrachloride	**18.2**	0.40	ug/L	20		91.0	75-125	15.6	30	
Chlorobenzene	**19.1**	1.0	ug/L	20		95.6	75-125	10.4	30	
Chloroethane	**18.2**	1.0	ug/L	20		91.1	75-125	19.5	30	
Chloroform	**20.0**	1.0	ug/L	20		100	75-125	14.3	30	
Chloromethane	**18.9**	1.0	ug/L	20		94.5	75-125	13.3	30	
2-Chlorotoluene	**19.0**	1.0	ug/L	20		95.0	75-125	11.5	30	
4-Chlorotoluene	**20.4**	1.0	ug/L	20		102	75-125	1.65	30	
1,2-Dibromo-3-chloropropane	**22.4**	1.0	ug/L	20		112	75-125	6.60	30	
Dibromochloromethane	**20.8**	1.0	ug/L	20		104	75-125	3.82	30	
1,2-Dibromoethane (EDB)	**21.6**	1.0	ug/L	20		108	75-125	0.416	30	
Dibromomethane	**25.1**	1.0	ug/L	20		126	75-125	0.871	30	AA-C1
1,3-Dichlorobenzene	**21.2**	1.0	ug/L	20		106	75-125	2.96	30	
1,2-Dichlorobenzene	**21.9**	1.0	ug/L	20		109	75-125	0.638	30	
1,4-Dichlorobenzene	**20.1**	1.0	ug/L	20		100	75-125	6.09	30	
Dichlorodifluoromethane (R12)	**16.2**	1.0	ug/L	20		81.1	75-125	7.93	30	
1,1-Dichloroethane	**19.4**	0.20	ug/L	20		97.1	75-125	11.2	30	
1,2-Dichloroethane (EDC)	**22.8**	1.0	ug/L	20		114	75-125	9.42	30	
1,1-Dichloroethylene	**18.4**	1.0	ug/L	20		92.0	75-125	11.6	30	
cis-1,2-Dichloroethylene	**19.9**	1.0	ug/L	20		99.3	75-125	2.49	30	
trans-1,2-Dichloroethylene	**17.3**	1.0	ug/L	20		86.6	75-125	3.07	30	
2,2-Dichloropropane	**16.2**	1.0	ug/L	20		81.2	75-125	14.1	30	
1,2-Dichloropropane	**25.3**	1.0	ug/L	20		126	75-125	3.96	30	AA-C1
1,3-Dichloropropane	**22.7**	1.0	ug/L	20		114	75-125	7.70	30	
trans-1,3-Dichloropropylene	**19.8**	1.0	ug/L	20		98.8	75-125	9.77	30	
cis-1,3-Dichloropropylene	**22.4**	1.0	ug/L	20		112	75-125	8.06	30	
1,1-Dichloropropylene	**18.8**	1.0	ug/L	20		94.0	75-125	9.43	30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
LCS Dup (B3H2308-BSD1) Continued				Prepared & Analyzed: 08/22/13						
Ethylbenzene	**17.4**	1.0	ug/L	20		86.9	75-125	7.37	30	
Hexachlorobutadiene	**19.2**	1.0	ug/L	20		96.0	75-125	5.23	30	
2-Hexanone (MBK)	**24.7**	10	ug/L	20		124	75-125	4.38	30	
Isopropylbenzene	**18.7**	1.0	ug/L	20		93.6	75-125	2.53	30	
4-Isopropyltoluene	**18.7**	1.0	ug/L	20		93.6	75-125	4.85	30	
Methyl-tert-Butyl Ether (MTBE)	**20.6**	5.0	ug/L	20		103	75-125	1.49	30	
Methylene Chloride	**18.2**	5.0	ug/L	20		91.2	75-125	10.8	30	
4-Methyl-2-pentanone (MIBK)	**28.3**	10	ug/L	20		142	75-125	3.16	30	AA-C1
Naphthalene	**30.2**	0.60	ug/L	20		151	75-125	20.7	30	AA-C1
n-Propylbenzene	**19.6**	1.0	ug/L	20		97.8	75-125	3.56	30	
Styrene	**18.9**	1.0	ug/L	20		94.4	75-125	5.81	30	
1,1,2,2-Tetrachloroethane	**28.5**	1.0	ug/L	20		143	75-125	3.97	30	AA-C1
1,1,1,2-Tetrachloroethane	**19.1**	1.0	ug/L	20		95.6	75-125	7.50	30	
Tetrachloroethylene (PCE)	**17.0**	1.0	ug/L	20		84.8	75-125	8.58	30	
Toluene	**17.7**	1.0	ug/L	20		88.4	75-125	8.76	30	
1,2,3-Trichlorobenzene	**22.4**	1.0	ug/L	20		112	75-125	0.0446	30	
1,1,2-Trichloroethane	**21.6**	1.0	ug/L	20		108	75-125	1.16	30	
1,1,1-Trichloroethane	**18.6**	1.0	ug/L	20		93.1	75-125	12.0	30	
Trichloroethylene (TCE)	**20.4**	1.0	ug/L	20		102	75-125	3.98	30	
Trichlorofluoromethane (R11)	**16.0**	1.0	ug/L	20		80.0	75-125	21.4	30	
1,2,3-Trichloropropane	**26.3**	1.0	ug/L	20		132	75-125	2.25	30	AA-C1
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	**17.5**	5.0	ug/L	20		87.5	75-125	8.95	30	
1,3,5-Trimethylbenzene	**19.2**	1.0	ug/L	20		96.2	75-125	3.52	30	
1,2,4-Trimethylbenzene	**18.9**	1.0	ug/L	20		94.5	75-125	4.50	30	
Vinyl chloride	**17.2**	0.20	ug/L	20		86.1	75-125	18.3	30	
o-Xylene	**18.9**	1.0	ug/L	20		94.7	75-125	6.09	30	
m,p-Xylenes	**37.0**	1.0	ug/L	40		92.4	75-125	6.94	30	
Surrogate: 4-Bromofluorobenzene	*50.3*		*ug/L*	*50*		*101*	*75-125*			
Surrogate: Dibromofluoromethane	*53.9*		*ug/L*	*50*		*108*	*75-125*			
Surrogate: Toluene-d8	*48.7*		*ug/L*	*50*		*97.3*	*75-125*			

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
Duplicate (B3H2308-DUP1)			**Source: 3H23002-25**	Prepared & Analyzed: 08/22/13						
Acetone	**<1.0**	1.0	ug/L		<1.0				30	
Benzene	**<0.060**	0.060	ug/L		<0.060				30	
Bromobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Bromochloromethane	**<0.10**	0.10	ug/L		<0.10				30	
Bromodichloromethane	**<0.10**	0.10	ug/L		<0.10				30	
Bromoform	**<0.10**	0.10	ug/L		<0.10				30	
Bromomethane	**<0.10**	0.10	ug/L		<0.10				30	
2-Butanone (MEK)	**<1.0**	1.0	ug/L		<1.0				30	
n-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
sec-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
tert-Butylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Carbon Disulfide	**<0.10**	0.10	ug/L		<0.10				30	
Carbon Tetrachloride	**<0.040**	0.040	ug/L		<0.040				30	
Chlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Chloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Chloroform	**<0.10**	0.10	ug/L		<0.10				30	
Chloromethane	**<0.10**	0.10	ug/L		<0.10				30	
2-Chlorotoluene	**<0.10**	0.10	ug/L		<0.10				30	
4-Chlorotoluene	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dibromo-3-chloropropane	**<0.10**	0.10	ug/L		<0.10				30	
Dibromochloromethane	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dibromoethane (EDB)	**<0.10**	0.10	ug/L		<0.10				30	
Dibromomethane	**<0.10**	0.10	ug/L		<0.10				30	
1,3-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,4-Dichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
Dichlorodifluoromethane (R12)	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloroethane	**<0.020**	0.020	ug/L		<0.020				30	
1,2-Dichloroethane (EDC)	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	
cis-1,2-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	
trans-1,2-Dichloroethylene	**<0.10**	0.10	ug/L		<0.10				30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
Duplicate (B3H2308-DUP1) Continued				**Source: 3H23002-25**	Prepared & Analyzed: 08/22/13					
2,2-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,2-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,3-Dichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
trans-1,3-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
cis-1,3-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
1,1-Dichloropropylene	**<0.10**	0.10	ug/L		<0.10				30	
Ethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Hexachlorobutadiene	**<0.10**	0.10	ug/L		<0.10				30	
2-Hexanone (MBK)	**<1.0**	1.0	ug/L		<1.0				30	
Isopropylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
4-Isopropyltoluene	**<0.10**	0.10	ug/L		<0.10				30	
Methyl-tert-Butyl Ether (MTBE)	**<0.50**	0.50	ug/L		<0.50				30	
Methylene Chloride	**<0.50**	0.50	ug/L		<0.50				30	
4-Methyl-2-pentanone (MIBK)	**<1.0**	1.0	ug/L		<1.0				30	
Naphthalene	**<0.060**	0.060	ug/L		<0.060				30	
n-Propylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
Styrene	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2,2-Tetrachloroethane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,1,2-Tetrachloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Tetrachloroethylene (PCE)	**<0.10**	0.10	ug/L		<0.10				30	
Toluene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,4-Trichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,3-Trichlorobenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2-Trichloroethane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,1-Trichloroethane	**<0.10**	0.10	ug/L		<0.10				30	
Trichloroethylene (TCE)	**<0.10**	0.10	ug/L		<0.10				30	
Trichlorofluoromethane (R11)	**<0.10**	0.10	ug/L		<0.10				30	
1,2,3-Trichloropropane	**<0.10**	0.10	ug/L		<0.10				30	
1,1,2-Trichloro-1,2,2-trifluoroethane (R113)	**<0.50**	0.50	ug/L		<0.50				30	
1,3,5-Trimethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	
1,2,4-Trimethylbenzene	**<0.10**	0.10	ug/L		<0.10				30	

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client: InterPhase Environmental, Inc.
Project No: NA
Project Name: Irwindale

AA Project No: MB53964
Date Received: 08/21/13
Date Reported: 08/28/13

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs in Vapor by GC/MS - Field - Quality Control										
*Batch B3H2308 - *** DEFAULT PREP ****										
Duplicate (B3H2308-DUP1) Continued		**Source: 3H23002-25**	Prepared & Analyzed: 08/22/13							
Vinyl chloride	**<0.020**	0.020	ug/L		<0.020				30	
o-Xylene	**<0.10**	0.10	ug/L		<0.10				30	
m,p-Xylenes	**<0.10**	0.10	ug/L		<0.10				30	
Isopropanol (IPA)	**<10**	10	ug/L		<1.0					
Surrogate: 4-Bromofluorobenzene	*50.3*		*ug/L*	*50*		*101*	*70-130*			
Surrogate: Dibromofluoromethane	*55.3*		*ug/L*	*50*		*111*	*70-130*			
Surrogate: Toluene-d8	*51.7*		*ug/L*	*50*		*103*	*70-130*			

Allen Aminian
QA/QC Manager

LABORATORY ANALYSIS RESULTS

Client:	InterPhase Environmental, Inc.	**AA Project No:**	MB53964
Project No:	NA	**Date Received:**	08/21/13
Project Name:	Irwindale	**Date Reported:**	08/28/13

Special Notes

[1] = **AA-C1** : Analyte recovery is outside of the upper control limits, since the analyte was not detected in any of the samples, therefore data is valid.

Allen Aminian
QA/QC Manager

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311
Tel: 818-998-5547 FAX: 818-998-7258

A.A. COC No.: 117845
70037692

Client: INTERPHASE
Project Name / No.: PHASE I ESA UPDATE-IRVINDALE
Sampler's Name: [illegible]
Project Manager: LINDA [illegible]
Site Address: 4848 AZUSA CANYON RD
Sampler's Signature: [illegible]
Phone:
City: IRVINDALE
P.O. No.:
Fax:
State & Zip: CA
Quote No.:

TAT Turnaround Codes **

1 = Same Day Rush
2 = 24 Hour Rush
3 = 48 Hour Rush
4 = 72 Hour Rush
5 = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	8260B	6010B/6020/MS									Special Instructions
AMBIENT AIR	3H23002-01	8-21-13	0900	V	2	X	X									
SV10-S	2		0925	V	2	X	X									PV1
SV10-S	3		0955	V	2	X	X									PV3
SV10-S	4		1020	V	2	X	X									PV10
SV21-S	5		1048	V	2	X	X									PV3
SV23-S	6		1121	V	2	X	X									
SV9-S	7		1145	V	2	X	X									
SV9-SD	8		1145	V	2	X	X									
SV24-S	9		1243	V	2	X	X									
SV22-S	10		0810	V	2	X	X									
SV8-S	11		1333	V	2	X	X									
SV7-S	12		1405	V	2	X	X									
SV17-S	13		1428	V	2	X	X									
SV16-S	14		1458	V	2	X	X									
SV15-S	15		1523	V	2	X	X									

For Laboratory Use
REVIEWED
Date 8/22/13 Time 1530
TAT 1 Days Sign: E Schwa

A.A. Project No.: MB53964 / 3H23002

Relinquished by	Date	Time	Received by
[illegible]	8-21-13	1621	[illegible]
[illegible]	8/22/13	1530	Eydie Schwa

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311
Tel: 818-998-5547 FAX: 818-998-7258

A.A. COC No.: 117842
70037714

Client: INTERPHASE
Project Name / No.: PHASE I ESA UPDATE-IRWINDALE
Sampler's Name: William Stephenson
Project Manager: Linda Conlan
Site Address: 4848 ARUSA CANYON RD
Sampler's Signature:
Phone:
City: IRWINDALE
P.O. No.:
Fax:
State & Zip: CA
Quote No.:

TAT Turnaround Codes **

1 = Same Day Rush
2 = 24 Hour Rush
3 = 48 Hour Rush
4 = 72 Hour Rush
5 = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	8260B	6010B/6020									Special Instructions
SV20-S	16	8-21-13	1548	V	2	X	X									
SV5-S	17	↓	1620	V	2	X	X									
SV5-SDUP	18	↓	1620	V	2	X	X									

For Laboratory Use
REVIEWED
Date 8/22/13 Time 1520
TAT N Days Sign: E Schwarz
A.A. Project No.: M3539 64 / 2H23002

Relinquished by	Date	Time	Received by
[signature]	8-21-13	1621	[signature]
[signature]	8/22/13	1530	Eydie Schwarz
Relinquished by	Date	Time	Received by

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311
Tel: 818-998-5547 FAX: 818-998-7258

A.A. COC No.: 117892
70037716
Page 2 of 1

Client: INTERPHASE
Project Name / No.: PHASE I ESA UPDATE-IRWINDALE
Sampler's Name: William Bergman
Project Manager: LINDA CANLAN
Site Address: 4848 AZUSA CANYON RD
Sampler's Signature:
Phone:
City: IRWINDALE
P.O. No.:
Fax:
State & Zip: CA.
Quote No.:

TAT Turnaround Codes **

1 = Same Day Rush
2 = 24 Hour Rush
3 = 48 Hour Rush
4 = 72 Hour Rush
5 = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	8260B	GRO BY GC/MS									Special Instructions
AMBIENT AIR	3H23002-19	8-22-13	0835	V	2	X	X									
SV18-S	20		0900	V	2	X	X									PV3
SV15-S	21		0928	V	2	X	X									
SV6-S	22		0952	V	2	X	X									
SV13-S	23		1018	V	2	X	X									
SV11-S	24		1045	V	2	X	X									
SV12-S	25		1110	V	2	X	X									
SV12-S DUP	26		1110	V	2	X	X									
SV1-S	27		1200	V	2	X	X									
SV4-S	28		1230	V	2	X	X									
SV2-S	29		1255	V	2	X	X									
SV3-S	30		1320	V	2	X	X									

For Laboratory Use
REVIEWED
Date 8/22/13 Time 1530
TAT 1N Days Sign:

A.A. Project No.: MB53964 / 3H23002

Relinquished by	Date	Time	Received by
[signature]	8-22-13	1350	[signature]
[signature]	8/22/13	1530	[signature]

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-08-1572

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Phase I Update - Irwindale / IR13164320

Attention: Linda Conlan
121 Innovation Drive
Suite 200
Irvine, CA 92617-3094

Approved for release on 09/05/2013 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

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Work Order Number: 13-08-1572

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Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 13-08-1572 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 08/22/13. They were assigned to Work Order 13-08-1572.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Sample Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order:	13-08-1572
		Project Name:	Phase I Update - Irwindale / IR13164320
		PO Number:	
		Date/Time Received:	08/22/13 15:18
		Number of Containers:	73
Attn:	Linda Conlan		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SV8-1	13-08-1572-1	08/20/13 08:50	4	Soil
SV9-5	13-08-1572-2	08/20/13 09:10	4	Soil
SB2-1	13-08-1572-3	08/20/13 09:45	1	Soil
SB2-3	13-08-1572-4	08/20/13 09:50	1	Soil
SV7-1	13-08-1572-5	08/20/13 10:00	4	Soil
SV7-5	13-08-1572-6	08/20/13 10:05	4	Soil
SV10-1	13-08-1572-7	08/20/13 11:30	4	Soil
SV10-5	13-08-1572-8	08/20/13 11:35	4	Soil
SB3-1	13-08-1572-9	08/20/13 13:10	1	Soil
SB3-3	13-08-1572-10	08/20/13 13:15	1	Soil
SV18-1	13-08-1572-11	08/20/13 13:40	4	Soil
SV18-5	13-08-1572-12	08/20/13 13:45	4	Soil
SV20-1	13-08-1572-13	08/20/13 14:40	4	Soil
SV20-5	13-08-1572-14	08/20/13 14:45	5	Soil
SV16-1	13-08-1572-15	08/20/13 15:30	5	Soil
SV16-5	13-08-1572-16	08/20/13 15:45	5	Soil
QCTB-082013	13-08-1572-17	08/20/13 15:50	2	Aqueous
QCEB-082013	13-08-1572-18	08/20/13 16:00	3	Aqueous
SB4-1	13-08-1572-19	08/21/13 09:40	1	Soil
SB4-3	13-08-1572-20	08/21/13 09:45	1	Soil
SV22-3	13-08-1572-21	08/21/13 10:40	5	Soil
SV22-5	13-08-1572-22	08/21/13 10:45	1	Soil
SB1-1	13-08-1572-23	08/21/13 13:10	1	Soil
SB1-3	13-08-1572-24	08/21/13 13:15	1	Soil
QCEB-082113	13-08-1572-25	08/21/13 15:00	3	Aqueous

Return to Contents

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure	Work Order:	13-08-1572
	121 Innovation Drive, Suite 200	Project Name:	Phase I Update - Irwindale / IR13164320
	Irvine, CA 92617-3094	Received:	08/22/13
Attn:	Linda Conlan		

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SV8-1 (13-08-1572-1)						
Arsenic	4.52		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	125		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.315		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	20.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	11.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	25.9		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	11.9		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	16.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	32.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	75.9		1.00	mg/kg	EPA 6010B	EPA 3050B
SV9-5 (13-08-1572-2)						
Arsenic	1.55		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	60.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	5.90		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	10.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.27		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.10		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	15.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	29.3		1.00	mg/kg	EPA 6010B	EPA 3050B
SV7-1 (13-08-1572-5)						
Bromide	2.0		1.0	mg/kg	EPA 300.0	N/A
Lithium	11.3		2.50	mg/kg	EPA 6010B	EPA 3050B
SV7-5 (13-08-1572-6)						
Lithium	8.07		2.50	mg/kg	EPA 6010B	EPA 3050B
SV10-1 (13-08-1572-7)						
Bromide	760		10	mg/kg	EPA 300.0	N/A
Arsenic	1.33		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	60.6		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	7.93		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.83		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	5.98		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.52		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	7.48		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	20.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	31.4		1.00	mg/kg	EPA 6010B	EPA 3050B
Lithium	27.2		2.50	mg/kg	EPA 6010B	EPA 3050B
C6-C44 Total	9.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

* MDL is shown

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Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	13-08-1572 Phase I Update - Irwindale / IR13164320 08/22/13
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SV10-5 (13-08-1572-8)						
Bromide	24		1.0	mg/kg	EPA 300.0	N/A
Arsenic	1.30		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	63.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	13.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	6.34		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	14.1		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.62		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	0.538		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.66		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	17.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	30.1		1.00	mg/kg	EPA 6010B	EPA 3050B
Lithium	9.38		2.50	mg/kg	EPA 6010B	EPA 3050B
SV18-1 (13-08-1572-11)						
Arsenic	5.86		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	127		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.285		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	23.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.88		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	27.0		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	48.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Molybdenum	1.37		0.250	mg/kg	EPA 6010B	EPA 3050B
Nickel	14.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	25.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	78.0		1.00	mg/kg	EPA 6010B	EPA 3050B
C29-C32	53		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	65		25	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	65		25	mg/kg	EPA 8015B (M)	EPA 3550B
C41-C44	40		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	240		25	mg/kg	EPA 8015B (M)	EPA 3550B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	13-08-1572 Phase I Update - Irwindale / IR13164320 08/22/13
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SV18-5 (13-08-1572-12)						
Arsenic	1.43		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	61.4		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	10.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.00		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	8.87		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	2.10		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	8.33		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	19.2		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	31.7		1.00	mg/kg	EPA 6010B	EPA 3050B
SV20-1 (13-08-1572-13)						
Arsenic	4.34		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	115		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.314		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	19.3		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	10.5		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	23.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	114		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	15.9		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	30.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	102		1.00	mg/kg	EPA 6010B	EPA 3050B
SV20-5 (13-08-1572-14)						
Antimony	0.877		0.750	mg/kg	EPA 6010B	EPA 3050B
Arsenic	3.61		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	136		0.500	mg/kg	EPA 6010B	EPA 3050B
Beryllium	0.372		0.250	mg/kg	EPA 6010B	EPA 3050B
Chromium	22.0		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	12.7		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	25.0		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	8.54		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	18.1		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	38.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	67.2		1.00	mg/kg	EPA 6010B	EPA 3050B

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Detections Summary

Client:	AMEC Environment & Infrastructure 121 Innovation Drive, Suite 200 Irvine, CA 92617-3094	Work Order: Project Name: Received:	13-08-1572 Phase I Update - Irwindale / IR13164320 08/22/13
Attn:	Linda Conlan		

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
SV16-1 (13-08-1572-15)						
Arsenic	2.43		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	80.2		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	12.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	7.73		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	14.1		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.79		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	10.6		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	20.8		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	34.8		1.00	mg/kg	EPA 6010B	EPA 3050B
SV16-5 (13-08-1572-16)						
Arsenic	1.39		0.750	mg/kg	EPA 6010B	EPA 3050B
Barium	71.3		0.500	mg/kg	EPA 6010B	EPA 3050B
Chromium	7.83		0.250	mg/kg	EPA 6010B	EPA 3050B
Cobalt	5.36		0.250	mg/kg	EPA 6010B	EPA 3050B
Copper	12.8		0.500	mg/kg	EPA 6010B	EPA 3050B
Lead	1.66		0.500	mg/kg	EPA 6010B	EPA 3050B
Nickel	5.81		0.250	mg/kg	EPA 6010B	EPA 3050B
Vanadium	14.4		0.250	mg/kg	EPA 6010B	EPA 3050B
Zinc	31.0		1.00	mg/kg	EPA 6010B	EPA 3050B
SV22-3 (13-08-1572-21)						
2-Butanone	84		19	ug/kg	EPA 8260B	EPA 5035

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	N/A
		Method:	EPA 300.0
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV7-1	**13-08-1572-5-A**	**08/20/13 10:00**	**Soil**	**IC 7**	**08/24/13**	**08/24/13 12:04**	**130824L01**

Parameter	Result	RL	DF	Qualifiers
Bromide	2.0	1.0	1	

Parameter	Result	RL	DF	Qualifiers
Bromide	ND	1.0	1	

Parameter	Result	RL	DF	Qualifiers
Bromide	760	10	10	

Parameter	Result	RL	DF	Qualifiers
Bromide	24	1.0	1	

Parameter	Result	RL	DF	Qualifiers
Bromide	ND	1.0	1	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV8-1	**13-08-1572-1-A**	**08/20/13 08:50**	**Soil**	**GC 47**	**08/23/13**	**08/23/13 23:22**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	66	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV9-5	**13-08-1572-2-A**	**08/20/13 09:10**	**Soil**	**GC 47**	**08/23/13**	**08/23/13 23:39**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	77	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV10-1	**13-08-1572-7-A**	**08/20/13 11:30**	**Soil**	**GC 47**	**08/23/13**	**08/23/13 23:56**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	9.0	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV10-5	**13-08-1572-8-A**	**08/20/13 11:35**	**Soil**	**GC 47**	**08/23/13**	**08/24/13 00:30**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	82	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV18-1	**13-08-1572-11-A**	**08/20/13 13:40**	**Soil**	**GC 47**	**08/23/13**	**08/24/13 00:47**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5	
C7	ND	25	5	
C8	ND	25	5	
C9-C10	ND	25	5	
C11-C12	ND	25	5	
C13-C14	ND	25	5	
C15-C16	ND	25	5	
C17-C18	ND	25	5	
C19-C20	ND	25	5	
C21-C22	ND	25	5	
C23-C24	ND	25	5	
C25-C28	ND	25	5	
C29-C32	53	25	5	
C33-C36	65	25	5	
C37-C40	65	25	5	
C41-C44	40	25	5	
C6-C44 Total	240	25	5	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	61	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV18-5	**13-08-1572-12-A**	**08/20/13 13:45**	**Soil**	**GC 47**	**08/23/13**	**08/24/13 01:04**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	88	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 7 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV20-1	**13-08-1572-13-A**	**08/20/13 14:40**	**Soil**	**GC 47**	**08/23/13**	**08/24/13 01:21**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	79	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV20-5	**13-08-1572-14-A**	**08/20/13 14:45**	**Soil**	**GC 47**	**08/23/13**	**08/24/13 01:38**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	73	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV16-1	**13-08-1572-15-A**	**08/20/13 15:30**	**Soil**	**GC 47**	**08/23/13**	**08/24/13 01:55**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	92	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV16-5	**13-08-1572-16-A**	**08/20/13 15:45**	**Soil**	**GC 47**	**08/23/13**	**08/24/13 02:12**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-477**	**N/A**	**Soil**	**GC 47**	**08/23/13**	**08/23/13 20:16**	**130823B10A**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1	
C7	ND	5.0	1	
C8	ND	5.0	1	
C9-C10	ND	5.0	1	
C11-C12	ND	5.0	1	
C13-C14	ND	5.0	1	
C15-C16	ND	5.0	1	
C17-C18	ND	5.0	1	
C19-C20	ND	5.0	1	
C21-C22	ND	5.0	1	
C23-C24	ND	5.0	1	
C25-C28	ND	5.0	1	
C29-C32	ND	5.0	1	
C33-C36	ND	5.0	1	
C37-C40	ND	5.0	1	
C41-C44	ND	5.0	1	
C6-C44 Total	ND	5.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	125	61-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV7-1	**13-08-1572-5-A**	**08/20/13 10:00**	**Soil**	**ICP 7300**	**08/23/13**	**08/26/13 11:56**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Lithium	11.3	2.50	1	

Parameter	Result	RL	DF	Qualifiers
Lithium	8.07	2.50	1	

Parameter	Result	RL	DF	Qualifiers
Lithium	27.2	2.50	1	

Parameter	Result	RL	DF	Qualifiers
Lithium	9.38	2.50	1	

Parameter	Result	RL	DF	Qualifiers
Lithium	ND	2.50	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV8-1	**13-08-1572-1-A**	**08/20/13 08:50**	**Soil**	**ICP 7300**	**08/23/13**	**08/24/13 15:40**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	4.52	0.750	1	
Barium	125	0.500	1	
Beryllium	0.315	0.250	1	
Cadmium	ND	0.500	1	
Chromium	20.4	0.250	1	
Cobalt	11.2	0.250	1	
Copper	25.9	0.500	1	
Lead	11.9	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	16.6	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	32.3	0.250	1	
Zinc	75.9	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV9-5	**13-08-1572-2-A**	**08/20/13 09:10**	**Soil**	**ICP 7300**	**08/23/13**	**08/24/13 15:41**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	1.55	0.750	1	
Barium	60.3	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	10.2	0.250	1	
Cobalt	5.90	0.250	1	
Copper	10.8	0.500	1	
Lead	1.27	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	8.10	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	15.7	0.250	1	
Zinc	29.3	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV10-1	**13-08-1572-7-A**	**08/20/13 11:30**	**Soil**	**ICP 7300**	**08/23/13**	**08/26/13 11:52**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	1.33	0.750	1	
Barium	60.6	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	7.93	0.250	1	
Cobalt	6.83	0.250	1	
Copper	5.98	0.500	1	
Lead	1.52	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	7.48	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	20.1	0.250	1	
Zinc	31.4	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 4 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV10-5	**13-08-1572-8-A**	**08/20/13 11:35**	**Soil**	**ICP 7300**	**08/23/13**	**08/26/13 11:59**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	1.30	0.750	1	
Barium	63.8	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	13.4	0.250	1	
Cobalt	6.34	0.250	1	
Copper	14.1	0.500	1	
Lead	1.62	0.500	1	
Molybdenum	0.538	0.250	1	
Nickel	8.66	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	17.5	0.250	1	
Zinc	30.1	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV18-1	**13-08-1572-11-A**	**08/20/13 13:40**	**Soil**	**ICP 7300**	**08/23/13**	**08/24/13 15:47**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	5.86	0.750	1	
Barium	127	0.500	1	
Beryllium	0.285	0.250	1	
Cadmium	ND	0.500	1	
Chromium	23.4	0.250	1	
Cobalt	7.88	0.250	1	
Copper	27.0	0.500	1	
Lead	48.3	0.500	1	
Molybdenum	1.37	0.250	1	
Nickel	14.6	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	25.2	0.250	1	
Zinc	78.0	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 6 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV18-5	**13-08-1572-12-A**	**08/20/13 13:45**	**Soil**	**ICP 7300**	**08/23/13**	**08/24/13 15:53**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	1.43	0.750	1	
Barium	61.4	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	10.0	0.250	1	
Cobalt	7.00	0.250	1	
Copper	8.87	0.500	1	
Lead	2.10	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	8.33	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	19.2	0.250	1	
Zinc	31.7	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV20-1	**13-08-1572-13-A**	**08/20/13 14:40**	**Soil**	**ICP 7300**	**08/23/13**	**08/24/13 15:54**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	4.34	0.750	1	
Barium	115	0.500	1	
Beryllium	0.314	0.250	1	
Cadmium	ND	0.500	1	
Chromium	19.3	0.250	1	
Cobalt	10.5	0.250	1	
Copper	23.3	0.500	1	
Lead	114	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	15.9	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	30.8	0.250	1	
Zinc	102	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 8 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV20-5	**13-08-1572-14-A**	**08/20/13 14:45**	**Soil**	**ICP 7300**	**08/23/13**	**08/24/13 15:55**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	0.877	0.750	1	
Arsenic	3.61	0.750	1	
Barium	136	0.500	1	
Beryllium	0.372	0.250	1	
Cadmium	ND	0.500	1	
Chromium	22.0	0.250	1	
Cobalt	12.7	0.250	1	
Copper	25.0	0.500	1	
Lead	8.54	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	18.1	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	38.4	0.250	1	
Zinc	67.2	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 9 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV16-1	**13-08-1572-15-A**	**08/20/13 15:30**	**Soil**	**ICP 7300**	**08/23/13**	**08/24/13 15:56**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	2.43	0.750	1	
Barium	80.2	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	12.8	0.250	1	
Cobalt	7.73	0.250	1	
Copper	14.1	0.500	1	
Lead	1.79	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	10.6	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	20.8	0.250	1	
Zinc	34.8	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 10 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV16-5	**13-08-1572-16-A**	**08/20/13 15:45**	**Soil**	**ICP 7300**	**08/23/13**	**08/24/13 15:57**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	1.39	0.750	1	
Barium	71.3	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	7.83	0.250	1	
Cobalt	5.36	0.250	1	
Copper	12.8	0.500	1	
Lead	1.66	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	5.81	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	14.4	0.250	1	
Zinc	31.0	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 11 of 11

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-002-17247**	**N/A**	**Soil**	**ICP 7300**	**08/23/13**	**08/26/13 11:48**	**130823L07**

Parameter	Result	RL	DF	Qualifiers
Antimony	ND	0.750	1	
Arsenic	ND	0.750	1	
Barium	ND	0.500	1	
Beryllium	ND	0.250	1	
Cadmium	ND	0.500	1	
Chromium	ND	0.250	1	
Cobalt	ND	0.250	1	
Copper	ND	0.500	1	
Lead	ND	0.500	1	
Molybdenum	ND	0.250	1	
Nickel	ND	0.250	1	
Selenium	ND	0.750	1	
Silver	ND	0.250	1	
Thallium	ND	0.750	1	
Vanadium	ND	0.250	1	
Zinc	ND	1.00	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV8-1	**13-08-1572-1-A**	**08/20/13 08:50**	**Soil**	**Mercury**	**08/26/13**	**08/26/13 12:19**	**130826L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV16-1	**13-08-1572-15-A**	**08/20/13 15:30**	**Soil**	**Mercury**	**08/26/13**	**08/26/13 12:41**	**130826L01**

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

Parameter	Result	RL	DF	Qualifiers
Mercury	ND	0.0835	1	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB2-1	**13-08-1572-3-A**	**08/20/13 09:45**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 17:01**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	50-135	
2,4,5,6-Tetrachloro-m-Xylene	104	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB2-3	**13-08-1572-4-A**	**08/20/13 09:50**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 17:15**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	50-135	
2,4,5,6-Tetrachloro-m-Xylene	90	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB3-1	**13-08-1572-9-A**	**08/20/13 13:10**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 17:30**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	50-135	
2,4,5,6-Tetrachloro-m-Xylene	103	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB3-3	**13-08-1572-10-A**	**08/20/13 13:15**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 17:44**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	69	50-135	
2,4,5,6-Tetrachloro-m-Xylene	71	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB4-1	**13-08-1572-19-A**	**08/21/13 09:40**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 17:58**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	50-135	
2,4,5,6-Tetrachloro-m-Xylene	103	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB4-3	**13-08-1572-20-A**	**08/21/13 09:45**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 18:13**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	50-135	
2,4,5,6-Tetrachloro-m-Xylene	96	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB1-1	**13-08-1572-23-A**	**08/21/13 13:10**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 18:27**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	50-135	
2,4,5,6-Tetrachloro-m-Xylene	97	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB1-3	**13-08-1572-24-A**	**08/21/13 13:15**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 18:41**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	50-135	
2,4,5,6-Tetrachloro-m-Xylene	94	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-537-1461**	**N/A**	**Soil**	**GC 51**	**08/23/13**	**08/27/13 13:05**	**130823L03**

Parameter	Result	RL	DF	Qualifiers
Aldrin	ND	5.0	1	
Alpha-BHC	ND	5.0	1	
Beta-BHC	ND	5.0	1	
Chlordane	ND	50	1	
4,4'-DDD	ND	5.0	1	
4,4'-DDE	ND	5.0	1	
4,4'-DDT	ND	5.0	1	
Delta-BHC	ND	5.0	1	
Dieldrin	ND	5.0	1	
Endosulfan I	ND	5.0	1	
Endosulfan II	ND	5.0	1	
Endosulfan Sulfate	ND	5.0	1	
Endrin	ND	5.0	1	
Endrin Aldehyde	ND	5.0	1	
Endrin Ketone	ND	5.0	1	
Gamma-BHC	ND	5.0	1	
Heptachlor	ND	5.0	1	
Heptachlor Epoxide	ND	5.0	1	
Methoxychlor	ND	5.0	1	
Toxaphene	ND	100	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	50-135	
2,4,5,6-Tetrachloro-m-Xylene	101	50-135	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV8-1	**13-08-1572-1-A**	**08/20/13 08:50**	**Soil**	**GC 31**	**08/23/13**	**08/27/13 18:07**	**130823L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	50-130	
2,4,5,6-Tetrachloro-m-Xylene	96	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	50-130	
2,4,5,6-Tetrachloro-m-Xylene	97	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV10-1	**13-08-1572-7-A**	**08/20/13 11:30**	**Soil**	**GC 31**	**08/23/13**	**08/27/13 18:45**	**130823L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	50-130	
2,4,5,6-Tetrachloro-m-Xylene	90	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	50-130	
2,4,5,6-Tetrachloro-m-Xylene	92	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV18-1	**13-08-1572-11-A**	**08/20/13 13:40**	**Soil**	**GC 31**	**08/23/13**	**08/27/13 19:23**	**130823L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	99	50-130	
2,4,5,6-Tetrachloro-m-Xylene	82	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	98	50-130	
2,4,5,6-Tetrachloro-m-Xylene	81	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV20-1	**13-08-1572-13-A**	**08/20/13 14:40**	**Soil**	**GC 31**	**08/23/13**	**08/27/13 20:01**	**130823L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	100	50-130	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	50-130	
2,4,5,6-Tetrachloro-m-Xylene	78	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV16-1	**13-08-1572-15-A**	**08/20/13 15:30**	**Soil**	**GC 31**	**08/23/13**	**08/27/13 20:39**	**130823L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	50-130	
2,4,5,6-Tetrachloro-m-Xylene	86	50-130	

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	50-130	
2,4,5,6-Tetrachloro-m-Xylene	91	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-535-2236**	**N/A**	**Soil**	**GC 31**	**08/23/13**	**08/27/13 17:48**	**130823L09**

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	50	1	
Aroclor-1221	ND	50	1	
Aroclor-1232	ND	50	1	
Aroclor-1242	ND	50	1	
Aroclor-1248	ND	50	1	
Aroclor-1254	ND	50	1	
Aroclor-1260	ND	50	1	
Aroclor-1262	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	50-130	
2,4,5,6-Tetrachloro-m-Xylene	106	50-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB2-1	**13-08-1572-3-A**	**08/20/13 09:45**	**Soil**	**GC 35**	**08/23/13**	**08/27/13 15:54**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	104	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB2-3	**13-08-1572-4-A**	**08/20/13 09:50**	**Soil**	**GC 35**	**08/23/13**	**08/27/13 18:07**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	87	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB3-1	**13-08-1572-9-A**	**08/20/13 13:10**	**Soil**	**GC 35**	**08/23/13**	**08/27/13 20:26**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	93	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 4 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB3-3	**13-08-1572-10-A**	**08/20/13 13:15**	**Soil**	**GC 35**	**08/23/13**	**08/27/13 21:10**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	86	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB4-1	**13-08-1572-19-A**	**08/21/13 09:40**	**Soil**	**GC 35**	**08/23/13**	**08/27/13 21:54**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	86	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB4-3	**13-08-1572-20-A**	**08/21/13 09:45**	**Soil**	**GC 35**	**08/23/13**	**08/27/13 22:39**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	87	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB1-1	**13-08-1572-23-A**	**08/21/13 13:10**	**Soil**	**GC 35**	**08/23/13**	**08/27/13 23:23**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	84	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 8 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB1-3	**13-08-1572-24-A**	**08/21/13 13:15**	**Soil**	**GC 35**	**08/23/13**	**08/28/13 00:07**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	88	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
		Units:	mg/kg
Project: Phase I Update - Irwindale / IR13164320			Page 9 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-973-16**	**N/A**	**Soil**	**GC 35**	**08/23/13**	**08/27/13 14:26**	**130823L14**

Parameter	Result	RL	DF	Qualifiers
Demeton-o/s	ND	0.50	1	
Azinphos Methyl	ND	0.50	1	
Bolstar	ND	0.50	1	
Chlorpyrifos	ND	0.50	1	
Coumaphos	ND	0.50	1	
Diazinon	ND	0.50	1	
Dichlorvos	ND	0.50	1	
Disulfoton	ND	0.50	1	
Ethoprop	ND	0.50	1	
Fensulfothion	ND	0.50	1	
Fenthion	ND	0.50	1	
Merphos	ND	0.50	1	
Methyl Parathion	ND	0.50	1	
Mevinphos	ND	0.50	1	
Naled	ND	4.0	1	
Phorate	ND	0.50	1	
Ronnel	ND	0.50	1	
Stirophos	ND	2.0	1	
Tokuthion	ND	0.50	1	
Trichloronate	ND	0.50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Tributylphosphate	107	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 8151A
		Method:	EPA 8151A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB2-1	**13-08-1572-3-A**	**08/20/13 09:45**	**Soil**	**GC 40**	**08/26/13**	**08/30/13 04:27**	**130826L19**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	87	30-130	

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	94	30-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 8151A
		Method:	EPA 8151A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB3-1	**13-08-1572-9-A**	**08/20/13 13:10**	**Soil**	**GC 40**	**08/26/13**	**08/30/13 05:19**	**130826L19**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	89	30-130	

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	90	30-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 8151A
		Method:	EPA 8151A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB4-1	**13-08-1572-19-A**	**08/21/13 09:40**	**Soil**	**GC 40**	**08/26/13**	**08/30/13 06:11**	**130826L19**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	88	30-130	

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	86	30-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 8151A
		Method:	EPA 8151A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SB1-1	**13-08-1572-23-A**	**08/21/13 13:10**	**Soil**	**GC 40**	**08/26/13**	**08/30/13 07:02**	**130826L19**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	99	30-130	

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	92	30-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 8151A
		Method:	EPA 8151A
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-033-1121**	**N/A**	**Soil**	**GC 40**	**08/26/13**	**08/30/13 03:09**	**130826L19**

Parameter	Result	RL	DF	Qualifiers
Dalapon	ND	250	1	
Dicamba	ND	10	1	
MCPP	ND	10000	1	
MCPA	ND	10000	1	
Dichlorprop	ND	100	1	
2,4-D	ND	100	1	
2,4,5-TP (Silvex)	ND	10	1	
2,4,5-T	ND	10	1	
2,4-DB	ND	100	1	
Dinoseb	ND	50	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4-Dichlorophenylacetic acid	85	30-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV8-1	**13-08-1572-1-C**	**08/20/13 08:50**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 18:00**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.01	
Benzene	ND	1.0	1.01	
Bromobenzene	ND	1.0	1.01	
Bromochloromethane	ND	2.0	1.01	
Bromodichloromethane	ND	1.0	1.01	
Bromoform	ND	5.0	1.01	
Bromomethane	ND	20	1.01	
2-Butanone	ND	20	1.01	
n-Butylbenzene	ND	1.0	1.01	
sec-Butylbenzene	ND	1.0	1.01	
tert-Butylbenzene	ND	1.0	1.01	
Carbon Disulfide	ND	10	1.01	
Carbon Tetrachloride	ND	1.0	1.01	
Chlorobenzene	ND	1.0	1.01	
Chloroethane	ND	2.0	1.01	
Chloroform	ND	1.0	1.01	
Chloromethane	ND	20	1.01	
2-Chlorotoluene	ND	1.0	1.01	
4-Chlorotoluene	ND	1.0	1.01	
Dibromochloromethane	ND	2.0	1.01	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.01	
1,2-Dibromoethane	ND	1.0	1.01	
Dibromomethane	ND	1.0	1.01	
1,2-Dichlorobenzene	ND	1.0	1.01	
1,3-Dichlorobenzene	ND	1.0	1.01	
1,4-Dichlorobenzene	ND	1.0	1.01	
Dichlorodifluoromethane	ND	2.0	1.01	
1,1-Dichloroethane	ND	1.0	1.01	
1,2-Dichloroethane	ND	1.0	1.01	
1,1-Dichloroethene	ND	1.0	1.01	
c-1,2-Dichloroethene	ND	1.0	1.01	
t-1,2-Dichloroethene	ND	1.0	1.01	
1,2-Dichloropropane	ND	1.0	1.01	
1,3-Dichloropropane	ND	1.0	1.01	
2,2-Dichloropropane	ND	5.0	1.01	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	08/22/13
121 Innovation Drive, Suite 200	Work Order:	13-08-1572
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320		Page 2 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.01	
c-1,3-Dichloropropene	ND	1.0	1.01	
t-1,3-Dichloropropene	ND	2.0	1.01	
Ethylbenzene	ND	1.0	1.01	
2-Hexanone	ND	20	1.01	
Isopropylbenzene	ND	1.0	1.01	
p-Isopropyltoluene	ND	1.0	1.01	
Methylene Chloride	ND	10	1.01	
4-Methyl-2-Pentanone	ND	20	1.01	
Naphthalene	ND	10	1.01	
n-Propylbenzene	ND	2.0	1.01	
Styrene	ND	1.0	1.01	
1,1,1,2-Tetrachloroethane	ND	1.0	1.01	
1,1,2,2-Tetrachloroethane	ND	2.0	1.01	
Tetrachloroethene	ND	1.0	1.01	
Toluene	ND	1.0	1.01	
1,2,3-Trichlorobenzene	ND	2.0	1.01	
1,2,4-Trichlorobenzene	ND	2.0	1.01	
1,1,1-Trichloroethane	ND	1.0	1.01	
1,1,2-Trichloroethane	ND	1.0	1.01	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.01	
Trichloroethene	ND	2.0	1.01	
Trichlorofluoromethane	ND	10	1.01	
1,2,3-Trichloropropane	ND	2.0	1.01	
1,2,4-Trimethylbenzene	ND	2.0	1.01	
1,3,5-Trimethylbenzene	ND	2.0	1.01	
Vinyl Acetate	ND	10	1.01	
Vinyl Chloride	ND	1.0	1.01	
p/m-Xylene	ND	2.0	1.01	
o-Xylene	ND	1.0	1.01	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	80-120	
Dibromofluoromethane	106	79-133	
1,2-Dichloroethane-d4	116	71-155	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV9-5	**13-08-1572-2-C**	**08/20/13 09:10**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 18:27**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	48	0.967	
Benzene	ND	0.97	0.967	
Bromobenzene	ND	0.97	0.967	
Bromochloromethane	ND	1.9	0.967	
Bromodichloromethane	ND	0.97	0.967	
Bromoform	ND	4.8	0.967	
Bromomethane	ND	19	0.967	
2-Butanone	ND	19	0.967	
n-Butylbenzene	ND	0.97	0.967	
sec-Butylbenzene	ND	0.97	0.967	
tert-Butylbenzene	ND	0.97	0.967	
Carbon Disulfide	ND	9.7	0.967	
Carbon Tetrachloride	ND	0.97	0.967	
Chlorobenzene	ND	0.97	0.967	
Chloroethane	ND	1.9	0.967	
Chloroform	ND	0.97	0.967	
Chloromethane	ND	19	0.967	
2-Chlorotoluene	ND	0.97	0.967	
4-Chlorotoluene	ND	0.97	0.967	
Dibromochloromethane	ND	1.9	0.967	
1,2-Dibromo-3-Chloropropane	ND	4.8	0.967	
1,2-Dibromoethane	ND	0.97	0.967	
Dibromomethane	ND	0.97	0.967	
1,2-Dichlorobenzene	ND	0.97	0.967	
1,3-Dichlorobenzene	ND	0.97	0.967	
1,4-Dichlorobenzene	ND	0.97	0.967	
Dichlorodifluoromethane	ND	1.9	0.967	
1,1-Dichloroethane	ND	0.97	0.967	
1,2-Dichloroethane	ND	0.97	0.967	
1,1-Dichloroethene	ND	0.97	0.967	
c-1,2-Dichloroethene	ND	0.97	0.967	
t-1,2-Dichloroethene	ND	0.97	0.967	
1,2-Dichloropropane	ND	0.97	0.967	
1,3-Dichloropropane	ND	0.97	0.967	
2,2-Dichloropropane	ND	4.8	0.967	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	08/22/13
121 Innovation Drive, Suite 200	Work Order:	13-08-1572
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320		Page 4 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	0.967	
c-1,3-Dichloropropene	ND	0.97	0.967	
t-1,3-Dichloropropene	ND	1.9	0.967	
Ethylbenzene	ND	0.97	0.967	
2-Hexanone	ND	19	0.967	
Isopropylbenzene	ND	0.97	0.967	
p-Isopropyltoluene	ND	0.97	0.967	
Methylene Chloride	ND	9.7	0.967	
4-Methyl-2-Pentanone	ND	19	0.967	
Naphthalene	ND	9.7	0.967	
n-Propylbenzene	ND	1.9	0.967	
Styrene	ND	0.97	0.967	
1,1,1,2-Tetrachloroethane	ND	0.97	0.967	
1,1,2,2-Tetrachloroethane	ND	1.9	0.967	
Tetrachloroethene	ND	0.97	0.967	
Toluene	ND	0.97	0.967	
1,2,3-Trichlorobenzene	ND	1.9	0.967	
1,2,4-Trichlorobenzene	ND	1.9	0.967	
1,1,1-Trichloroethane	ND	0.97	0.967	
1,1,2-Trichloroethane	ND	0.97	0.967	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.7	0.967	
Trichloroethene	ND	1.9	0.967	
Trichlorofluoromethane	ND	9.7	0.967	
1,2,3-Trichloropropane	ND	1.9	0.967	
1,2,4-Trimethylbenzene	ND	1.9	0.967	
1,3,5-Trimethylbenzene	ND	1.9	0.967	
Vinyl Acetate	ND	9.7	0.967	
Vinyl Chloride	ND	0.97	0.967	
p/m-Xylene	ND	1.9	0.967	
o-Xylene	ND	0.97	0.967	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.967	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	80-120	
Dibromofluoromethane	102	79-133	
1,2-Dichloroethane-d4	106	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV10-1	**13-08-1572-7-C**	**08/20/13 11:30**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 18:53**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	45	0.899	
Benzene	ND	0.90	0.899	
Bromobenzene	ND	0.90	0.899	
Bromochloromethane	ND	1.8	0.899	
Bromodichloromethane	ND	0.90	0.899	
Bromoform	ND	4.5	0.899	
Bromomethane	ND	18	0.899	
2-Butanone	ND	18	0.899	
n-Butylbenzene	ND	0.90	0.899	
sec-Butylbenzene	ND	0.90	0.899	
tert-Butylbenzene	ND	0.90	0.899	
Carbon Disulfide	ND	9.0	0.899	
Carbon Tetrachloride	ND	0.90	0.899	
Chlorobenzene	ND	0.90	0.899	
Chloroethane	ND	1.8	0.899	
Chloroform	ND	0.90	0.899	
Chloromethane	ND	18	0.899	
2-Chlorotoluene	ND	0.90	0.899	
4-Chlorotoluene	ND	0.90	0.899	
Dibromochloromethane	ND	1.8	0.899	
1,2-Dibromo-3-Chloropropane	ND	4.5	0.899	
1,2-Dibromoethane	ND	0.90	0.899	
Dibromomethane	ND	0.90	0.899	
1,2-Dichlorobenzene	ND	0.90	0.899	
1,3-Dichlorobenzene	ND	0.90	0.899	
1,4-Dichlorobenzene	ND	0.90	0.899	
Dichlorodifluoromethane	ND	1.8	0.899	
1,1-Dichloroethane	ND	0.90	0.899	
1,2-Dichloroethane	ND	0.90	0.899	
1,1-Dichloroethene	ND	0.90	0.899	
c-1,2-Dichloroethene	ND	0.90	0.899	
t-1,2-Dichloroethene	ND	0.90	0.899	
1,2-Dichloropropane	ND	0.90	0.899	
1,3-Dichloropropane	ND	0.90	0.899	
2,2-Dichloropropane	ND	4.5	0.899	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	08/22/13
121 Innovation Drive, Suite 200	Work Order:	13-08-1572
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320		Page 6 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.8	0.899	
c-1,3-Dichloropropene	ND	0.90	0.899	
t-1,3-Dichloropropene	ND	1.8	0.899	
Ethylbenzene	ND	0.90	0.899	
2-Hexanone	ND	18	0.899	
Isopropylbenzene	ND	0.90	0.899	
p-Isopropyltoluene	ND	0.90	0.899	
Methylene Chloride	ND	9.0	0.899	
4-Methyl-2-Pentanone	ND	18	0.899	
Naphthalene	ND	9.0	0.899	
n-Propylbenzene	ND	1.8	0.899	
Styrene	ND	0.90	0.899	
1,1,1,2-Tetrachloroethane	ND	0.90	0.899	
1,1,2,2-Tetrachloroethane	ND	1.8	0.899	
Tetrachloroethene	ND	0.90	0.899	
Toluene	ND	0.90	0.899	
1,2,3-Trichlorobenzene	ND	1.8	0.899	
1,2,4-Trichlorobenzene	ND	1.8	0.899	
1,1,1-Trichloroethane	ND	0.90	0.899	
1,1,2-Trichloroethane	ND	0.90	0.899	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.0	0.899	
Trichloroethene	ND	1.8	0.899	
Trichlorofluoromethane	ND	9.0	0.899	
1,2,3-Trichloropropane	ND	1.8	0.899	
1,2,4-Trimethylbenzene	ND	1.8	0.899	
1,3,5-Trimethylbenzene	ND	1.8	0.899	
Vinyl Acetate	ND	9.0	0.899	
Vinyl Chloride	ND	0.90	0.899	
p/m-Xylene	ND	1.8	0.899	
o-Xylene	ND	0.90	0.899	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	0.899	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	80-120	
Dibromofluoromethane	104	79-133	
1,2-Dichloroethane-d4	104	71-155	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 7 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV10-5	**13-08-1572-8-C**	**08/20/13 11:35**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 19:20**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	48	0.951	
Benzene	ND	0.95	0.951	
Bromobenzene	ND	0.95	0.951	
Bromochloromethane	ND	1.9	0.951	
Bromodichloromethane	ND	0.95	0.951	
Bromoform	ND	4.8	0.951	
Bromomethane	ND	19	0.951	
2-Butanone	ND	19	0.951	
n-Butylbenzene	ND	0.95	0.951	
sec-Butylbenzene	ND	0.95	0.951	
tert-Butylbenzene	ND	0.95	0.951	
Carbon Disulfide	ND	9.5	0.951	
Carbon Tetrachloride	ND	0.95	0.951	
Chlorobenzene	ND	0.95	0.951	
Chloroethane	ND	1.9	0.951	
Chloroform	ND	0.95	0.951	
Chloromethane	ND	19	0.951	
2-Chlorotoluene	ND	0.95	0.951	
4-Chlorotoluene	ND	0.95	0.951	
Dibromochloromethane	ND	1.9	0.951	
1,2-Dibromo-3-Chloropropane	ND	4.8	0.951	
1,2-Dibromoethane	ND	0.95	0.951	
Dibromomethane	ND	0.95	0.951	
1,2-Dichlorobenzene	ND	0.95	0.951	
1,3-Dichlorobenzene	ND	0.95	0.951	
1,4-Dichlorobenzene	ND	0.95	0.951	
Dichlorodifluoromethane	ND	1.9	0.951	
1,1-Dichloroethane	ND	0.95	0.951	
1,2-Dichloroethane	ND	0.95	0.951	
1,1-Dichloroethene	ND	0.95	0.951	
c-1,2-Dichloroethene	ND	0.95	0.951	
t-1,2-Dichloroethene	ND	0.95	0.951	
1,2-Dichloropropane	ND	0.95	0.951	
1,3-Dichloropropane	ND	0.95	0.951	
2,2-Dichloropropane	ND	4.8	0.951	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	08/22/13
121 Innovation Drive, Suite 200	Work Order:	13-08-1572
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320		Page 8 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	0.951	
c-1,3-Dichloropropene	ND	0.95	0.951	
t-1,3-Dichloropropene	ND	1.9	0.951	
Ethylbenzene	ND	0.95	0.951	
2-Hexanone	ND	19	0.951	
Isopropylbenzene	ND	0.95	0.951	
p-Isopropyltoluene	ND	0.95	0.951	
Methylene Chloride	ND	9.5	0.951	
4-Methyl-2-Pentanone	ND	19	0.951	
Naphthalene	ND	9.5	0.951	
n-Propylbenzene	ND	1.9	0.951	
Styrene	ND	0.95	0.951	
1,1,1,2-Tetrachloroethane	ND	0.95	0.951	
1,1,2,2-Tetrachloroethane	ND	1.9	0.951	
Tetrachloroethene	ND	0.95	0.951	
Toluene	ND	0.95	0.951	
1,2,3-Trichlorobenzene	ND	1.9	0.951	
1,2,4-Trichlorobenzene	ND	1.9	0.951	
1,1,1-Trichloroethane	ND	0.95	0.951	
1,1,2-Trichloroethane	ND	0.95	0.951	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.5	0.951	
Trichloroethene	ND	1.9	0.951	
Trichlorofluoromethane	ND	9.5	0.951	
1,2,3-Trichloropropane	ND	1.9	0.951	
1,2,4-Trimethylbenzene	ND	1.9	0.951	
1,3,5-Trimethylbenzene	ND	1.9	0.951	
Vinyl Acetate	ND	9.5	0.951	
Vinyl Chloride	ND	0.95	0.951	
p/m-Xylene	ND	1.9	0.951	
o-Xylene	ND	0.95	0.951	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.951	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	108	71-155	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 9 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV18-1	**13-08-1572-11-C**	**08/20/13 13:40**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 19:47**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	43	0.856	
Benzene	ND	0.86	0.856	
Bromobenzene	ND	0.86	0.856	
Bromochloromethane	ND	1.7	0.856	
Bromodichloromethane	ND	0.86	0.856	
Bromoform	ND	4.3	0.856	
Bromomethane	ND	17	0.856	
2-Butanone	ND	17	0.856	
n-Butylbenzene	ND	0.86	0.856	
sec-Butylbenzene	ND	0.86	0.856	
tert-Butylbenzene	ND	0.86	0.856	
Carbon Disulfide	ND	8.6	0.856	
Carbon Tetrachloride	ND	0.86	0.856	
Chlorobenzene	ND	0.86	0.856	
Chloroethane	ND	1.7	0.856	
Chloroform	ND	0.86	0.856	
Chloromethane	ND	17	0.856	
2-Chlorotoluene	ND	0.86	0.856	
4-Chlorotoluene	ND	0.86	0.856	
Dibromochloromethane	ND	1.7	0.856	
1,2-Dibromo-3-Chloropropane	ND	4.3	0.856	
1,2-Dibromoethane	ND	0.86	0.856	
Dibromomethane	ND	0.86	0.856	
1,2-Dichlorobenzene	ND	0.86	0.856	
1,3-Dichlorobenzene	ND	0.86	0.856	
1,4-Dichlorobenzene	ND	0.86	0.856	
Dichlorodifluoromethane	ND	1.7	0.856	
1,1-Dichloroethane	ND	0.86	0.856	
1,2-Dichloroethane	ND	0.86	0.856	
1,1-Dichloroethene	ND	0.86	0.856	
c-1,2-Dichloroethene	ND	0.86	0.856	
t-1,2-Dichloroethene	ND	0.86	0.856	
1,2-Dichloropropane	ND	0.86	0.856	
1,3-Dichloropropane	ND	0.86	0.856	
2,2-Dichloropropane	ND	4.3	0.856	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 10 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.7	0.856	
c-1,3-Dichloropropene	ND	0.86	0.856	
t-1,3-Dichloropropene	ND	1.7	0.856	
Ethylbenzene	ND	0.86	0.856	
2-Hexanone	ND	17	0.856	
Isopropylbenzene	ND	0.86	0.856	
p-Isopropyltoluene	ND	0.86	0.856	
Methylene Chloride	ND	8.6	0.856	
4-Methyl-2-Pentanone	ND	17	0.856	
Naphthalene	ND	8.6	0.856	
n-Propylbenzene	ND	1.7	0.856	
Styrene	ND	0.86	0.856	
1,1,1,2-Tetrachloroethane	ND	0.86	0.856	
1,1,2,2-Tetrachloroethane	ND	1.7	0.856	
Tetrachloroethene	ND	0.86	0.856	
Toluene	ND	0.86	0.856	
1,2,3-Trichlorobenzene	ND	1.7	0.856	
1,2,4-Trichlorobenzene	ND	1.7	0.856	
1,1,1-Trichloroethane	ND	0.86	0.856	
1,1,2-Trichloroethane	ND	0.86	0.856	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.6	0.856	
Trichloroethene	ND	1.7	0.856	
Trichlorofluoromethane	ND	8.6	0.856	
1,2,3-Trichloropropane	ND	1.7	0.856	
1,2,4-Trimethylbenzene	ND	1.7	0.856	
1,3,5-Trimethylbenzene	ND	1.7	0.856	
Vinyl Acetate	ND	8.6	0.856	
Vinyl Chloride	ND	0.86	0.856	
p/m-Xylene	ND	1.7	0.856	
o-Xylene	ND	0.86	0.856	
Methyl-t-Butyl Ether (MTBE)	ND	1.7	0.856	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	80-120	
Dibromofluoromethane	107	79-133	
1,2-Dichloroethane-d4	111	71-155	
Toluene-d8	95	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 11 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV18-5	**13-08-1572-12-C**	**08/20/13 13:45**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 20:14**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	49	0.982	
Benzene	ND	0.98	0.982	
Bromobenzene	ND	0.98	0.982	
Bromochloromethane	ND	2.0	0.982	
Bromodichloromethane	ND	0.98	0.982	
Bromoform	ND	4.9	0.982	
Bromomethane	ND	20	0.982	
2-Butanone	ND	20	0.982	
n-Butylbenzene	ND	0.98	0.982	
sec-Butylbenzene	ND	0.98	0.982	
tert-Butylbenzene	ND	0.98	0.982	
Carbon Disulfide	ND	9.8	0.982	
Carbon Tetrachloride	ND	0.98	0.982	
Chlorobenzene	ND	0.98	0.982	
Chloroethane	ND	2.0	0.982	
Chloroform	ND	0.98	0.982	
Chloromethane	ND	20	0.982	
2-Chlorotoluene	ND	0.98	0.982	
4-Chlorotoluene	ND	0.98	0.982	
Dibromochloromethane	ND	2.0	0.982	
1,2-Dibromo-3-Chloropropane	ND	4.9	0.982	
1,2-Dibromoethane	ND	0.98	0.982	
Dibromomethane	ND	0.98	0.982	
1,2-Dichlorobenzene	ND	0.98	0.982	
1,3-Dichlorobenzene	ND	0.98	0.982	
1,4-Dichlorobenzene	ND	0.98	0.982	
Dichlorodifluoromethane	ND	2.0	0.982	
1,1-Dichloroethane	ND	0.98	0.982	
1,2-Dichloroethane	ND	0.98	0.982	
1,1-Dichloroethene	ND	0.98	0.982	
c-1,2-Dichloroethene	ND	0.98	0.982	
t-1,2-Dichloroethene	ND	0.98	0.982	
1,2-Dichloropropane	ND	0.98	0.982	
1,3-Dichloropropane	ND	0.98	0.982	
2,2-Dichloropropane	ND	4.9	0.982	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 12 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	0.982	
c-1,3-Dichloropropene	ND	0.98	0.982	
t-1,3-Dichloropropene	ND	2.0	0.982	
Ethylbenzene	ND	0.98	0.982	
2-Hexanone	ND	20	0.982	
Isopropylbenzene	ND	0.98	0.982	
p-Isopropyltoluene	ND	0.98	0.982	
Methylene Chloride	ND	9.8	0.982	
4-Methyl-2-Pentanone	ND	20	0.982	
Naphthalene	ND	9.8	0.982	
n-Propylbenzene	ND	2.0	0.982	
Styrene	ND	0.98	0.982	
1,1,1,2-Tetrachloroethane	ND	0.98	0.982	
1,1,2,2-Tetrachloroethane	ND	2.0	0.982	
Tetrachloroethene	ND	0.98	0.982	
Toluene	ND	0.98	0.982	
1,2,3-Trichlorobenzene	ND	2.0	0.982	
1,2,4-Trichlorobenzene	ND	2.0	0.982	
1,1,1-Trichloroethane	ND	0.98	0.982	
1,1,2-Trichloroethane	ND	0.98	0.982	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.8	0.982	
Trichloroethene	ND	2.0	0.982	
Trichlorofluoromethane	ND	9.8	0.982	
1,2,3-Trichloropropane	ND	2.0	0.982	
1,2,4-Trimethylbenzene	ND	2.0	0.982	
1,3,5-Trimethylbenzene	ND	2.0	0.982	
Vinyl Acetate	ND	9.8	0.982	
Vinyl Chloride	ND	0.98	0.982	
p/m-Xylene	ND	2.0	0.982	
o-Xylene	ND	0.98	0.982	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.982	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	109	71-155	
Toluene-d8	95	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 13 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV20-1	**13-08-1572-13-C**	**08/20/13 14:40**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 20:41**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	49	0.977	
Benzene	ND	0.98	0.977	
Bromobenzene	ND	0.98	0.977	
Bromochloromethane	ND	2.0	0.977	
Bromodichloromethane	ND	0.98	0.977	
Bromoform	ND	4.9	0.977	
Bromomethane	ND	20	0.977	
2-Butanone	ND	20	0.977	
n-Butylbenzene	ND	0.98	0.977	
sec-Butylbenzene	ND	0.98	0.977	
tert-Butylbenzene	ND	0.98	0.977	
Carbon Disulfide	ND	9.8	0.977	
Carbon Tetrachloride	ND	0.98	0.977	
Chlorobenzene	ND	0.98	0.977	
Chloroethane	ND	2.0	0.977	
Chloroform	ND	0.98	0.977	
Chloromethane	ND	20	0.977	
2-Chlorotoluene	ND	0.98	0.977	
4-Chlorotoluene	ND	0.98	0.977	
Dibromochloromethane	ND	2.0	0.977	
1,2-Dibromo-3-Chloropropane	ND	4.9	0.977	
1,2-Dibromoethane	ND	0.98	0.977	
Dibromomethane	ND	0.98	0.977	
1,2-Dichlorobenzene	ND	0.98	0.977	
1,3-Dichlorobenzene	ND	0.98	0.977	
1,4-Dichlorobenzene	ND	0.98	0.977	
Dichlorodifluoromethane	ND	2.0	0.977	
1,1-Dichloroethane	ND	0.98	0.977	
1,2-Dichloroethane	ND	0.98	0.977	
1,1-Dichloroethene	ND	0.98	0.977	
c-1,2-Dichloroethene	ND	0.98	0.977	
t-1,2-Dichloroethene	ND	0.98	0.977	
1,2-Dichloropropane	ND	0.98	0.977	
1,3-Dichloropropane	ND	0.98	0.977	
2,2-Dichloropropane	ND	4.9	0.977	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 14 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	0.977	
c-1,3-Dichloropropene	ND	0.98	0.977	
t-1,3-Dichloropropene	ND	2.0	0.977	
Ethylbenzene	ND	0.98	0.977	
2-Hexanone	ND	20	0.977	
Isopropylbenzene	ND	0.98	0.977	
p-Isopropyltoluene	ND	0.98	0.977	
Methylene Chloride	ND	9.8	0.977	
4-Methyl-2-Pentanone	ND	20	0.977	
Naphthalene	ND	9.8	0.977	
n-Propylbenzene	ND	2.0	0.977	
Styrene	ND	0.98	0.977	
1,1,1,2-Tetrachloroethane	ND	0.98	0.977	
1,1,2,2-Tetrachloroethane	ND	2.0	0.977	
Tetrachloroethene	ND	0.98	0.977	
Toluene	ND	0.98	0.977	
1,2,3-Trichlorobenzene	ND	2.0	0.977	
1,2,4-Trichlorobenzene	ND	2.0	0.977	
1,1,1-Trichloroethane	ND	0.98	0.977	
1,1,2-Trichloroethane	ND	0.98	0.977	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.8	0.977	
Trichloroethene	ND	2.0	0.977	
Trichlorofluoromethane	ND	9.8	0.977	
1,2,3-Trichloropropane	ND	2.0	0.977	
1,2,4-Trimethylbenzene	ND	2.0	0.977	
1,3,5-Trimethylbenzene	ND	2.0	0.977	
Vinyl Acetate	ND	9.8	0.977	
Vinyl Chloride	ND	0.98	0.977	
p/m-Xylene	ND	2.0	0.977	
o-Xylene	ND	0.98	0.977	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.977	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	80-120	
Dibromofluoromethane	104	79-133	
1,2-Dichloroethane-d4	112	71-155	
Toluene-d8	97	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 15 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV20-5	**13-08-1572-14-D**	**08/20/13 14:45**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 21:08**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.01	
Benzene	ND	1.0	1.01	
Bromobenzene	ND	1.0	1.01	
Bromochloromethane	ND	2.0	1.01	
Bromodichloromethane	ND	1.0	1.01	
Bromoform	ND	5.0	1.01	
Bromomethane	ND	20	1.01	
2-Butanone	ND	20	1.01	
n-Butylbenzene	ND	1.0	1.01	
sec-Butylbenzene	ND	1.0	1.01	
tert-Butylbenzene	ND	1.0	1.01	
Carbon Disulfide	ND	10	1.01	
Carbon Tetrachloride	ND	1.0	1.01	
Chlorobenzene	ND	1.0	1.01	
Chloroethane	ND	2.0	1.01	
Chloroform	ND	1.0	1.01	
Chloromethane	ND	20	1.01	
2-Chlorotoluene	ND	1.0	1.01	
4-Chlorotoluene	ND	1.0	1.01	
Dibromochloromethane	ND	2.0	1.01	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.01	
1,2-Dibromoethane	ND	1.0	1.01	
Dibromomethane	ND	1.0	1.01	
1,2-Dichlorobenzene	ND	1.0	1.01	
1,3-Dichlorobenzene	ND	1.0	1.01	
1,4-Dichlorobenzene	ND	1.0	1.01	
Dichlorodifluoromethane	ND	2.0	1.01	
1,1-Dichloroethane	ND	1.0	1.01	
1,2-Dichloroethane	ND	1.0	1.01	
1,1-Dichloroethene	ND	1.0	1.01	
c-1,2-Dichloroethene	ND	1.0	1.01	
t-1,2-Dichloroethene	ND	1.0	1.01	
1,2-Dichloropropane	ND	1.0	1.01	
1,3-Dichloropropane	ND	1.0	1.01	
2,2-Dichloropropane	ND	5.0	1.01	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 16 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1.01	
c-1,3-Dichloropropene	ND	1.0	1.01	
t-1,3-Dichloropropene	ND	2.0	1.01	
Ethylbenzene	ND	1.0	1.01	
2-Hexanone	ND	20	1.01	
Isopropylbenzene	ND	1.0	1.01	
p-Isopropyltoluene	ND	1.0	1.01	
Methylene Chloride	ND	10	1.01	
4-Methyl-2-Pentanone	ND	20	1.01	
Naphthalene	ND	10	1.01	
n-Propylbenzene	ND	2.0	1.01	
Styrene	ND	1.0	1.01	
1,1,1,2-Tetrachloroethane	ND	1.0	1.01	
1,1,2,2-Tetrachloroethane	ND	2.0	1.01	
Tetrachloroethene	ND	1.0	1.01	
Toluene	ND	1.0	1.01	
1,2,3-Trichlorobenzene	ND	2.0	1.01	
1,2,4-Trichlorobenzene	ND	2.0	1.01	
1,1,1-Trichloroethane	ND	1.0	1.01	
1,1,2-Trichloroethane	ND	1.0	1.01	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.01	
Trichloroethene	ND	2.0	1.01	
Trichlorofluoromethane	ND	10	1.01	
1,2,3-Trichloropropane	ND	2.0	1.01	
1,2,4-Trimethylbenzene	ND	2.0	1.01	
1,3,5-Trimethylbenzene	ND	2.0	1.01	
Vinyl Acetate	ND	10	1.01	
Vinyl Chloride	ND	1.0	1.01	
p/m-Xylene	ND	2.0	1.01	
o-Xylene	ND	1.0	1.01	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.01	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	98	71-155	
Toluene-d8	103	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 17 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV16-1	**13-08-1572-15-D**	**08/20/13 15:30**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 21:35**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	49	0.98	
Benzene	ND	0.98	0.98	
Bromobenzene	ND	0.98	0.98	
Bromochloromethane	ND	2.0	0.98	
Bromodichloromethane	ND	0.98	0.98	
Bromoform	ND	4.9	0.98	
Bromomethane	ND	20	0.98	
2-Butanone	ND	20	0.98	
n-Butylbenzene	ND	0.98	0.98	
sec-Butylbenzene	ND	0.98	0.98	
tert-Butylbenzene	ND	0.98	0.98	
Carbon Disulfide	ND	9.8	0.98	
Carbon Tetrachloride	ND	0.98	0.98	
Chlorobenzene	ND	0.98	0.98	
Chloroethane	ND	2.0	0.98	
Chloroform	ND	0.98	0.98	
Chloromethane	ND	20	0.98	
2-Chlorotoluene	ND	0.98	0.98	
4-Chlorotoluene	ND	0.98	0.98	
Dibromochloromethane	ND	2.0	0.98	
1,2-Dibromo-3-Chloropropane	ND	4.9	0.98	
1,2-Dibromoethane	ND	0.98	0.98	
Dibromomethane	ND	0.98	0.98	
1,2-Dichlorobenzene	ND	0.98	0.98	
1,3-Dichlorobenzene	ND	0.98	0.98	
1,4-Dichlorobenzene	ND	0.98	0.98	
Dichlorodifluoromethane	ND	2.0	0.98	
1,1-Dichloroethane	ND	0.98	0.98	
1,2-Dichloroethane	ND	0.98	0.98	
1,1-Dichloroethene	ND	0.98	0.98	
c-1,2-Dichloroethene	ND	0.98	0.98	
t-1,2-Dichloroethene	ND	0.98	0.98	
1,2-Dichloropropane	ND	0.98	0.98	
1,3-Dichloropropane	ND	0.98	0.98	
2,2-Dichloropropane	ND	4.9	0.98	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure	Date Received:	08/22/13
121 Innovation Drive, Suite 200	Work Order:	13-08-1572
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320		Page 18 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	0.98	
c-1,3-Dichloropropene	ND	0.98	0.98	
t-1,3-Dichloropropene	ND	2.0	0.98	
Ethylbenzene	ND	0.98	0.98	
2-Hexanone	ND	20	0.98	
Isopropylbenzene	ND	0.98	0.98	
p-Isopropyltoluene	ND	0.98	0.98	
Methylene Chloride	ND	9.8	0.98	
4-Methyl-2-Pentanone	ND	20	0.98	
Naphthalene	ND	9.8	0.98	
n-Propylbenzene	ND	2.0	0.98	
Styrene	ND	0.98	0.98	
1,1,1,2-Tetrachloroethane	ND	0.98	0.98	
1,1,2,2-Tetrachloroethane	ND	2.0	0.98	
Tetrachloroethene	ND	0.98	0.98	
Toluene	ND	0.98	0.98	
1,2,3-Trichlorobenzene	ND	2.0	0.98	
1,2,4-Trichlorobenzene	ND	2.0	0.98	
1,1,1-Trichloroethane	ND	0.98	0.98	
1,1,2-Trichloroethane	ND	0.98	0.98	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.8	0.98	
Trichloroethene	ND	2.0	0.98	
Trichlorofluoromethane	ND	9.8	0.98	
1,2,3-Trichloropropane	ND	2.0	0.98	
1,2,4-Trimethylbenzene	ND	2.0	0.98	
1,3,5-Trimethylbenzene	ND	2.0	0.98	
Vinyl Acetate	ND	9.8	0.98	
Vinyl Chloride	ND	0.98	0.98	
p/m-Xylene	ND	2.0	0.98	
o-Xylene	ND	0.98	0.98	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	0.98	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	80-120	
Dibromofluoromethane	119	79-133	
1,2-Dichloroethane-d4	104	71-155	
Toluene-d8	102	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 19 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV16-5	**13-08-1572-16-D**	**08/20/13 15:45**	**Soil**	**GC/MS Q**	**08/20/13**	**08/23/13 22:02**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	47	0.936	
Benzene	ND	0.94	0.936	
Bromobenzene	ND	0.94	0.936	
Bromochloromethane	ND	1.9	0.936	
Bromodichloromethane	ND	0.94	0.936	
Bromoform	ND	4.7	0.936	
Bromomethane	ND	19	0.936	
2-Butanone	ND	19	0.936	
n-Butylbenzene	ND	0.94	0.936	
sec-Butylbenzene	ND	0.94	0.936	
tert-Butylbenzene	ND	0.94	0.936	
Carbon Disulfide	ND	9.4	0.936	
Carbon Tetrachloride	ND	0.94	0.936	
Chlorobenzene	ND	0.94	0.936	
Chloroethane	ND	1.9	0.936	
Chloroform	ND	0.94	0.936	
Chloromethane	ND	19	0.936	
2-Chlorotoluene	ND	0.94	0.936	
4-Chlorotoluene	ND	0.94	0.936	
Dibromochloromethane	ND	1.9	0.936	
1,2-Dibromo-3-Chloropropane	ND	4.7	0.936	
1,2-Dibromoethane	ND	0.94	0.936	
Dibromomethane	ND	0.94	0.936	
1,2-Dichlorobenzene	ND	0.94	0.936	
1,3-Dichlorobenzene	ND	0.94	0.936	
1,4-Dichlorobenzene	ND	0.94	0.936	
Dichlorodifluoromethane	ND	1.9	0.936	
1,1-Dichloroethane	ND	0.94	0.936	
1,2-Dichloroethane	ND	0.94	0.936	
1,1-Dichloroethene	ND	0.94	0.936	
c-1,2-Dichloroethene	ND	0.94	0.936	
t-1,2-Dichloroethene	ND	0.94	0.936	
1,2-Dichloropropane	ND	0.94	0.936	
1,3-Dichloropropane	ND	0.94	0.936	
2,2-Dichloropropane	ND	4.7	0.936	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 20 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.9	0.936	
c-1,3-Dichloropropene	ND	0.94	0.936	
t-1,3-Dichloropropene	ND	1.9	0.936	
Ethylbenzene	ND	0.94	0.936	
2-Hexanone	ND	19	0.936	
Isopropylbenzene	ND	0.94	0.936	
p-Isopropyltoluene	ND	0.94	0.936	
Methylene Chloride	ND	9.4	0.936	
4-Methyl-2-Pentanone	ND	19	0.936	
Naphthalene	ND	9.4	0.936	
n-Propylbenzene	ND	1.9	0.936	
Styrene	ND	0.94	0.936	
1,1,1,2-Tetrachloroethane	ND	0.94	0.936	
1,1,2,2-Tetrachloroethane	ND	1.9	0.936	
Tetrachloroethene	ND	0.94	0.936	
Toluene	ND	0.94	0.936	
1,2,3-Trichlorobenzene	ND	1.9	0.936	
1,2,4-Trichlorobenzene	ND	1.9	0.936	
1,1,1-Trichloroethane	ND	0.94	0.936	
1,1,2-Trichloroethane	ND	0.94	0.936	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.4	0.936	
Trichloroethene	ND	1.9	0.936	
Trichlorofluoromethane	ND	9.4	0.936	
1,2,3-Trichloropropane	ND	1.9	0.936	
1,2,4-Trimethylbenzene	ND	1.9	0.936	
1,3,5-Trimethylbenzene	ND	1.9	0.936	
Vinyl Acetate	ND	9.4	0.936	
Vinyl Chloride	ND	0.94	0.936	
p/m-Xylene	ND	1.9	0.936	
o-Xylene	ND	0.94	0.936	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.936	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	103	80-120	
Dibromofluoromethane	106	79-133	
1,2-Dichloroethane-d4	111	71-155	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 21 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV22-3	**13-08-1572-21-D**	**08/21/13 10:40**	**Soil**	**GC/MS Q**	**08/21/13**	**08/23/13 22:29**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.93	0.928	
Bromobenzene	ND	0.93	0.928	
Bromochloromethane	ND	1.9	0.928	
Bromodichloromethane	ND	0.93	0.928	
Bromoform	ND	4.6	0.928	
Bromomethane	ND	19	0.928	
2-Butanone	84	19	0.928	
n-Butylbenzene	ND	0.93	0.928	
sec-Butylbenzene	ND	0.93	0.928	
tert-Butylbenzene	ND	0.93	0.928	
Carbon Disulfide	ND	9.3	0.928	
Carbon Tetrachloride	ND	0.93	0.928	
Chlorobenzene	ND	0.93	0.928	
Chloroethane	ND	1.9	0.928	
Chloroform	ND	0.93	0.928	
Chloromethane	ND	19	0.928	
2-Chlorotoluene	ND	0.93	0.928	
4-Chlorotoluene	ND	0.93	0.928	
Dibromochloromethane	ND	1.9	0.928	
1,2-Dibromo-3-Chloropropane	ND	4.6	0.928	
1,2-Dibromoethane	ND	0.93	0.928	
Dibromomethane	ND	0.93	0.928	
1,2-Dichlorobenzene	ND	0.93	0.928	
1,3-Dichlorobenzene	ND	0.93	0.928	
1,4-Dichlorobenzene	ND	0.93	0.928	
Dichlorodifluoromethane	ND	1.9	0.928	
1,1-Dichloroethane	ND	0.93	0.928	
1,2-Dichloroethane	ND	0.93	0.928	
1,1-Dichloroethene	ND	0.93	0.928	
c-1,2-Dichloroethene	ND	0.93	0.928	
t-1,2-Dichloroethene	ND	0.93	0.928	
1,2-Dichloropropane	ND	0.93	0.928	
1,3-Dichloropropane	ND	0.93	0.928	
2,2-Dichloropropane	ND	4.6	0.928	
1,1-Dichloropropene	ND	1.9	0.928	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure	Date Received:	08/22/13
121 Innovation Drive, Suite 200	Work Order:	13-08-1572
Irvine, CA 92617-3094	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320		Page 22 of 26

Parameter	Result	RL	DF	Qualifiers
c-1,3-Dichloropropene	ND	0.93	0.928	
t-1,3-Dichloropropene	ND	1.9	0.928	
Ethylbenzene	ND	0.93	0.928	
2-Hexanone	ND	19	0.928	
Isopropylbenzene	ND	0.93	0.928	
p-Isopropyltoluene	ND	0.93	0.928	
Methylene Chloride	ND	9.3	0.928	
4-Methyl-2-Pentanone	ND	19	0.928	
Naphthalene	ND	9.3	0.928	
n-Propylbenzene	ND	1.9	0.928	
Styrene	ND	0.93	0.928	
1,1,1,2-Tetrachloroethane	ND	0.93	0.928	
1,1,2,2-Tetrachloroethane	ND	1.9	0.928	
Tetrachloroethene	ND	0.93	0.928	
Toluene	ND	0.93	0.928	
1,2,3-Trichlorobenzene	ND	1.9	0.928	
1,2,4-Trichlorobenzene	ND	1.9	0.928	
1,1,1-Trichloroethane	ND	0.93	0.928	
1,1,2-Trichloroethane	ND	0.93	0.928	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.3	0.928	
Trichloroethene	ND	1.9	0.928	
Trichlorofluoromethane	ND	9.3	0.928	
1,2,3-Trichloropropane	ND	1.9	0.928	
1,2,4-Trimethylbenzene	ND	1.9	0.928	
1,3,5-Trimethylbenzene	ND	1.9	0.928	
Vinyl Acetate	ND	9.3	0.928	
Vinyl Chloride	ND	0.93	0.928	
p/m-Xylene	ND	1.9	0.928	
o-Xylene	ND	0.93	0.928	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	0.928	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	106	71-155	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 23 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV22-3	**13-08-1572-21-E**	**08/21/13 10:40**	**Soil**	**GC/MS Q**	**08/21/13**	**08/24/13 17:08**	**130824L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	2500	49.4	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	80-120	
Dibromofluoromethane	103	79-133	
1,2-Dichloroethane-d4	97	71-155	
Toluene-d8	94	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 24 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-025-24212**	**N/A**	**Soil**	**GC/MS Q**	**08/23/13**	**08/23/13 16:14**	**130823L01**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1	
Benzene	ND	1.0	1	
Bromobenzene	ND	1.0	1	
Bromochloromethane	ND	2.0	1	
Bromodichloromethane	ND	1.0	1	
Bromoform	ND	5.0	1	
Bromomethane	ND	20	1	
2-Butanone	ND	20	1	
n-Butylbenzene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1	
Carbon Disulfide	ND	10	1	
Carbon Tetrachloride	ND	1.0	1	
Chlorobenzene	ND	1.0	1	
Chloroethane	ND	2.0	1	
Chloroform	ND	1.0	1	
Chloromethane	ND	20	1	
2-Chlorotoluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1	
Dibromochloromethane	ND	2.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1	
1,2-Dibromoethane	ND	1.0	1	
Dibromomethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1	
Dichlorodifluoromethane	ND	2.0	1	
1,1-Dichloroethane	ND	1.0	1	
1,2-Dichloroethane	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1	
1,3-Dichloropropane	ND	1.0	1	
2,2-Dichloropropane	ND	5.0	1	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 25 of 26

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	2.0	1	
c-1,3-Dichloropropene	ND	1.0	1	
t-1,3-Dichloropropene	ND	2.0	1	
Ethylbenzene	ND	1.0	1	
2-Hexanone	ND	20	1	
Isopropylbenzene	ND	1.0	1	
p-Isopropyltoluene	ND	1.0	1	
Methylene Chloride	ND	10	1	
4-Methyl-2-Pentanone	ND	20	1	
Naphthalene	ND	10	1	
n-Propylbenzene	ND	2.0	1	
Styrene	ND	1.0	1	
1,1,1,2-Tetrachloroethane	ND	1.0	1	
1,1,2,2-Tetrachloroethane	ND	2.0	1	
Tetrachloroethene	ND	1.0	1	
Toluene	ND	1.0	1	
1,2,3-Trichlorobenzene	ND	2.0	1	
1,2,4-Trichlorobenzene	ND	2.0	1	
1,1,1-Trichloroethane	ND	1.0	1	
1,1,2-Trichloroethane	ND	1.0	1	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Trichloroethene	ND	2.0	1	
Trichlorofluoromethane	ND	10	1	
1,2,3-Trichloropropane	ND	2.0	1	
1,2,4-Trimethylbenzene	ND	2.0	1	
1,3,5-Trimethylbenzene	ND	2.0	1	
Vinyl Acetate	ND	10	1	
Vinyl Chloride	ND	1.0	1	
p/m-Xylene	ND	2.0	1	
o-Xylene	ND	1.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	110	71-155	
Toluene-d8	96	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
		Units:	ug/kg
Project: Phase I Update - Irwindale / IR13164320			Page 26 of 26

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**095-01-025-24229**	**N/A**	**Soil**	**GC/MS Q**	**08/24/13**	**08/24/13 15:21**	**130824L02**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	5000	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	106	79-133	
1,2-Dichloroethane-d4	94	71-155	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	N/A
		Method:	EPA 300.0
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 8

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV7-1	**Soil**	**IC 7**	**08/24/13**	**08/24/13 13:10**	**130824S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Bromide	2.000	50.00	51.36	99	51.57	99	80-120	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 8

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-08-1603-6	**Soil**	**GC 47**	**08/23/13**	**08/23/13 20:50**	**130823S10**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	419.5	105	369.6	92	64-130	13	0-15	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 8

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV10-1	**Soil**	**ICP 7300**	**08/23/13**	**08/26/13 11:53**	**130823S07**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Antimony	ND	25.00	23.75	95	23.48	94	50-115	1	0-20	
Arsenic	1.333	25.00	25.18	95	25.00	95	75-125	1	0-20	
Barium	60.58	25.00	85.17	98	83.23	91	75-125	2	0-20	
Beryllium	ND	25.00	26.13	105	25.75	103	75-125	1	0-20	
Cadmium	ND	25.00	25.19	101	24.91	100	75-125	1	0-20	
Chromium	7.928	25.00	32.94	100	32.34	98	75-125	2	0-20	
Cobalt	6.831	25.00	33.05	105	32.94	104	75-125	0	0-20	
Copper	5.975	25.00	33.14	109	32.85	108	75-125	1	0-20	
Lead	1.520	25.00	27.02	102	27.00	102	75-125	0	0-20	
Molybdenum	ND	25.00	25.08	100	24.99	100	75-125	0	0-20	
Nickel	7.478	25.00	34.12	107	33.63	105	75-125	1	0-20	
Selenium	ND	25.00	24.21	97	24.40	98	75-125	1	0-20	
Silver	ND	12.50	12.55	100	12.40	99	75-125	1	0-20	
Thallium	ND	25.00	25.19	101	24.92	100	75-125	1	0-20	
Vanadium	20.05	25.00	44.80	99	43.91	95	75-125	2	0-20	
Zinc	31.38	25.00	57.49	104	56.84	102	75-125	1	0-20	
Lithium	27.22	50.00	76.41	98	78.28	102	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Phase I Update - Irwindale / IR13164320			Page 4 of 8

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-08-1616-1	**Soil**	**Mercury**	**08/26/13**	**08/26/13 12:10**	**130826S01**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.6374	76	0.6266	75	71-137	2	0-14	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 8

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-08-1532-1	**Soil**	**GC 51**	**08/23/13**	**08/27/13 13:33**	**130823S03**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	25.00	17.83	71	17.92	72	45-140	0	0-20	
Alpha-BHC	ND	25.00	18.82	75	18.64	75	60-125	1	0-20	
Beta-BHC	ND	25.00	20.83	83	21.13	85	60-125	1	0-20	
4,4'-DDD	ND	25.00	20.63	83	20.56	82	30-135	0	0-20	
4,4'-DDE	ND	25.00	20.09	80	20.04	80	70-125	0	0-20	
4,4'-DDT	ND	25.00	20.20	81	20.14	81	45-140	0	0-20	
Delta-BHC	ND	25.00	19.34	77	19.43	78	55-130	1	0-20	
Dieldrin	ND	25.00	20.16	81	19.93	80	65-125	1	0-20	
Endosulfan I	ND	25.00	19.50	78	19.35	77	15-135	1	0-20	
Endosulfan II	ND	25.00	20.58	82	20.40	82	35-140	1	0-20	
Endosulfan Sulfate	ND	25.00	19.28	77	19.06	76	60-135	1	0-20	
Endrin	ND	25.00	22.91	92	23.02	92	60-135	0	0-20	
Endrin Aldehyde	ND	25.00	17.85	71	17.63	71	35-145	1	0-20	
Endrin Ketone	ND	25.00	20.47	82	20.11	80	65-135	2	0-20	
Gamma-BHC	ND	25.00	17.93	72	18.06	72	60-125	1	0-20	
Heptachlor	ND	25.00	18.74	75	18.80	75	50-140	0	0-20	
Heptachlor Epoxide	ND	25.00	18.87	75	18.82	75	65-130	0	0-20	
Methoxychlor	ND	25.00	19.29	77	19.26	77	55-145	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8082
Project: Phase I Update - Irwindale / IR13164320			Page 6 of 8

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV18-5	**Soil**	**GC 31**	**08/23/13**	**08/27/13 21:18**	**130823S09**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	99.86	100	99.33	99	50-135	1	0-20	
Aroclor-1260	ND	100.0	88.96	89	62.96	63	50-135	34	0-25	4

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
Project: Phase I Update - Irwindale / IR13164320			Page 7 of 8

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB2-1	**Soil**	**GC 35**	**08/23/13**	**08/27/13 16:38**	**130823S14**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Azinphos Methyl	ND	4.000	4.078	102	3.534	88	30-130	14	0-30	
Bolstar	ND	4.000	4.421	111	4.133	103	30-130	7	0-30	
Chlorpyrifos	ND	4.000	4.457	111	4.133	103	30-130	8	0-30	
Coumaphos	ND	4.000	4.879	122	4.536	113	30-130	7	0-30	
Diazinon	ND	4.000	4.550	114	4.366	109	30-130	4	0-30	
Disulfoton	ND	4.000	5.346	134	4.806	120	30-130	11	0-30	3
Ethoprop	ND	4.000	4.343	109	4.124	103	30-130	5	0-30	
Fensulfothion	ND	4.000	4.515	113	4.351	109	30-130	4	0-30	
Fenthion	ND	4.000	4.723	118	4.283	107	30-130	10	0-30	
Merphos	ND	4.000	6.826	171	6.154	154	30-130	10	0-30	3
Methyl Parathion	ND	4.000	4.372	109	3.985	100	30-130	9	0-30	
Phorate	ND	4.000	5.013	125	4.653	116	30-130	7	0-30	
Ronnel	ND	4.000	4.465	112	3.934	98	30-130	13	0-30	
Stirophos	ND	4.000	4.198	105	3.748	94	30-130	11	0-30	
Tokuthion	ND	4.000	4.590	115	4.138	103	30-130	10	0-30	
Trichloronate	ND	4.000	4.677	117	4.251	106	30-130	10	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 8151A
		Method:	EPA 8151A
Project: Phase I Update - Irwindale / IR13164320			Page 8 of 8

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SB2-3	**Soil**	**GC 40**	**08/26/13**	**08/30/13 03:35**	**130826S19**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4-D	ND	400.0	292.9	73	306.8	77	30-130	5	0-30	
2,4,5-T	ND	40.00	30.40	76	31.50	79	30-130	4	0-30	
2,4-DB	ND	400.0	306.5	77	323.8	81	30-130	5	0-30	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - PDS/PDSD

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 1

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
13-08-1616-1	**Soil**	**Mercury**	**08/26/13 00:00**	**08/26/13 12:14**	**130826S01**

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7878	94	0.7869	94	75-125	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	N/A
		Method:	EPA 300.0
Project: Phase I Update - Irwindale / IR13164320			Page 1 of 10

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-922-252	**Soil**	**IC 7**	**08/24/13 11:48**	**130824L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Bromide	50.00	48.62	97	90-110	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: Phase I Update - Irwindale / IR13164320			Page 2 of 10

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-15-490-477	**Soil**	**GC 47**	**08/23/13 20:33**	**130823B10A**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	380.3	95	75-123	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3050B
		Method:	EPA 6010B
Project: Phase I Update - Irwindale / IR13164320			Page 3 of 10

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
097-01-002-17247	**Soil**	**ICP 7300**	**08/26/13 11:50**	**130823L07**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Antimony	25.00	21.39	86	80-120	73-127	
Arsenic	25.00	21.30	85	80-120	73-127	
Barium	25.00	25.39	102	80-120	73-127	
Beryllium	25.00	25.48	102	80-120	73-127	
Cadmium	25.00	25.90	104	80-120	73-127	
Chromium	25.00	25.13	101	80-120	73-127	
Cobalt	25.00	27.43	110	80-120	73-127	
Copper	25.00	25.98	104	80-120	73-127	
Lead	25.00	25.64	103	80-120	73-127	
Molybdenum	25.00	25.19	101	80-120	73-127	
Nickel	25.00	27.45	110	80-120	73-127	
Selenium	25.00	24.63	99	80-120	73-127	
Silver	12.50	12.59	101	80-120	73-127	
Thallium	25.00	26.23	105	80-120	73-127	
Vanadium	25.00	24.57	98	80-120	73-127	
Zinc	25.00	27.87	111	80-120	73-127	
Lithium	25.00	27.20	109	80-120	73-127	

Total number of LCS compounds: 17
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 7471A Total
		Method:	EPA 7471A
Project: Phase I Update - Irwindale / IR13164320			Page 4 of 10

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-04-007-9576	**Soil**	**Mercury**	**08/26/13 12:05**	**130826L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Mercury	0.8350	0.8452	101	85-121	

RPD: Relative Percent Difference. CL: Control Limits

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8081A
Project: Phase I Update - Irwindale / IR13164320			Page 5 of 10

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-537-1461	**Soil**	**GC 51**	**08/27/13 14:16**	**130823L03**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Aldrin	25.00	20.57	82	50-135	36-149	
Alpha-BHC	25.00	20.83	83	50-135	36-149	
Beta-BHC	25.00	19.89	80	50-135	36-149	
4,4'-DDD	25.00	20.39	82	50-135	36-149	
4,4'-DDE	25.00	20.96	84	50-135	36-149	
4,4'-DDT	25.00	20.18	81	50-135	36-149	
Delta-BHC	25.00	20.29	81	50-135	36-149	
Dieldrin	25.00	20.97	84	50-135	36-149	
Endosulfan I	25.00	21.90	88	50-135	36-149	
Endosulfan II	25.00	21.21	85	50-135	36-149	
Endosulfan Sulfate	25.00	20.16	81	50-135	36-149	
Endrin	25.00	21.52	86	50-135	36-149	
Endrin Aldehyde	25.00	20.55	82	50-135	36-149	
Gamma-BHC	25.00	21.48	86	50-135	36-149	
Heptachlor	25.00	21.07	84	50-135	36-149	
Heptachlor Epoxide	25.00	20.15	81	50-135	36-149	
Methoxychlor	25.00	27.02	108	50-135	36-149	

Total number of LCS compounds: 17
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8082
Project: Phase I Update - Irwindale / IR13164320			Page 6 of 10

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-12-535-2236	**Soil**	**GC 31**	**08/27/13 17:29**	**130823L09**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Aroclor-1016	100.0	102.2	102	50-135	
Aroclor-1260	100.0	92.42	92	50-135	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 3545
		Method:	EPA 8141A
Project: Phase I Update - Irwindale / IR13164320			Page 7 of 10

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
099-15-973-16	**Soil**	**GC 35**	**08/27/13 15:10**	**130823L14**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Azinphos Methyl	4.000	5.125	128	30-130	13-147	
Bolstar	4.000	5.091	127	30-130	13-147	
Chlorpyrifos	4.000	4.366	109	30-130	13-147	
Coumaphos	4.000	5.038	126	30-130	13-147	
Diazinon	4.000	3.569	89	30-130	13-147	
Disulfoton	4.000	5.170	129	30-130	13-147	
Ethoprop	4.000	4.649	116	30-130	13-147	
Fensulfothion	4.000	5.003	125	30-130	13-147	
Fenthion	4.000	5.151	129	30-130	13-147	
Merphos	4.000	5.021	126	30-130	13-147	
Methyl Parathion	4.000	5.017	125	30-130	13-147	
Phorate	4.000	4.739	118	30-130	13-147	
Ronnel	4.000	5.039	126	30-130	13-147	
Stirophos	4.000	4.740	118	30-130	13-147	
Tokuthion	4.000	4.830	121	30-130	13-147	
Trichloronate	4.000	5.110	128	30-130	13-147	

Total number of LCS compounds: 16
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS

AMEC Environment & Infrastructure	Date Received:	08/22/13
121 Innovation Drive, Suite 200	Work Order:	13-08-1572
Irvine, CA 92617-3094	Preparation:	EPA 8151A
	Method:	EPA 8151A
Project: Phase I Update - Irwindale / IR13164320		Page 8 of 10

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	LCS Batch Number
095-01-033-1121	**Soil**	**GC 40**	**08/30/13 02:44**	**130826L19**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
2,4-D	400.0	352.1	88	30-130	
2,4,5-T	40.00	35.40	88	30-130	
2,4-DB	400.0	336.8	84	30-130	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
Project: Phase I Update - Irwindale / IR13164320			Page 9 of 10

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-025-24212	**Soil**	**GC/MS Q**	**08/23/13**	**08/23/13 14:52**	**130823L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	49.73	99	47.36	95	80-120	73-127	5	0-20	
Carbon Tetrachloride	50.00	52.09	104	51.27	103	65-137	53-149	2	0-20	
Chlorobenzene	50.00	51.16	102	47.04	94	80-120	73-127	8	0-20	
1,2-Dibromoethane	50.00	50.49	101	47.36	95	80-120	73-127	6	0-20	
1,2-Dichlorobenzene	50.00	50.55	101	47.20	94	80-120	73-127	7	0-20	
1,2-Dichloroethane	50.00	50.35	101	48.64	97	80-120	73-127	3	0-20	
1,1-Dichloroethene	50.00	48.07	96	47.15	94	68-128	58-138	2	0-20	
Ethylbenzene	50.00	51.26	103	47.93	96	80-120	73-127	7	0-20	
Toluene	50.00	50.64	101	47.47	95	80-120	73-127	6	0-20	
Trichloroethene	50.00	51.94	104	48.82	98	80-120	73-127	6	0-20	
Vinyl Chloride	50.00	45.17	90	49.15	98	67-127	57-137	8	0-20	
p/m-Xylene	100.0	102.7	103	96.29	96	75-125	67-133	6	0-25	
o-Xylene	50.00	51.51	103	47.22	94	75-125	67-133	9	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	49.66	99	48.96	98	70-124	61-133	1	0-20	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

AMEC Environment & Infrastructure		Date Received:	08/22/13
121 Innovation Drive, Suite 200		Work Order:	13-08-1572
Irvine, CA 92617-3094		Preparation:	EPA 5035
		Method:	EPA 8260B
Project: Phase I Update - Irwindale / IR13164320			Page 10 of 10

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-025-24229	**Soil**	**GC/MS Q**	**08/24/13**	**08/24/13 13:33**	**130824L02**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	47.70	95	49.56	99	80-120	73-127	4	0-20	
Carbon Tetrachloride	50.00	49.12	98	52.30	105	65-137	53-149	6	0-20	
Chlorobenzene	50.00	46.76	94	50.00	100	80-120	73-127	7	0-20	
1,2-Dibromoethane	50.00	44.36	89	47.60	95	80-120	73-127	7	0-20	
1,2-Dichlorobenzene	50.00	44.75	90	49.07	98	80-120	73-127	9	0-20	
1,2-Dichloroethane	50.00	47.75	95	49.81	100	80-120	73-127	4	0-20	
1,1-Dichloroethene	50.00	48.34	97	52.33	105	68-128	58-138	8	0-20	
Ethylbenzene	50.00	49.28	99	51.87	104	80-120	73-127	5	0-20	
Toluene	50.00	46.63	93	51.84	104	80-120	73-127	11	0-20	
Trichloroethene	50.00	45.12	90	50.35	101	80-120	73-127	11	0-20	
Vinyl Chloride	50.00	59.09	118	58.29	117	67-127	57-137	1	0-20	
p/m-Xylene	100.0	101.1	101	105.0	105	75-125	67-133	4	0-25	
o-Xylene	50.00	48.43	97	52.28	105	75-125	67-133	8	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	46.20	92	45.73	91	70-124	61-133	1	0-20	

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 13-08-1572

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 300.0	N/A	811	IC 7	1
EPA 6010B	EPA 3050B	469	ICP 7300	1
EPA 7471A	EPA 7471A Total	769	Mercury	1
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8081A	EPA 3545	500	GC 51	1
EPA 8082	EPA 3545	669	GC 31	1
EPA 8141A	EPA 3545	842	GC 35	1
EPA 8151A	EPA 8151A	669	GC 40	1
EPA 8260B	EPA 5035	823	GC/MS Q	2

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order: 13-08-1572

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN-OF-CUSTODY RECORD

NB 26670

PROJECT NAME: Phase I update - Irwindale

DATE: 08/20/13 PAGE 1 OF 2

PROJECT NUMBER: IR 13164320

RESULTS TO: Linda Conlan

TURNAROUND TIME: Standard

SAMPLE SHIPMENT METHOD: Sampler drop off at lab

LABORATORY NAME: Calscience

LABORATORY ADDRESS:

LABORATORY CONTACT: Stephen Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS: 13-08-1572

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	VOCs (8260B)	TPHcc (8015)*	Metals (6010B/7471A)	PCBs (8082)		Lithium		Bromide			Pesticides/Herbicides (8081/8141/8151)			CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
1	08/20/13	850	SV8-1	X	X	X		X									5035kit, 8 oz jar	S		**	✓		4	
2		910	SV9-5	X	X	X		X									↓	S		**	✓		4	
3		945	SB2-1											X			8 oz jar	S		–	✓		1	
4		950	SB2-3											X			↓	S		–	✓		1	
5		1000	SV7-1						X		X						5035kit 8 oz jar	S		**	✓		4	
6		1005	SV7-5						X		X						↓	S		**	✓		4	
7		1130	SV10-1	X	X	X		X		X		X					↓	S		**	✓		4	
8		1135	SV10-5	X	X	X		X		X		X					↓	S		**	✓		4	
9		1310	SB3-1											X			4 oz jars	S		–	✓		1	
10		1315	SB3-3											X			↓	S		–	✓		1	
11		1340	SV18-1	X	X	X		X									5035kit, 8 oz jar	S		**	✓		4	
12		1345	SV18-5	X	X	X		X									↓	S		**	✓		4	
13		1440	SV20-1	X	X	X		X									5035kit, 8 oz jars	S		**	✓		4	
14		1445	SV20-5	X	X	X		X									5035kit, 4 oz jars	S		**	✓		5	
15		1530	SV16-1	X	X	X		X									↓			**	✓		5	

TOTAL NUMBER OF CONTAINERS: 50

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	08/22/13	15:18	SIGNATURE:	8/22/13	1518
PRINTED NAME: Thet Naing			PRINTED NAME: Yau Liang		
COMPANY: AMEC			COMPANY: CCL		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

SAMPLING COMMENTS:

* TPH as carbon chain full range

** 5035 kit: 2 - NaHSO4 preserved 40mL VOAs, 1 - MeOH preserved 40 mL VOA

121 Innovation Drive, Suite 200
Irvine, California 92617-3094
Tel 949.642.0245 Fax 949.642.4474

amec

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CHAIN-OF-CUSTODY RECORD

NB 26671

PROJECT NAME: Phase I update - Irwindale

DATE: 08/20/2013 PAGE 2 OF 2

PROJECT NUMBER: IR131164320

RESULTS TO: Linda Conlan

TURNAROUND TIME: Standard

SAMPLE SHIPMENT METHOD: Sampler dropped at lab

LABORATORY NAME: CalScience

LABORATORY ADDRESS:

LABORATORY CONTACT: Stephen Nowak

LABORATORY PHONE NUMBER:

CLIENT INFORMATION:

REPORTING REQUIREMENTS: 1572

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

	DATE	TIME	SAMPLE NUMBER	VOCs (SPA8260B) *	TPHcc (8015)	Metals (6010B)	7471A	PCBs (8082)	Lithium		Bromide	HOLD	Pesticides	Herbicides	8081/8141/8151	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
16	08/20/13	1545	~~SV16-2~~ SV16-5	X	X	X		X	X	TN						5035Kit, 4oz jar	S		**	✓		5	
17		1550	QCTB-082013									X				40mL VOA	W		HCL	✓		2	
18		1600	QCEB-082013									X				↓	W		HCL	✓		3	
19	08/21/2013	940	SB4-1											X		4oz jar	S		-	✓		1	
20		945	SB4-3											X		↓	S		-	✓		1	
21		1040	SV22-3	X												5035Kit, 4oz jar	S		**	✓		5	
22		1045	SV22-5									X				4oz jar	S		-	✓		1	
23		1310	SB1-1											X		4oz jar	S		-	✓		1	
24		1315	SB1-3											X		4oz jar	S		-	✓		1	
25	✓	1900	QCEB-082113									X				40mL VOA	W	-	HCL	✓		3	

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE: [signature]	08/22/13	15:18	SIGNATURE: [signature]	8/22/13	1518
PRINTED NAME: Mat Naing			PRINTED NAME: Yan Liao		
COMPANY: AMEC			COMPANY: CA		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS: 23

SAMPLING COMMENTS:

* & ** : See page 1

121 Innovation Drive, Suite 200
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Tel 949.642.0245 Fax 949.642.4474

amec

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-08-1572

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 08/22/13

TEMPERATURE: Thermometer ID: SC3 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.0 °C - 0.2 °C (CF) = 2.8 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: YL

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: YL

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: [illegible]

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☑ 4ozCGJ (2) ☑ 8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☑ TerraCores® (3) ☐_____

Aqueous: ☐VOA ☑ VOAh (3) ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:** 130812A **Labeled/Checked by:** [illegible]

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** [illegible]

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** [illegible]

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Appendix E

Azusa Canyon Industrial Park Acoustical Analysis

(Environmental Impact Sciences, August 2014)

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Azusa Canyon Industrial Park
Acoustical Analysis

4832-4910 Azusa Canyon Road
Irwindale, California

Prepared for:
City of Irwindale
Community Development Department
Gus Romo, Planning Director
5050 North Irwindale
Irwindale, California 91706

Prepared by:
Environmental Impact Sciences
26051 Via Concha
Mission Viejo, California 92691-5614

August 2014

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1.0 Methodology

The following analysis provides a discussion on the fundamentals of sound, examines federal, State, and City noise guidelines and policies, reviews noise levels at the site and existing receptor locations, and evaluates potential noise impacts associated with the proposed project. Modeled traffic noise levels are based upon vehicle data contained in the traffic projections and data provided in the "Draft Transportation Study for the Azusa Canyon Industrial Park, Irwindale California" (Gibson Transportation Consulting, Inc., September 2013) (Gibson). This evaluation was prepared in conformance with local standards and utilizes procedures and methodologies as specified by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA). The evaluation of noise impacts associated with a proposed project includes:

- Reviewing existing ambient noise levels including traffic-noise modeling in the project area,
- Determining the noise impacts associated with site development,
- Determining the long-term noise impacts from project-related traffic, and
- Determining the long-term noise impacts from on-site activity noise at off-site occupants.

The generation of noise associated with the implementation of the proposed project would occur in the short-term with construction activities and over the long-term from the on-site operation of transportation-related noise sources associated with the proposed development. This noise assessment addresses noise impacts by discussing the current noise environment, analyzing impacts associated with proposed land use (including mobile-source noise), and evaluating construction equipment noise.

The FHWA's Traffic Noise Model (Version 2.5), is used to evaluate traffic-related noise conditions in the project area. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry, to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the Community Noise Equivalent Level (CNEL) values. CNEL contours are derived through a series of calculations to determine the 60, 65, and 70 dBA CNEL contours associated with traffic noise generated on the adjacent road. These data are used in the assessment of impacts in this analysis.

2.0 Existing Conditions

2.1 Noise Definitions

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the decibel (dB). Typical human hearing can detect changes in sound levels of approximately three (3) dBA under normal conditions. Changes of one (1) to three (3) dBA are detectable under quiet, controlled conditions, and changes of less than one (1) dBA are usually indiscernible. A change of five (5) dBA is discernable to most people in an exterior environment while a change of 10 dBA is perceived as a doubling (or halving) of the noise.

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not

equally sensitive to sound at all frequencies, a special frequency dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

2.2 Noise Measurement Scales

Several rating scales (or noise "metrics") exist to analyze adverse effects of noise, including traffic-generated noise, on a community. These scales include the equivalent noise level (Leq), the community noise equivalent level (CNEL), and the day-night noise level (Ldn). Leq is a measurement of the sound energy level averaged over a specified time period (usually 1 hour). Leq represents the amount of variable sound energy received by a receptor over a time interval in a single numerical value. For example, a 1-hour Leq noise level measurement represents the average amount of acoustic energy that occurred in that hour.

Unlike the Leq metric, the CNEL noise metric is based on 24 hours of measurement. CNEL also differs from Leq in that it applies a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when quiet time and sleep disturbance is of particular concern). Noise occurring during the daytime period (7:00 AM to 7:00 PM) receives no penalty. Noise produced during the evening time period (7:00 PM to 10:00 PM) is penalized by 5 dBA, while nighttime (10:00 PM to 7:00 AM) noise is penalized by 10 dBA.

The Ldn noise metric is similar to the CNEL metric except that the period from 7:00 PM to 10:00 PM receives no penalty. Both the CNEL and Ldn metrics yield approximately the same 24-hour value (within about 0.5 dBA) with the CNEL being the more restrictive (i.e., its calculation results in the higher value of the two).

2.3 Vibration Fundamentals

Vibration is a trembling, quivering, or oscillating motion of the earth. Like noise, vibration is transmitted in waves, but in this case through the earth or solid objects. Unlike noise, vibration is typically of a frequency that is felt rather than heard.

Vibration can be either natural as in the form of earthquakes, volcanic eruptions, sea waves, landslides, etc., or man-made as from explosions, the action of heavy machinery or heavy vehicles such as trucks or trains. Both natural and man-made vibration may be continuous such as from operating machinery, or transient as from an explosion.

As with noise, vibration can be described by both its amplitude and frequency. Amplitude may be characterized in three ways including displacement, velocity, and acceleration. Particle displacement is a measure of the distance that a vibrated particle travels from its original position and for the purposes of soil displacement is typically measured in inches or millimeters. Particle velocity is the rate of speed at which soil particles move in inches per second or millimeters per second. Particle acceleration is the rate of change in velocity with respect to time and is measured in inches per second per second or millimeters per second per second. Typically, particle velocity (measured in

inches or millimeters per second) and/or acceleration (measured in gravities) are used to describe vibration. Table N-1 (Human Reaction to Typical Vibration Levels) presents the human reaction and effects on buildings exposed to various levels of continuous vibration.

Table N-1
HUMAN REACTION TO TYPICAL VIBRATION LEVELS

Vibration Level Peak Particle Velocity (inches/second)	**Human Reaction**	**Effect on Buildings**
0.006 - 0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people.	Virtually no risk of "architectural" damage to normal buildings
0.20	Vibrations annoying to people in buildings.	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4 – 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking by bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: California Department of Transportation, 2002

Vibrations also vary in frequency and this affects perception. Typical construction vibrations fall in the 10 to 30 Hz range and usually occur around 15 Hz. Traffic vibrations exhibit a similar range of frequencies. However, due to their suspension systems, city buses often generate frequencies around 3 Hz at high vehicle speeds. It is more uncommon, but possible, to measure traffic frequencies above 30 Hz.

The way in which vibration is transmitted through the earth is called propagation. Propagation of earth borne vibrations is complicated and difficult to predict because of the endless variations in the soil through which waves travel. There are three main types of vibration propagation; surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation."

As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

2.4 Regulatory Background

To limit population exposure to physically and/or psychologically damaging, as well as intrusive noise levels, the federal government, the State, various county governments, and most municipalities in the State have established standards and ordinances to control noise.

Federal Government

- **Occupational Health and Safety Administration**. The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the United States Environmental Protection Agency (USEPA). Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan. The construction of the project will be subject to these OSHA limitations and all workers would receive appropriate training, hearing protection, and breaks, accordingly, ensuring that they are not exposed to harmful noise levels. Similarly, once operational, noise in the workplace would be subject to OSHA limitations.

- **Department of Housing and Urban Development**. The United States Department of Housing and Urban Development (HUD) has set a goal of 45 dBA Ldn as a desirable maximum interior standard for residential units developed under HUD funding. This level is also generally accepted within the State. While HUD does not specify acceptable exterior noise levels, standard construction of residential dwellings constructed under Title 24 standards typically provide 20 dBA of attenuation with the windows closed. Based on this premise, the exterior Ldn should not exceed 65 dBA.

State of California

The California Office of Noise Control has set acceptable noise limits for sensitive uses. Sensitive-type land uses, such as homes and schools, are "normally acceptable" in exterior noise environments up to 65 dBA CNEL and "conditionally acceptable" in areas up to 70 dBA CNEL. A "conditionally acceptable" designation implies that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land-use type is made and needed noise insulation features are incorporated in the design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements.

Applicable interior standards for new multi-family dwellings are governed by Title 24 of the California Government Code (CGC). These standards require that acoustical studies be performed prior to construction in areas that exceed 60 dBA Ldn. Such studies are required to establish measures that will limit interior noise to no more than 45 dBA Ldn and this level has been applied to many communities in the State.

City of Irwindale

The "City of Irwindale General Plan Update 2020" (General Plan) addresses noise concerns within the General Plan's Safety Element (Section 6: Noise and Land Use Compatibility). The Safety Element notes that the "City of Irwindale will work to reduce the high levels of noise exposure associated with the existing development and transportation facilities in the City." Relevant policies contained in the Safety Element include, but may not be limited to: (1) "The City of Irwindale will strive to reduce the community's exposure to noise from on-going manufacturing activities" (Policy

4); (2) “The City of Irwindale will work towards reducing noise exposure in the City by considering noise and land use compatibility in land use planning” (Policy 5); and (3) “The City of Irwindale will continue to investigate strategies that will be effective in reducing the community‘s exposure to harmful noise levels” (Policy 6). The Safety Element then goes on to include the various federal and State standards and limitations outlined above.

Referencing the State Office of Noise Control’s “Guidelines for the Preparation and Content of Noise Elements of General Plans,” the Safety Element sets land-use compatibility in accordance with State guidelines. This provides a guide for compatibility of noise-sensitive land uses in areas subject to noise levels of 55 to 80 dBA CNEL or Ldn. Residential uses are normally unacceptable in areas exceeding 70 dBA CNEL; and conditionally acceptable between 55 and 70 dBA CNEL for low-density single-family dwelling units, duplexes, and mobile homes, and between 60 and 70 dBA CNEL for multiple-family units. Schools, libraries, hospitals, and nursing homes are treated as noise-sensitive land uses, requiring acoustical studies within areas exceeding 60 dBA CNEL. Commercial/professional office buildings and industrial land uses are normally unacceptable in areas exceeding 75 dB CNEL, and are conditionally acceptable within 67 to 78 dB CNEL (for commercial and professional offices only).

The goals of the Safety Element are implemented through Chapter 9.28 (Noise Regulations) in the “City of Irwindale Municipal Code” (City Code). Section 9.28.030 (Ambient Base Noise Levels Designated) sets exterior standards by land use. These base levels defined in Subsection A therein are included in Table N-2 (City of Irwindale Ambient Noise Levels). Note that residential land uses include a base exterior noise level of 50 dBA between the hours of 7:00 AM and 10:00 PM and 45 dBA between the hours of 10:00 PM and 7:00 AM. Commercial properties raise these levels to 55 and 50 dBA, respectively; industrial properties carry a standard of 70 dBA and 60 dBA for the day and night, respectively. Note that the base levels represent the lowest levels to be used in the existing setting for an environmental assessment, even if the actual levels are lower and, if the actual ambient levels exceed the base levels included the table, the ambient levels become the base levels.

Table N-2
CITY OF IRWINDALE AMBIENT NOISE LEVELS

Zone	Ambient Base Noise Level	
	10:00 PM – 7:00 AM	7:00 AM – 10:00 PM
Residential	45 dBA	50 dBA
Commercial	50 dBA	55 dBA
Industrial	60 dBA	70 dBA

Source: City of Irwindale General Plan Update 2020

The City Code notes that “[a]ny noise at a level which exceeds the ambient or the ambient base level as set forth in Subsection A of this section, whichever is greater, by more than 10 dB when measured at any boundary line of the property from which the noise emanates shall constitute sufficient proof of a violation.”

Section 9.28.040 (Noise Level Violation Designated) of the City Code notes that “[i]t is unlawful for any person to wilfully make or continue, or cause to be made or continued any noise at a level which exceeds by more than five dB the ambient or the ambient base level as set forth in Section 9.28.030, whichever is greater, when measured at any boundary line of the property from which the noise emanates.”

The City sets regulations for the operation of machinery. Section 9.28.100 (Machinery, Equipment, Fans, and Air Conditioning) of the City Code states that "[i]t is unlawful for any person to operate any machinery, equipment, pump, fan, air-conditioning apparatus, or similar mechanical device in any manner so as to create any noise which would cause the noise level at any boundary line of any property from which such noise emanates to exceed the ambient noise level or the ambient base level as set forth in Section 9.28.030 of the City Code, whichever is greater, by more than ten decibels; provided, however, this section shall not prevent the reasonable operation of customary household gardening equipment or hobby shop equipment during the hours of eight AM to nine PM, Monday through Saturday, and ten AM to eight PM on Sunday, provided the same may not exceed eighty decibels (as measured from the adjacent property line) for more than three hours from sunup to sundown."

The City recognizes construction is necessary but can present a nuisance value to sensitive receptors if performed in their proximity and sets limitations. Accordingly, Subsection A of Section 9.28.110 (Construction of Building and Projects – Times) of the City Code states that: "[i]t is unlawful for any person within a residential zone, or within a radius of five hundred feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist or other construction type device on a development requiring a City permit, in such a manner that noise is produced which would constitute a violation of Section 9.28.040, unless beforehand authorization therefor has been duly obtained from the building inspector. Such activity is unlawful without a permit during all hours on Sunday. No permit shall be required to perform emergency work as defined in Subsection E of 9.28.020." Subsection B goes on to define allowable times as being limited to the hours of 7:00 AM to 7:00 PM.

City of Baldwin Park

The City of Baldwin Park (Baldwin Park) lies across Azusa Canyon Road from the project site and noise generated at the site could be perceptible to the sensitive, residential land uses located across that roadway. Baldwin Park's noise standards are included in Chapter 153 of the "City of Baldwin Park Code of Ordinances" (Baldwin Park Code). These standards are presented in Table N-3 (Baldwin Park Noise Standards).

Table N-3
BALDWIN PARK NOISE STANDARDS

Zone	Time	Allowable Noise Level (dBA)
Residential	7:00 AM – 7:00 PM	55
Residential	7:00 PM – 10:00 PM	50
Residential	10:00 PM – 7:00 AM	45
Commercial	1:00 AM – 10:00 PM	65
Commercial	10:00 PM – 7:00 AM	55
Industrial	Anytime	65

Source: City of Baldwin Park

As stipulated therein, noise levels may be increased such that they are not exceeded by more than 5 dBA for a cumulative period of no more than 15 minutes per 24-hour period, 10 dBA permitted for a cumulative period of no more than 5 minutes per 24-hour period, 15 dBA for a cumulative period of

no more than 1 minute per 24-hour period, or by 20 dBA for a cumulative period of less than 1 minute per 24-hour period.

Baldwin Park also recognizes that construction is necessary and sets construction hours accordingly. Section 130.04, Subsection A of the Baldwin Park Code states that "[n]o person shall engage in any act of construction, reconstruction or demolition as to any building or structure, including, but not limited to grading operations, on any lot located in the city, except between the hours of 7:00 AM and 7:00 PM." Subsection B therein further notes that "[n]otwithstanding any other provision of this code, a violation of this section shall be deemed to be an infraction."

2.5 Existing Noise Environment

Field Measurements

The project site is located within the City along the east side of Azusa Canyon Road, between Olive Street to the south and Nubia Street to the north. The subject property is currently used for general industrial uses and includes four residential units that will be removed. The project is to be an industrial use (e.g., manufacturing, warehouse, office) and is not considered to be "noise sensitive" in nature. The project areas to the north, south, and east are also industrial and are not sensitive by nature. The nearest residential uses are located in Baldwin Park immediately across Azusa Canyon Road. The nearest of these homes are on the order of 100 feet from the site perimeter.

A field survey was conducted on Wednesday, August 6, 2014 to determine ambient noise levels in the project area. The study included two noise readings obtained both on-site and in the Hoy Fong Foods parking area, directly to the south of the site. During the study, noise monitoring was conducted using a Quest Technologies Model 2900 Type 2 Integrating/logging Sound Level Meter. The unit meets the American National Standards Institute Standard S1.4-1983 for Type 2, International Electrotechnical Commission Standard 651-1979 for Type 2, and International Electro-technical Commission Standard 651-1979 for Type 2 sound level meters. The unit was field calibrated using a Quest Technologies QC-10 calibrator immediately prior to the first set of readings. The calibration unit meets the requirements of the American National Standards Institute Standard S1.4-1984 and the International Electrotechnical Commission Standard 942: 1988 for Class 1 equipment. The accuracies of the meter and calibrator are maintained through a program established through the manufacturer and traceable to the National Bureau of Standards. The calibration of the meter was rechecked at 11:15 AM after the final reading and no meter "drift" was noted. Monitoring locations are shown in Figure N-1 (Noise Level Monitoring Locations). All obtained noise level measurements are included in Table N-4 (Noise Level Measurements). The results of the field study are summarized below.

- **Noise Reading (NR) 1**. This reading was taken along the east side of Azusa Canyon Road in the parking area of the Hoy Fong Foods facility, 158 feet north of Olive Street and just south of the project site. The meter was placed at a distance of 50 feet from the centerline of travel (as determined by the presence of grease stains) for the near, northbound lane. The 15-minute measurement began it 10:29 AM. Traffic along Azusa Canyon Road included 44 autos and one heavy truck going northbound and 27 automobiles, four medium trucks, and one heavy trucks proceeding southbound. The road is posted at 40 mph. Additionally one heavy truck pulled into the Hoy Fond Foods facility and idled at the guard station for a period of a few minutes, while two departed. The inbound truck passed approximately 40 feet from the meter, idling about 100 feet away, while the outbound trucks were at about 75 feet away. Other sources of noise included a train in the background, a car

alarm at the liquor store located at the northwest corner of Azusa Canyon Road and Olive Street, and a light plane.

Table N-4
NOISE LEVEL MEASUREMENTS[1]

Monitoring Location	Leq (dBA)	L_{02} (dBA)	L_{08} (dBA)	L_{25} (dBA)	L_{50} (dBA)	Lmin (dBA)	Lmax (dBA)
NR-1	60.0	66.8	64.3	61.3	56.9	45.0	72.4
NR-2	63.3	73.2	67.5	65.3	61.3	53.0	80.5

Notes:
1. The Leq represents the equivalent sound level and is the numeric value of a constant level that over the given period of time transmits the same amount of acoustic energy as the actual time-varying sound level. The L_{02}, L_{08}, L_{25}, and L_{50} are the levels that are exceeded 2, 8, 25, and 50 percent of the time, respectively. Alternatively, these values represent the noise level that would be exceeded for 1, 5, 15, and 30 minutes during a 1-hour period if the readings were extrapolated out to an hour's duration. The Lmin and Lmax represent the minimum and maximum root-mean-square noise levels obtained over a period of 1 second during the measurement.

Source: Environmental Impact Sciences

- **Noise Reading (NR) 2**. This reading was taken on the project site along Azusa Canyon Road across from the property line separating the residential units at 4863 and 4903 Azusa Canyon Road. The meter was placed at a distance of 50 feet from the centerline of travel (as determined by the presence of grease stains) for the near, northbound lane. The 15-minute measurement began it 10:55 AM. Traffic along Azusa Canyon Road included 47 automobiles, two medium trucks, and four heavy truck going northbound and 38 autos and four heavy trucks proceeding southbound. Other sources of noise included aircraft and a dog barking across Azusa Canyon Road.

Modeling of Observed Field Data

Noise from motor vehicles is generated by engine vibrations, the interaction between the tires and the road, and the exhaust system. Reducing the average motor vehicle speed reduces the noise exposure at receptors adjacent to the road. Each reduction of five (5) miles per hour (mph) reduces noise by approximately one (1) dBA.

Noise from a line source, such as vehicles proceeding down a roadway, will be reduced with distance and the rate of reduction is a function of both the distance and the type of terrain over which the noise passes. Hard sites, such as developed areas with paving, reduce noise at a rate of 3 dBA per doubling of the distance while soft sites, such as undeveloped areas, open space, and vegetated areas reduce noise at a rate of 4.5 dBA per doubling of the distance. These represent the extremes and most areas will actually contain a combination of hard and soft elements with the noise reduction placed somewhere in between these two factors.

Most noise in the project area is generated by vehicles using local roadways and trains, although local sources and aircraft add to the noise profile, especially in proximity to some industrial machinery. In order to gauge the potential for project-generated impacts due to the addition of traffic, it is necessary to quantify the existing traffic-generated noise. The FHWA Traffic Noise Model (TNM Version 2.5) was used to evaluate traffic-related noise conditions in the vicinity of the project site. The model predicts 1-hour Leq noise levels and, as discussed below, factors are applied to ascertain the CNEL noise levels. These latter values are used in assessing the potential for mobile-source impacts from the proposed project.

Figure N-1
NOISE LEVEL MONITORING LOCATIONS
Source: Environmental Impact Sciences

The TNM model uses various parameters including the traffic volume, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent (Leq) noise levels. The model is typically accurate to within about 2 dBA where traffic provides the dominant noise source. To validate/calibrate the results of the model, TNM modeling was prepared for the number of vehicles and logistics observed during readings NR-1 and NR-2 in the field study. In the case of NR-1, the measurement was modeled as being located over "hard dirt", but was actually a combination of dirt, asphalt, and low plantings. In the case of reading NR-2, the measurement was modeled over paving as was performed in the field study. In both cases modeling was prepared for a posted speed of 40 mph. Model results are included in Table N-5 (Noise Level Measurements Versus Predicted Model Results). Note that the field measurements show excellent correlation with the model.

Table N-5
NOISE LEVEL MEASUREMENTS VERSUS PREDICTED MODEL RESULTS[1]

Monitoring Location	**Measured Leq** (dBA)	**Modeled Leq** (dBA)	**Difference** (dBA)
NR-1	60.0	60.6	0.6
NR-2	63.3	63.3	0.0

Notes:
1. Based on a posted speed of 40 mph.

Source: Environmental Impact Sciences

Modeling of Existing Traffic Volumes

Existing traffic volumes are modeled to determine if the project would add enough vehicles to significantly raise the noise level along the local roadways. In this case the impact is based solely on the addition of vehicles and the additional noise they create, regardless of the surrounding terrain.

The average daily traffic (ADT) volume for Azusa Canyon Road is based on data obtained by Counts Unlimited, Inc. on July 9, 2014. These counts show a value of 8,280 ADT between Arrow Highway, to the north of the project site, and Cypress Avenue to the south of the site. Additionally, values of 10,980 ADT were obtained between Cypress Avenue and Los Angeles Street, and 9,740 ADT between San Bernardino Street and Cypress Street, both to the south of the project site.

Additionally, intersection counts presented in the Gibson transportation analysis, counts obtained in the noise analysis field study, and data presented by the CARB were used to determine the ratio of automobiles and trucks such that a CNEL may be ascertained.

The Gibson study examined the intersection at Azusa Canyon Road and Arrow Highway to the north of the project site. The turning and through movements for the link (Azusa Canyon Road) south of Arrow Highway were summed so that existing volumes could be determined to Azusa Canyon Road south of the Arrow Highway. The results of this analysis are included in Table 6.

Reflecting the industrial nature of the project area, this ratio of trucks to autos is considerably higher than that for the County of Los Angeles (County) in general which, on average, has 92.49 percent automobiles, 4.74 percent medium trucks, and 2.77 percent heavy trucks as projected by the CARB EMFAC2007 computer model. The EMFAC model further breaks this traffic down by the hour of the day thereby allowing for a determination of an overall CNEL value for the ADT. These County ratios

by time period are also included in Table N-6 (Comparison of Noted and Modeled Vehicle Ratios for Various Times of the Day).

Table N-6
A COMPARISON OF NOTED AND MODELED VEHICLE RATIOS FOR VARIOUS TIMES OF THE DAY[1]

Source	Time	Number of Vehicles [2]	Automobiles (Percent)	Medium Trucks (Percent)	Heavy Trucks (Percent)
Gibson Study	7:00 AM – 9:00 AM	1,375	88.07	9.09	2.84
EMFAC2007	7:00 AM – 9:00 AM	31,604	95.14	2.72	2.13
Gibson Study	4:00 PM – 6:00 PM	1,238	94.02	4.77	1.21
EMFAC2007	4:00 PM – 6:00 PM	33,117	94.28	4.75	0.97
Field Study (NR-1)	10:00 AM Hour	77	92.21	5.19	2.60
EMFAC2007	10:00 AM Hour	9,610	89.51	6.89	3.60
Field Study (NR-2)	10:00 – 11:00 AM Hour	95	89.47	2.11	8.42
EMFAC2007	10:00 – 11:00 AM Hour	11,362	90.57	6.32	3.10
EMFAC2007	7:00 AM– 7:00 PM	175,434	93.27	4.76	1.97
EMFAC2007	7:00 PM – 10:00 PM	24,341	95.14	2.99	1.87
EMFAC2007	10:00 PM – 7:00 AM	27,544	85.22	7.35	7.43
EMFAC2007	7:00 AM – 7:00 AM	227,319	92.50	4.88	2.62

Notes.
1. Because of differences in the way the Gibson and field studies and EMFAC model allocate trucks, there could be small discrepancies in the "medium" to "heavy" truck ratios. This should not impact the ratio of automobiles.
2. Numbers of vehicles for Gibson and field studies are based on the actual number of vehicles counted. The number of vehicles for the EMFAC2007 is based on thousands of vehicle miles traveled per day throughout the County.

Source: Environmental Impact Sciences

It is interesting to note that based on the Gibson study, the AM peak hour contains a considerably higher ratio of medium trucks than is predicted by the model, most likely because of the industrial nature of the area. Still, the model correlates fairly well with Gibson counts obtained during the PM peak as well as those counts obtained in the field study. Because a significant impact would be based on the project's ability to increase the existing noise, a reasonable worst case would use the existing County ratios for the existing setting, then to add the project-generated truck and auto traffic to those levels. As such, the EMFAC County ratios were used in the analysis if the existing setting.

With respect to traffic-derived noise impacts, an impact may be significant if the project's addition to the existing traffic would create a substantial increase in noise. Therefore, if it can be demonstrated that the roadway the receives the greatest contribution of project-generated traffic relative to its existing traffic volume is not subject to a significant increase, then the contribution to all other roadways, which is relatively smaller, would not be significant either, and it is not necessary to model all of the roads in the project vicinity to determine the significance of the impact.

Vehicle counts obtained on July 9, 2014 shows a value of 8,280 ADT between Arrow Highway, to the north of the project site, and Cypress Avenue to the south of the site. Additionally, values of 10,980 ADT were obtained between Cypress Avenue and Los Angeles Street, and 9,740 ADT between San Bernardino Street and Cypress Street, both to the south of the project site. Because the project traffic would be greatest at the site entrance along Azusa Canyon Road, and the traffic to the south of the site shows higher existing counts than those at the site, the impact would be greatest for that portion of Azusa Canyon Road at the site, and it is not necessary to model the traffic to the south or along other roads.

Azusa Canyon Road currently operates at 8,280 ADT. In this case, so as to represent the residents that live across from the project site, TNM modeling considers the presence of a lawn surface. Table N-7 (Existing Noise Levels along Azusa Canyon Road) includes the CNEL as modeled at a distance of 50 feet, as well as the existing distances to the 70, 65, and 60 dBA CNEL noise levels, all as measured from the centerline of travel.

Table N-7
EXISTING NOISE LEVELS ALONG AZUSA CANYON ROAD

Location	Existing ADT	Existing CNEL (dBA at 50 Feet)	Distance to 70 CNEL (feet)	Distance to 65 CNEL (feet)	Distance to 60 CNEL (feet)
Azusa Canyon Road at the Project Site	8,280	66.6	30	64	137

Source: Environmental Impact Sciences

2.6 Sensitive Receptors

Some land uses are considered more sensitive to noise than others due to the types of population groups or activities involved. Sensitive receptors include residential areas and other sensitive land uses including any private or public school, hospital, residential care facility for the elderly, and religious institutions.

The project is an industrial use and is not sensitive in nature. The nearest sensitive uses are the proximate residential units located in the City of Baldwin Park (Baldwin Park) across Azusa Canyon Road.

3.0 Thresholds of Significance

The City follows the State's guidelines for land-use compatibility, referencing the State Office of Noise Control's "Guidelines for the Preparation and Content of Noise Elements of General Plans." Residential uses are normally unacceptable in areas exceeding 70 dB CNEL; and conditionally acceptable between 55 and 70 dBA CNEL for low-density single-family dwelling units, duplexes, and mobile homes. Commercial/professional office buildings and industrial land uses are normally unacceptable in areas exceeding 75 dB CNEL, and are conditionally acceptable within 67 to 78 dB CNEL (for commercial and professional offices only).

Additionally, the City stationary noise standards siting criteria note that industrial land uses are compatible to exterior noise levels of 70 dBA CNEL during the day and 60 dBA at night. Residential land uses are compatible with noise levels of up to 50 dBA during the day and 45 dBA at night. Baldwin Park sets their residential standards at 55 dBA between 7:00 AM and 7:00 PM, 50 dBA from 7:00 PM to 10:00 PM and 45 dBA between 10:00 PM and 7:00 AM. Note that these standards

only apply to stationary sources of noise under City control and do not include those sources beyond City control, such as motor vehicles while operating on public roadways.

With respect to projected increases, noise impacts can be broken down into three categories. The first is "audible" impacts, which refers to increases in noise level that are perceptible to humans. Audible increases in noise levels generally refer to a change of three (3) dBA or more since this level has been found to be barely perceptible in exterior environments. The second category, "potentially audible," refers to a change in noise level between one (1) and three (3) dBA. This range of noise levels was found to be noticeable to sensitive people in laboratory environments. The last category includes changes in noise level of less than one (1) dBA that are typically "inaudible" to the human ear except under quiet conditions in controlled environments. Only "audible" changes in noise levels at sensitive receptor locations (i.e., 3 dBA or more) are considered potentially significant.

3.1 State CEQA Guidelines

In order to assist in determining whether a project will have a significant effect on the environment, the CEQA Guidelines identify criteria that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions. According to Appendix G of the Guidelines for the Implementation of the California Environmental Quality Act (State CEQA Guidelines), a project will normally have a significant adverse environmental impact on noise if the following apply:

- Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- Would the project result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?
- Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

4.0 Environmental Impacts

The project is depicted in Figure N-2 (Conceptual Site Plan). The generation of noise associated with the proposed project would occur over the short-term for site construction activities. In addition, noise would result from the long-term operation of the project. Both short-term and long-term noise impacts associated with the project are examined in this analysis. For ease of the reader, the included analysis follows the outline of the CEQA environmental checklist.

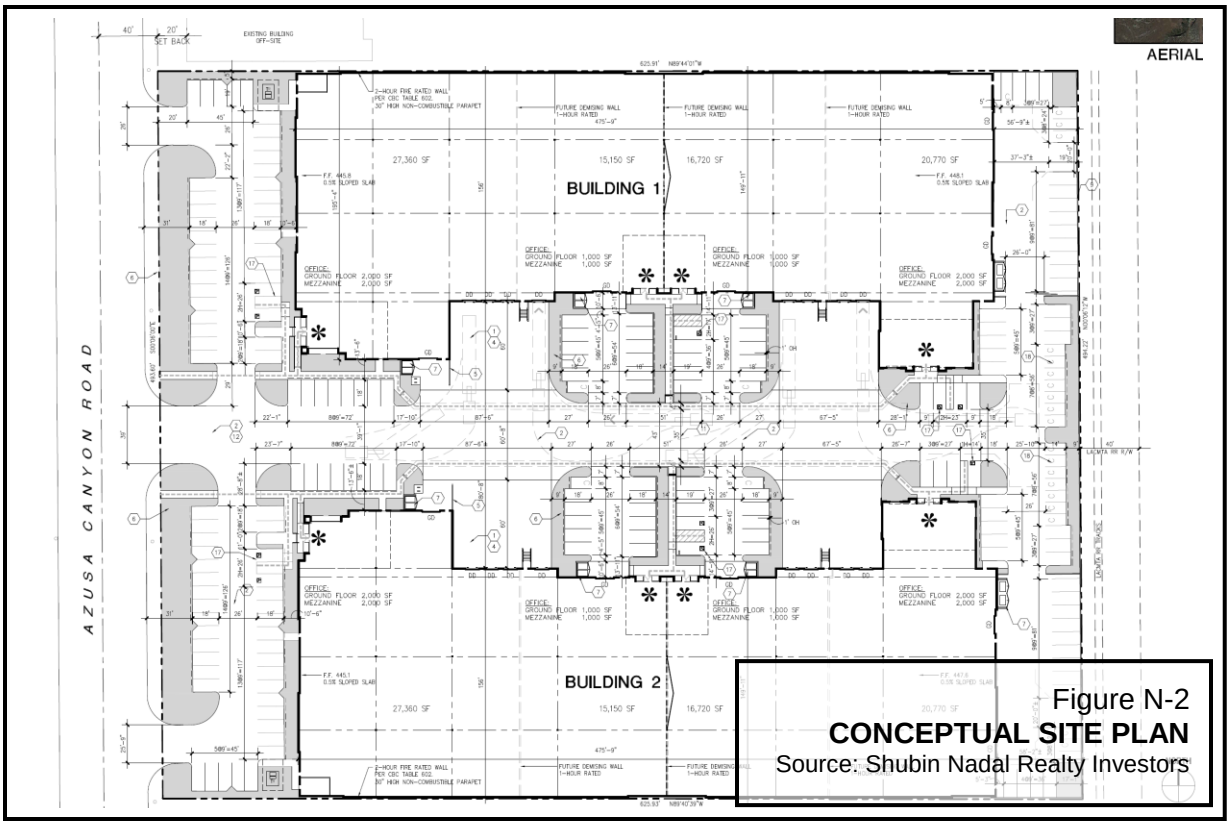

Figure N-2
CONCEPTUAL SITE PLAN
Source: Shubin Nadal Realty Investors

4.1 Potential for Exposure of Persons to or Generation of Noise Levels in Excess of Standards Established in the Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies

On-Site Impacts

- **Less than Significant Impact**. An impact could be significant if the project would site a sensitive land use in a location where noise levels would exceed the appropriate standards. The City's existing Noise Element references the State's noise guidelines and sets a goal level of up to 75 dBA CNEL as "normally acceptable" and up to 80 dBA CNEL as "conditionally acceptable" for the proposed industrial land use.

  Traffic noise modeling for Azusa Canyon Road shows an existing CNEL of 66.6 dBA as measured at a distance of 50 feet from the centerline of travel. The project is located beyond the 75 dBA CNEL that falls within the roadway easement and the land use is "normally acceptable" with the existing setting. Furthermore, on-site noise measurements obtained on August 6, 2014 (Wednesday) show on-site noise levels never approached the maximum "normally acceptable" levels for an industrial area, and in this respect the project is not subject to significant impact.

On-Site Workers

- **Less than Significant Impact**. Workers involved with the proposed project will be subject to augmented noise levels due to their working in proximity to both heavy equipment and trucks. Noise in the work place is regulated by OSHA. Article 105 (Control of Noise

Exposure) sets limitations on worker exposure. Specifically, an employer must administer a continuing, effective hearing conservation program whenever employee noise exposures equal or exceed an eight-hour time-weighted average sound level of 85 dBA. Furthermore, workers cannot be exposed to noise levels in excess of 90 dBA Leq for a period in excess of 8 hours. Higher noise levels carry shorter allowable duration periods. In no case may workers be exposed to peak noise levels in excess of 140 dB. OSHA also specifies a hearing conservation program, the use of hearing protectors, a training program and record keeping requirements for any workers exposed to prolonged periods of excessive noise. Required compliance with OSHA regulations will ensure that worker exposure to excessive noise remains less than significant.

Off-Site Impacts

- **Less than Significant Impact**. Stationary source impacts include noise generated from on-site equipment and, for the purposes of this analysis, trucking operations while within the confines of the subject parcel. These sources have the potential to create noise impacts on the adjoining community.

  As noted above, the project borders on Baldwin Park to the west across Azusa Canyon Road. With respect to the residents, an impact could be significant if project-related stationary noise would exceed the City standards of 50 dBA between the hours of 7:00 AM and 10:00 PM or 45 dBA between the hours of 10:00 PM and 7:00 AM. Baldwin Park sets these levels at 55 dBA between the hours of 7:00 AM and 7:00 PM, 50 dBA between the hours of 7:00 PM and 10:00 PM, and 45 dBA between the hours of 10:00 PM and 7:00 AM. As such, the City's standards are actually stricter than those of Baldwin Park and shall serve as the basis for impact.

  The primary source of noise from site operations would be from trucks idling while engaged in unloading activities. On-site air conditioning units and similar appurtenant equipment attached to the structure also produces noise, but City statute (Section 17.52.020, City Code) requires that this equipment be obscured, both visually and acoustically, and no significant impacts would result from the use of this equipment.

  Motor vehicles subject to regulation under the California Vehicle Code (CVC) are exempt from City and County codes when operating on public roadway. However, if the ordinance is deemed to be only applicable to vehicles when under operation on public roads, on-site trucks could be considered as a stationary noise source subject to the noise regulation limitation of 45 dBA at night and 50 dBA during the day.

  By State law, diesel trucks are prohibited from idling for more than five minutes at any one location (http://www.arb.ca.gov/toxics/idling/regtext.htm).

  Noise measurements taken for a variety of similar projects have demonstrated that the noise produced by idling/maneuvering semi-trucks is typically on the order of 70 dBA Leq, as measured at a distance of 50 feet from the noisiest portion of the truck (i.e., to the side behind the cab and in line with the engine and exhaust stacks). This would be inclusive of those noises commonly associated with idling, as well as such things as the release of air brakes, engine run-ups, couplers, etc.

  Truck operations while maneuvering in the loading bay area could generate noise discernable to the residents located across Azusa Canyon Road. The Gibson analysis

assumes that the project would generate as many as 396 truck trips on a daily basis. Assuming that 396 trucks are spread over a 24 hour period, approximately 16.5 trucks would call on the facility on an hourly basis including arrivals and departures. If each truck arriving and departing were to spend 5 minutes idling and 3 minutes in maneuvering, 4.4 trucks would be in operation at any given time (i.e., 16.5 truck/hour 8 minutes/truck x 2 / 60 minutes/hour = 4.4 trucks). Assuming that each truck produces an Leq of 70 dBA as measured at a distance of 50 feet, the composite hourly Leq noise is calculated at 76.4 dBA. The 50 dBA Leq falls at a distance of about 1,045 feet from this activity while the 45 dBA level is at about 1,860 feet and the impact of on-site noise could be significant at the residents located across Azusa Canyon Road.

The nearest residents could be on the order of 200 feet from the nearest on-site trucking activity. Based on this distance, and assuming 4.4 trucks are operating simultaneously at any given moment, noise at those residences is calculated at 64.4 dBA Leq.

Most of these on-site activities would, however, be at varying distances and mostly within the confines of the area shielded by the two structures and the buildings would serve as sound walls. Additionally, the analysis is based on noise monitoring for the largest semi-trucks. Most of the trucks accessing the project site would actually be smaller and less powerful.

The combination of these walls and the varying distances could reduce the noise by over 20 dBA (the maximum attributed to any wall) and noise at the near residents is not expected to exceed 44.4 dBA Leq for any given hour. This level is below the City's and daytime and nighttime standards of 50 dBA and 45 dBA, respectively as well as Baldwin Park's daytime, evening, and night standards of 55, 50, and 45 dBA, respectively and the impact is less than significant.

4.2 Potential to Result in Exposure of Persons to or Generation of Excessive Ground Borne Vibration or Ground Borne Noise Levels

- **Less than Significant Impact**. The City does not set quantitative standards for vibration impact; however, Baldwin Park Code standard (Section 153.140.090 [Vibration], Baldwin Park Code) prohibits operating or permitting the operation of any device that creates vibration which is "discernable without the aid of instruments" at any point on an adjacent property to the vibration source. The Baldwin Park Code standard exempts vibration caused by moving vehicles, trains, aircraft, temporary construction, and demolition.

  With respect to construction, Caltrans notes that ground-borne vibration is typically associated with blasting operations, the use of pile drivers, and large-scale demolition activities, none of which are anticipated for the construction or operation of the project.

  Some vibration could be produced due to truck bounce at the various railroad grade crossings located in the project vicinity. No residents are, however, located in the immediate proximity to these crossings, and any potential impacts of the project on off-site receptors are less than significant.

4.3 Potential to Result in a Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity above Levels Existing Without the Project

Road Noise

- **Less than Significant Impact**. Long-term impacts could be significant if the project creates activity or generates a volume of traffic that would substantially raise the ambient noise levels. As discussed above, a substantial increase is defined as 3 dBA CNEL.

  In accordance with the transportation analysis, the project would generate 1,119 ADT of which 723 are autos and 396 are trucks. Azusa Canyon Road currently operates at 8,280 ADT. A worst case scenario would assume that all of the project-generated traffic uses Azusa Canyon Road, and proceeds to and from the same direction such that the project would contribute the 1,119 ADT directly to the existing volume along this route. Under these circumstances the existing 66.6 dBA CNEL would be elevated to 68.4 dBA CNEL for an increase of 1.8 dBA CNEL as measured at a distance of 50 feet from the centerline of travel. The actual increase would be less because the analysis assumes the existing traffic is based on the County's overall vehicle mix and includes fewer trucks to automobiles than were observed in the field study. Still, even under these conditions the increase is less than the 3-dBA threshold for a significant increase and the impact is less than significant.

Stationary Source Noise

- **Less than Significant Impact**. Based on the discussion above, the noise generated by the on-site truck activities is estimated at 44.4 dBA for any given hour during the day at the near residents. Assuming this level to be continuous, the calculated CNEL is then 51.1 dBA (i.e., $10 \times \log ((12 \times 10^{(44.4/10)}) + (3 \times 10^{(44.4+5)/10}) + (9 \times 10^{(44.4 +10)/10}) / 24))$.

  As shown in Table N-7 (Existing Noise Levels along Azusa Canyon Road), the existing 65 dBA CNEL contour is located approximately 64 feet from the centerline of travel for Azusa Canyon Road. The distance would encompass the homes that lie across from the project site. The addition of 51.1 dBA CNEL to the existing 65 dBA CNEL would result in a composite level of 65.2 dBA for an increase of 0.2 dBA. This value is under the 3 dBA threshold for a significant increase and the impact is less than significant. Furthermore, even with the 1.8 dBA increase with the addition of the project-related traffic along Azusa Canyon Road, the increase would still be less than 2 dBA and is less than significant.

  In addition to the CNEL, an impact could also be significant if the project were to increase the ambient noise for any given period of time (e.g., the night). The calculation of the CNEL shows that traffic distributed between the hours of 10:00 PM and 7:00 AM would create a noise level of 58.8 dBA Leq as measured at a distance of 50 feet from the centerline of travel. Again using a value of 64 feet from the centerline of travel for the near receptors, this value would be reduced to 57.2 dBA Leq. The addition of 44.4 dBA Leq would raise this value to 57.4 for an increase of 0.2 dBA. If the receptors are closer to the centerline of the road, the ambient noise could be a bit louder and the project's contribution a bit less.

4.4 Potential to Result in a Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity above Levels Existing Without the Project

- **Less than Significant Impact**. Two types of noise impacts could occur during the construction phase. First, the transport of workers and equipment to the construction site would incrementally increase noise levels along site access roadways. Any increase in noise would, however, be less than one (1) dBA when averaged over a 24-hour period, and would therefore have a less than significant impact on noise receptors along the truck routes.

  The second type of impact is related to noise generated by on-site construction operations and existing local residents would be subject to elevated noise levels due to the operation of on-site construction equipment. Construction activities are typically carried out in discrete steps, each of which has its own mix of equipment, and consequently its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow noise ranges to be categorized by work phase. Table N-8 (Noise Levels Generated by Typical Construction Equipment) lists typical construction equipment noise levels recommended for noise impact assessment, measured at a distance of 50 feet.

Table N-8
NOISE LEVELS GENERATED BY TYPICAL CONSTRUCTION EQUIPMENT

Type of Equipment	**Average Sound Levels Measured** (dBA at 50 feet)
Pile Drivers	101
Rock Drills	98
Jack Hammers	88
Pneumatic Tools	85
Pumps	76
Dozers	80
Front-End Loaders	79
Hydraulic Backhoe	85
Hydraulic Excavators	82
Graders	85
Air Compressors	81
Trucks	91

Source: Noise Control for Buildings and Manufacturing Plants, BBN 1971

Noise ranges have been found to be similar during all phases of construction, although the actual construction of the structures tends to be somewhat less than that from grading. The grading and site preparation phase tends to create the highest noise levels, because the noisiest construction equipment is found in the earthmoving equipment category. This category includes excavating machinery (e.g., backfillers, bulldozers, draglines, and front loaders) and earthmoving and compacting equipment (e.g., compactors, scrapers, and graders). Typical operating cycles may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Noise levels at 50 feet from earthmoving equipment range from 73 to 96 dBA while Leq noise levels range up to about 89 dBA. The

later construction of structures is somewhat reduced from this value and the physical presence of the structure may break up line-of-sight noise propagation.

Composite construction noise is best characterized by Bolt, Beranek, and Newman (USEPA, December 31, 1971). In their study, construction noise for earthwork and finish-work related to industrial development is presented as 89 dBA Leq when measured at a distance of 50 feet from the construction effort. This value takes into account both the number of pieces and spacing of the heavy equipment used in the construction effort. Noise levels are typically reduced from this value and the physical structures further break up line of sight noise. As a worst-case scenario, the 89-dBA-value is used to assess the impact of construction.

The operation of such equipment would result in the generation of both steady and episodic noise significantly above the ambient levels currently experienced near the project site. The noise produced from construction decreases at a rate of approximately 6 dBA per doubling of distance. Therefore, at 100 feet the noise levels would be about 6 dBA less or 83 dBA Leq. Similarly, at 200 feet, the noise levels would be 12 dBA less or 77 dBA Leq.

The project is to be placed in an industrial area, but there are proximate residential uses. Most construction would be a over couple hundred feet from existing sensitive receptors. However, the nearest homes along Azusa Canyon Road could be on the order of 100 feet from construction activities with noise levels as high as 83 dBA Leq. These levels would only occur for very limited times when construction is performed near the proximate site boundary/structure on a worst-case workday. The other phases of construction would generate lower noise levels and are located further from the adjacent sensitive areas.

Both the City and Baldwin Park recognize that the control of construction noise is difficult at best and provide exemption for this type of noise when the work is performed within 500 feet of a residential zone within the hours specified within the City Code and Baldwin Park Code (i.e., 7:00 AM to 7:00 PM for permitted construction). Compliance with the City Code is mandatory and, as such, does not constitute mitigation under CEQA. The following measures shall aide in reducing the nuisance value of construction and complying with the Code to ensure that the impact remains less than significant:

- The construction contractor shall schedule all construction activities, deliveries, and haul trucks during the daytime hours of 7:00 AM to 7:00 PM Monday through Saturday.
- All construction equipment shall be properly maintained and tuned to minimize noise emissions,
- All equipment shall be fitted with properly operating mufflers and air intake silencers no less efficient than those originally installed,
- All stationary noise sources (e.g., generators and compressors) shall be located as far from the adjacent residential receptor locations as is feasible,
- The construction contractor shall post a sign, clearly visible on-site, with a contact name and telephone number of the construction contractor to respond to in the event of a noise complaint, and
- Construction shall be subject to any and all provisions set forth by the City of Irwindale Planning Department.

Implementation of these commitments would ensure that any impacts remain less than significant.

4.5 Project Potential to Expose People Residing or Working in the Project Area to Excessive Noise Levels from a Public Airport or Public Use Airport

- **Less than Significant Impact**. The El Monte airport is located west of Santa Anita Avenue approximately 5 miles to the west. While light plane and other aircraft noise is notable in the project area, the project is well beyond any airport's 60 dBA CNEL zone. No significant impacts would result from the implementation of the proposed project.

4.6 Project Potential to Expose People Residing or Working in the Project Area to Excessive Noise Levels from a Private Airstrip

- **Less than Significant Impact**. At about 4 miles to the southwest, Los Altos heliport in the City of Industry represents the nearest private use facility. No helicopter noise was observed during the field study and no significant impacts would result from the implementation of the proposed project.

5.0 References

- California Air Resources Board, EMFAC2007 Emissions Model, Version. 2.3
- California Department of Transportation, Technical Noise Supplement, October 1998
- California Department of Transportation, Transit Noise and Vibration Impact Assessment, Final Report, April 1995
- California Department of Transportation, Transportation Related Earthborne Vibrations, February 20, 2002
- City of Baldwin Park, 2020 General Plan Update, June 2008
- City of Baldwin Park, Baldwin Park, California Code of Ordinances (Online), February 19, 2014
- City of Irwindale, 2020 General Plan Update, June 2008
- City of Irwindale, Irwindale Municipal Code (Online), March 2013
- Federal Highway Administration, Traffic Noise Model, Version 2.5, February 2004
- Gibson Transportation Consulting, Inc., Draft Transportation Study for the Azusa Canyon Industrial Park, Irwindale California, September 2013
- United States Department of Housing and Urban Development, The Noise Guidebook, March 1985.
- United States Environmental Protection Agency, Bolt, Beranek, and Newman. Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, December 31, 1971.

Appendix A

TNM Noise Modeling for Noise Reading NR-1

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					7-Aug-14								
						TNM 2.5							
INPUT: ROADWAY								Average pavement type shall be used unless					
PROJECT/CONTRA	<Project Name?>							a State highway agency substantiates the use					
RUN:	Azusa Canyon Industrial, NR-1, Hard Soil							of a different type with the approval of FHWA					
Roadway			Points										
Name	Width		Name	No.	Coordinates (pavement)			Flow Control			Segment		
					X	Y	Z	Control	Speed	Percent	Pvmt	On	
								Device	Constrain	Vehicles	Type	Struct?	
										Affected			
	ft				ft	ft	ft		mph	%			
Roadway2	12		point2	2	-56	750	0				Average		
			point1	1	-56	-750	0						
Roadway3	12		point4	4	-87	-750	0				Average		
			point3	3	-87	750	0						
					7-Aug-14								
					TNM 2.5								
INPUT: TRAFFIC F(													
PROJECT/CONTRA	<Project Name?>												
RUN:	Azusa Canyon Industrial, NR-1, Hard Soil												
Roadway		Points											
Name		Name	No.	Segment									
				Autos		MTrucks		HTrucks		Buses		Motorcycles	
				V	S	V	S	V	S	V	S	V	S
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway2		point2	2	176	40	0	0	4	40	0	0	0	0
		point1	1										
Roadway3		point4	4	108	40	16	40	4	40	0	0	0	0
		point3	3										
<Organization?>						7-Aug-14							
<Analysis By?>						TNM 2.5							
INPUT: RECEIVERS													
PROJECT/CONTRA	<Project Name?>												
RUN:	Azusa Canyon Industrial, NR-1, Hard Soil												
Receiver													
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active		
			X	Y	Z	above	Existing	Impact Criteria		NR	in		
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.		
			ft	ft	ft	ft	dBA	dBA	dB	dB			
Receiver1	1	1	0	0	0	4.92	0	66	10	8	Y		
							7-Aug-14						
							TNM 2.5						
							Calculated with TNM 2.5						
RESULTS: SOUND I													
PROJECT/CONTRA		<Project Name?>											
RUN:		Azusa Canyon Industrial, NR-1, Hard Soil											
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless					
								a State highway agency substantiates the use					
ATMOSPHERICS:		68 deg F, 50% RH						of a different type with approval of FHWA.					
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over existir		Type	Calculate(	Noise Reduction			
				Calculate(	Crit'n	Calculate(	Crit'n	Impact	LAeq1h	Calculate(	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver1	1	1	0	60.6	66	60.6	10	----	60.6	0	8	-8	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0	0	0								
All Impacted		0	0	0	0								
All that meet NR Goal		0	0	0	0								

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Appendix B

TNM Noise Modeling for Noise Reading NR-2

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7-Aug-14
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: Azusa Canyon Industrial, NR-2, Pavement

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Northbound	12	point2	2	-56	750	0				Average	
		point1	1	-56	-750	0					
Southbound	12	point4	4	-87	-750	0				Average	
		point3	3	-87	750	0					

7-Aug-14
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: Azusa Canyon Industrial, NR-2, Pavement

Roadway Name	Points Name	No.	Segment Autos V	S	MTrucks V	S	HTrucks V	S	Buses V	S	Motorcycles V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Northbound	point2	2	188	40	8	40	16	40	0	0	0	0
	point1	1										
Southbound	point4	4	152	40	0	0	16	40	0	0	0	0
	point3	3										

7-Aug-14
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: Azusa Canyon Industrial, NR-2, Pavement

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Receiver1	1	1	0	0	0	4.92	0	66	10	8	Y

7-Aug-14
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: Azusa Canyon Industrial, NR-2, Pavement
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver1	1	1	0	63.3	66	63.3	10	----	63.3	0	8	-8

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0

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Appendix C

TNM Modeling for Existing Azusa Canyon Road Traffic Using Los Angeles County Vehicle Ratios for Various Periods

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						11-Aug-14							
						TNM 2.5							
INPUT: ROADWAYS								Average pavement type shall be used unless					
PROJECT/CONTRACT:	<Project Name?>							a State highway agency substantiates the use					
RUN:	Azusa Industrial Existing Day							of a different type with the approval of FHWA					
Roadway			Points										
Name	Width		Name	No.	Coordinates (pavement)			Flow Control			Segment		
					X	Y	Z	Control	Speed	Percent	Pvmt	On	
								Device	Constraint	Vehicles	Type	Struct?	
										Affected			
	ft				ft	ft	ft		mph	%			
Roadway1	12		point2	2	50	750	0				Average		
			point1	1	50	-750	0						
					11-Aug-14								
					TNM 2.5								
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	<Project Name?>												
RUN:	Azusa Industrial Existing Day												
Roadway		Points											
Name		Name	No.	Segment									
				Autos		MTrucks		HTrucks		Buses		Motorcycles	
				V	S	V	S	V	S	V	S	V	S
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1		point2	2	494	40	23	40	11	40	2	40	3	40
		point1	1										
						11-Aug-14							
						TNM 2.5							
INPUT: RECEIVERS													
PROJECT/CONTRACT:	<Project Name?>												
RUN:	Azusa Industrial Existing Day												
Receiver													
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active		
			X	Y	Z	above	Existing	Impact Criteria		NR	in		
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.		
			ft	ft	ft	ft	dBA	dBA	dB	dB			
Receiver1	1	1	0	0	0	4.92	0	66	10	8	Y		
							11-Aug-14						
							TNM 2.5						
							Calculated with TNM 2.5						
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		<Project Name?>											
RUN:		Azusa Industrial Existing Day											
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless					
								a State highway agency substantiates the use					
ATMOSPHERICS:		68 deg F, 50% RH						of a different type with approval of FHWA.					
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver1	1	1	0	63.9	66	63.9	10	----	63.9	0	8	-8	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0	0	0								
All Impacted		0	0	0	0								
All that meet NR Goal		0	0	0	0								

						11-Aug-14							
						TNM 2.5							
INPUT: ROADWAYS								Average pavement type shall be used unless					
PROJECT/CONTRACT:	<Project Name?>							a State highway agency substantiates the use					
RUN:	Azusa Industrial Existing Evening							of a different type with the approval of FHWA					
Roadway			Points										
Name	Width		Name	No.	Coordinates (pavement)			Flow Control			Segment		
					X	Y	Z	Control	Speed	Percent	Pvmt	On	
								Device	Constraint	Vehicles	Type	Struct?	
										Affected			
	ft				ft	ft	ft		mph	%			
Roadway1	12		point2	2	50	750	0				Average		
			point1	1	50	-750	0						
					11-Aug-14								
					TNM 2.5								
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	<Project Name?>												
RUN:	Azusa Industrial Existing Evening												
Roadway		Points											
Name		Name	No.	Segment									
				Autos		MTrucks		HTrucks		Buses		Motorcycles	
				V	S	V	S	V	S	V	S	V	S
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1		point2	2	280	40	8	40	5	40	1	40	1	40
		point1	1										
						11-Aug-14							
						TNM 2.5							
INPUT: RECEIVERS													
PROJECT/CONTRACT:	<Project Name?>												
RUN:	Azusa Industrial Existing Evening												
Receiver													
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active		
			X	Y	Z	above	Existing	Impact Criteria		NR	in		
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.		
			ft	ft	ft	ft	dBA	dBA	dB	dB			
Receiver1	1	1	0	0	0	4.92	0	66	10	8	Y		
							11-Aug-14						
							TNM 2.5						
							Calculated with TNM 2.5						
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		<Project Name?>											
RUN:		Azusa Industrial Existing Evening											
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless					
								a State highway agency substantiates the use					
ATMOSPHERICS:		68 deg F, 50% RH						of a different type with approval of FHWA.					
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver1	1	1	0	60.9	66	60.9	10	----	60.9	0	8	-8	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0	0	0								
All Impacted		0	0	0	0								
All that meet NR Goal		0	0	0	0								

Appendix D

TNM Noise Modeling for Azusa Canyon Road Traffic for Various Periods with Project

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						12-Aug-14							
						TNM 2.5							
INPUT: ROADWAYS								Average pavement type shall be used unless					
PROJECT/CONTRACT:								a State highway agency substantiates the use					
RUN:	Azusa Industrial With Project, Day							of a different type with the approval of FHWA					
Roadway			Points										
Name	Width		Name	No.	Coordinates (pavement)			Flow Control			Segment		
					X	Y	Z	Control	Speed	Percent	Pvmt	On	
								Device	Constrain	Vehicles	Type	Struct?	
										Affected			
	ft				ft	ft	ft		mph	%			
Roadway1	12		point2	2	50	750	0				Average		
			point1	1	50	-750	0						
					12-Aug-14								
					TNM 2.5								
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:													
RUN:	Azusa Industrial With Project, Day												
Roadway		Points											
Name		Name	No.	Segment									
				Autos		MTrucks		HTrucks		Buses		Motorcycles	
				V	S	V	S	V	S	V	S	V	S
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1		point2	2	524	40	33	40	17	40	3	40	3	40
		point1	1										
						12-Aug-14							
						TNM 2.5							
INPUT: RECEIVERS													
PROJECT/CONTRACT:													
RUN:	Azusa Industrial With Project, Day												
Receiver													
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active		
			X	Y	Z	above	Existing	Impact Criteria		NR	in		
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.		
			ft	ft	ft	ft	dBA	dBA	dB	dB			
Receiver1	1	1	0	0	0	4.92	0	66	10	8	Y		
							12-Aug-14						
							TNM 2.5						
							Calculated with TNM 2.5						
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:		Azusa Industrial With Project, Day											
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless					
								a State highway agency substantiates the use					
ATMOSPHERICS:		68 deg F, 50% RH						of a different type with approval of FHWA.					
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver1	1	1	0	64.7	66	64.7	10	----	64.7	0	8	-8	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0	0	0								
All Impacted		0	0	0	0								
All that meet NR Goal		0	0	0	0								

						12-Aug-14							
						TNM 2.5							
INPUT: ROADWAYS								Average pavement type shall be used unless					
PROJECT/CONTRACT:	<Project Name?>							a State highway agency substantiates the use					
RUN:	Azusa Industrial With Project, Evening							of a different type with the approval of FHWA					
Roadway			Points										
Name	Width		Name	No.	Coordinates (pavement)			Flow Control			Segment		
					X	Y	Z	Control	Speed	Percent	Pvmt	On	
								Device	Constraint	Vehicles	Type	Struct?	
										Affected			
	ft				ft	ft	ft		mph	%			
Roadway1	12		point2	2	50	750	0				Average		
			point1	1	50	-750	0						
					12-Aug-14								
					TNM 2.5								
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	<Project Name?>												
RUN:	Azusa Industrial With Project, Evening												
Roadway		Points											
Name		Name	No.	Segment									
				Autos		MTrucks		HTrucks		Buses		Motorcycles	
				V	S	V	S	V	S	V	S	V	S
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1		point2	2	310	40	18	40	11	40	2	40	1	40
		point1	1										
							12-Aug-14						
							TNM 2.5						
	INPUT: RE												
	PROJECT/(	<Project Name?>											
	RUN:	Azusa Industrial With Project, Evening											
	Receiver												
	Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active	
				X	Y	Z	above	Existing	Impact Criteria		NR	in	
							Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.	
				ft	ft	ft	ft	dBA	dBA	dB	dB		
	Receiver1	1	1	0	0	0	4.92	0	66	10	8	Y	
							12-Aug-14						
							TNM 2.5						
							Calculated with TNM 2.5						
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:		<Project Name?>											
RUN:		Azusa Industrial With Project, Evening											
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless					
								a State highway agency substantiates the use					
ATMOSPHERICS:		68 deg F, 50% RH						of a different type with approval of FHWA.					
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver1	1	1	0	62.4	66	62.4	10	----	62.4	0	8	-8	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0	0	0								
All Impacted		0	0	0	0								
All that meet NR Goal		0	0	0	0								

						12-Aug-14							
						TNM 2.5							
INPUT: ROADWAYS								Average pavement type shall be used unless					
PROJECT/CONTRACT:								a State highway agency substantiates the use					
RUN:	Azusa Industrial With Project, Night							of a different type with the approval of FHWA					
Roadway			Points										
Name	Width		Name	No.	Coordinates (pavement)			Flow Control			Segment		
					X	Y	Z	Control	Speed	Percent	Pvmt	On	
								Device	Constraint	Vehicles	Type	Struct?	
										Affected			
	ft				ft	ft	ft		mph	%			
Roadway1	12		point2	2	50	750	0				Average		
			point1	1	50	-750	0						
					12-Aug-14								
					TNM 2.5								
INPUT: TRAFFIC FOR LAeq1h Volume													
PROJECT/CONTRACT:													
RUN:	Azusa Industrial With Project, Night												
Roadway		Points											
Name		Name	No.	Segment									
				Autos		MTrucks		HTrucks		Buses		Motorcycles	
				V	S	V	S	V	S	V	S	V	S
				veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway1		point2	2	124	40	17	40	14	40	2	40	0	0
		point1	1										
						12-Aug-14							
						TNM 2.5							
INPUT: RECEIVERS													
PROJECT/CONTRACT:													
RUN:	Azusa Industrial With Project, Night												
Receiver													
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria				Active		
			X	Y	Z	above	Existing	Impact Criteria		NR	in		
						Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.		
			ft	ft	ft	ft	dBA	dBA	dB	dB			
Receiver1	1	1	0	0	0	4.92	0	66	10	8	Y		
							12-Aug-14						
							TNM 2.5						
							Calculated with TNM 2.5						
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:													
RUN:		Azusa Industrial With Project, Night											
BARRIER DESIGN:		INPUT HEIGHTS						Average pavement type shall be used unless					
								a State highway agency substantiates the use					
ATMOSPHERICS:		68 deg F, 50% RH						of a different type with approval of FHWA.					
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated	
							Sub'l Inc					minus	
												Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
Receiver1	1	1	0	61	66	61	10	----	61	0	8	-8	
Dwelling Units		# DUs	Noise Reduction										
			Min	Avg	Max								
			dB	dB	dB								
All Selected		1	0	0	0								
All Impacted		0	0	0	0								
All that meet NR Goal		0	0	0	0								

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Appendix E

Calculation of the CNEL for Azusa Canyon Road Traffic

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EXISTING NOISE LEVELS AND DISTANCES TO CONTOURS AT POSTED SPEEDS

This spreadsheet uses the projections generated by the FHWA TNM noise model and calculates the CNEL @ 50 feet as well as the distances to the 70, 65, and 60 dBA CNEL using soft site modeling.

The calculation is:

$$CNEL = 10*LOG(((12*10^{(Day/10)})+(3*10^{((Evening+5)/10)})+(9*10^{((Night+10)/10)}))/24)$$

Speed	Daytime L_{eq}	Evening L_{eq}	Night L_{eq}	CNEL for	8,280	ADT
40	63.9	60.9	58.8	66.6		
Road	Speed (mph)	ADT	CNEL (dBA @ 50 Feet)	Distance to 70 dBA CNEL	Distance to 65 dBA CNEL	Distance to 60 dBA CNEL
Azusa Canyon Road	40	8,280	66.6	30	64	137

WITH PROJECT NOISE LEVELS AND DISTANCES TO CONTOURS AT POSTED SPEEDS

This spreadsheet uses the projections generated by the FHWA TNM noise model and calculates the CNEL @ 50 feet as well as the distances to the 70, 65, and 60 dBA CNEL using soft site modeling.

The calculation is:

$$CNEL = 10*LOG(((12*10^{(Day/10)})+(3*10^{((Evening+5)/10)})+(9*10^{((Night+10)/10)}))/24)$$

Speed	Daytime L_{eq}	Evening L_{eq}	Night L_{eq}	CNEL for	9,399	ADT
40	64.7	62.4	61.0	68.4		
Road	Speed (mph)	ADT	CNEL (dBA @ 50 Feet)	Distance to 70 dBA CNEL	Distance to 65 dBA CNEL	Distance to 60 dBA CNEL
Azusa Canyon Road	40	9,399	68.4	39	84	181

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Appendix F

California Air Resources Board Idle Limit Regulations

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FINAL REGULATION ORDER
AIRBORNE TOXIC CONTROL MEASURE TO LIMIT DIESEL-FUELED COMMERCIAL MOTOR VEHICLE IDLING

Adopt new Section 2485 within Chapter 10 – Mobile Source Operational Controls, Article 1 – Motor Vehicles, Division 3. Air Resources Board, title 13, California Code of Regulations to read as follows:

Section 2485. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.

(a) **Purpose.** The purpose of this airborne toxic control measure is to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles.

(b) **Applicability.** This section applies to diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. This specifically includes:
- (1) California-based vehicles; and
- (2) Non-California-based vehicles.

(c) **Requirements.** On or after February 1, 2005, the driver of any vehicle subject to this section:
- (1) shall not idle the vehicle's primary diesel engine for greater than 5.0 minutes at any location, except as noted in Subsection (d); and
- (2) shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d).

(d) **Exceptions.** Subsection (c) does not apply for the period or periods during which
- (1) A bus is idling for
  - (A) Up to 10.0 minutes prior to passenger boarding, or
  - (B) When passengers are onboard;
- (2) Idling of the primary diesel-engine is necessary to power a heater, air conditioner, or any ancillary equipment during sleeping or resting in a sleeper berth. This provision does not apply when operating within 100 feet of a restricted area;
- (3) Idling when the vehicle must remain motionless due to traffic conditions, an official traffic control device, or an official traffic control signal over which the driver has no control, or at the direction of a peace officer, or operating a diesel-fueled APS at the direction of a peace officer;
- (4) Idling when the vehicle is queuing that at all times is beyond 100 feet from any restricted area;
- (5) Idling of the primary engine or operating a diesel-fueled APS when forced to remain motionless due to immediate adverse weather conditions affecting the safe operation of the vehicle or due to mechanical difficulties over which the driver has no control;
- (6) Idling to verify that the vehicle is in safe operating condition as required by law and that all equipment is in good working order, either as part of a daily vehicle inspection or as otherwise needed, provided that such engine idling is mandatory for such verification;
- (7) Idling of the primary engine or operating a diesel-fueled APS is mandatory for testing, servicing, repairing, or diagnostic purposes;

(8) Idling when positioning or providing a power source for equipment or operations, other than transporting passengers or propulsion, which involve a power take off or equivalent mechanism and is powered by the primary engine for:
  (A) Controlling cargo temperature, operating a lift, crane, pump, drill, hoist, mixer (such as a ready mix concrete truck), or other auxiliary equipment;
  (B) Providing mechanical extension to perform work functions for which the vehicle was designed and where substitute alternate means to idling are not reasonably available; or
  (C) Collection of solid waste or recyclable material by an entity authorized by contract, license, or permit by a school or local government;

(9) Idling of the primary engine or operating a diesel-fueled APS when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency;

(10) Idling of the primary engine or operating a diesel-fueled APS by authorized emergency vehicles while in the course of providing services for which the vehicle is designed;

(11) Idling of military tactical vehicles during periods of training; and

(12) Idling when operating equipment such as a wheelchair or people assist lift as prescribed by the Americans with Disabilities Act;

(e) **Relationship to Other Law**. Nothing in this section allows idling in violation of other applicable law, including, but not limited to:
  (1) California Vehicle Code Section 22515;
  (2) Title 13, Section 2480, California Code of Regulations;
  (3) California Health and Safety Code Section 40720; or
  (4) Any applicable ordinance, rule, or requirement as stringent as, or more stringent than, this section.

(f) **Enforcement.** This section may be enforced by the Air Resources Board; peace officers as defined in California Penal Code, title 3, chapter 4.5, Sections 830 et seq. and their respective law enforcement agencies' authorized representatives; and air pollution control or air quality management districts.

(g) **Penalties.** For violations of subsection (c)(1) or (c)(2), the driver of a subject vehicle is subject to a minimum civil penalty of 100 dollars and to criminal penalties as specified in the Health and Safety Code and the Vehicle Code.

(h) **Definitions.** The following definitions apply to this section:
  (1) "Authorized emergency vehicle" is as defined in Vehicle Code Section 165.
  (2) "Auxiliary power system" or "APS" means any device that provides electrical, mechanical, or thermal energy to the primary diesel engine, truck cab, or sleeper berth as an alternative to idling the primary diesel engine.
  (3) "Bus" means any vehicle defined in Title 13, California Code of Regulations, Section 2480, subsections (h) (13)-(16), inclusive or as defined in the Vehicle Code Section 233.
  (4) "Commercial Motor Vehicle" means any vehicle or combination of vehicles defined in Vehicle Code Section 15210(b) and any other motor truck or bus with a gross vehicle weight rating of 10,001 pounds or more, except the following:
    (A) A zero emission vehicle; or
    (B) A pickup truck as defined in Vehicle Code Section 471.
  (5) "Driver" is as defined in Vehicle Code Section 305.
  (6) "Gross vehicle weight rating" is as defined in Vehicle Code Section 350.
  (7) "Highway" is as defined in Vehicle Code Section 360.

(8) “Idling" means the vehicle engine is running at any location while the vehicle is stationary.

(9) "Motor truck" or "motortruck" means a motor vehicle designed, used, or maintained primarily for the transportation of property.

(10) "Official traffic control device" is as defined in Vehicle Code Section 440.

(11) “Official traffic control signal" is as defined in Vehicle Code Section 445.

(12) “Owner” is as defined in Vehicle Code Section 460.

(13) “Primary diesel engine” means the diesel-fueled engine used for vehicle propulsion.

(14) “Queuing” means (A) through (C)

- (A) The intermittent starting and stopping of a vehicle;
- (B) While the driver, in the normal course of doing business, is waiting to perform work or a service; and
- (C) When shutting the vehicle engine off would impede the progress of the queue and is not practicable.
- (D) Queuing does not include the time a driver may wait motionless in line in anticipation of the start of a workday or opening of a location where work or a service will be performed.

(15) “Restricted area” means any real property zoned for individual or multifamily housing units that has one or more of such units on it.

(16) "Safety or health emergency" means:

- (A) A sudden, urgent, or usually unforeseen, occurrence; or
- (B) A foreseeable occurrence relative to a medical or physiological condition.

(17) “Sleeper berth” is as defined in Title 13, California Code of Regulations, Section 1265.

(18) “Vehicle” is as defined in the Vehicle Code Section 670.

Authority: Sections 39600, 39601, 39614(b)(6)(A), 39658, 39667, 43000.5(d), 43013(b), 43013(h), 43018(b), and 43018(c), Health and Safety Code; and Western Oil & Gas Assn. v. Orange County Air Pollution Control Dist. (1975) [14 Cal.3d.411].

Reference: Sections 39002, 39003, 39027, 39500, 39600, 39650, 39655, 39656, 39657, 39658, 39659, 39662, 39665, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3, 42402, 42402.1, 42402.2, 42402.3, 42403.5, 42410, 43013, 43018, Health and Safety Code; Sections 305, 336, 350, 440, 445, 545, 546, 642, 680, 21400, 22452, 22515, 27153, 40001, 40001(b)(5), Vehicle Code; and Sections 1201,1900, 1962, 2480, Title13, California Code of Regulations.

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Appendix F

Transportation Study for Azusa Canyon Industrial Parks

(Gibson Transportation Consulting, September 2013)

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DRAFT

TRANSPORTATION STUDY FOR THE AZUSA CANYON INDUSTRIAL PARK

IRWINDALE, CALIFORNIA

SEPTEMBER 2013

PREPARED FOR

SHUBIN NADAL REALTY INVESTORS

PREPARED BY

Gibson
transportation consulting, inc.

DRAFT

TRANSPORTATION STUDY
FOR THE
AZUSA CANYON INDUSTRIAL PARK

IRWINDALE, CALIFORNIA

September 2013

Prepared for:

SHUBIN NADAL REALTY INVESTORS

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Chapter 1
Introduction

This study presents the traffic impact analysis for the proposed Azusa Canyon Industrial Park (Project) located in the City of Irwindale, California. The methodology and base assumptions used in the analysis were established in conjunction with the City of Irwindale.

PROJECT LOCATION

The Project site (Site) is located in the City of Irwindale on the east side of Azusa Canyon Road between Arrow Highway and Olive Street. The Site lies within an urbanized area consisting primarily of industrial uses on the east side of Azusa Canyon Road and residential developments on the west side.

Figure 1 shows the Study Area for the Project location.

EXISTING SITE CONDITIONS

The Site currently contains a mix of buildings, including four residential homes and 32,012 square feet (sf) of general light industrial use with access at a single driveway on Azusa Canyon Road, north of Olive Street.

As part of the Project, the existing residential and industrial buildings will be replaced by the new development.

PROJECT DESCRIPTION

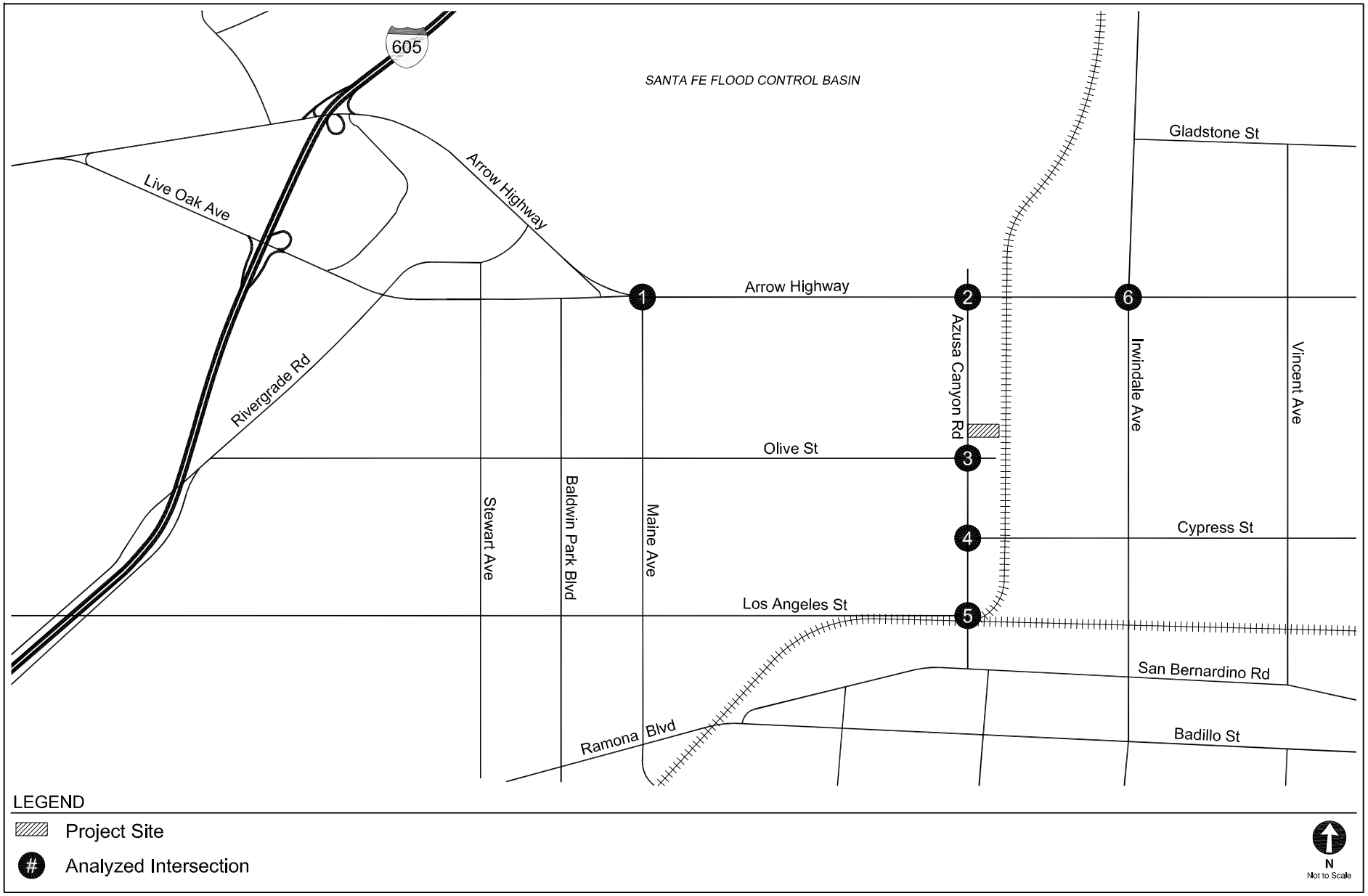
Shubin Nadal Realty Investors proposes to develop a general light industrial facility with approximately 172,000 sf and removal of existing buildings. Figure 2 shows the Site plan for the Project.

The Project proposes to utilize the existing driveway on Azusa Canyon Road, with stop-controlled westbound egress. Southbound left turns can be accommodated within the existing two-way left-turn lane on Azusa Canyon Road. Northbound right turning traffic will utilize the curbside through lane without requiring a deceleration or dedicated right-turn lane.

For the purposes of this traffic study, the Project is anticipated to be completed in 2016.

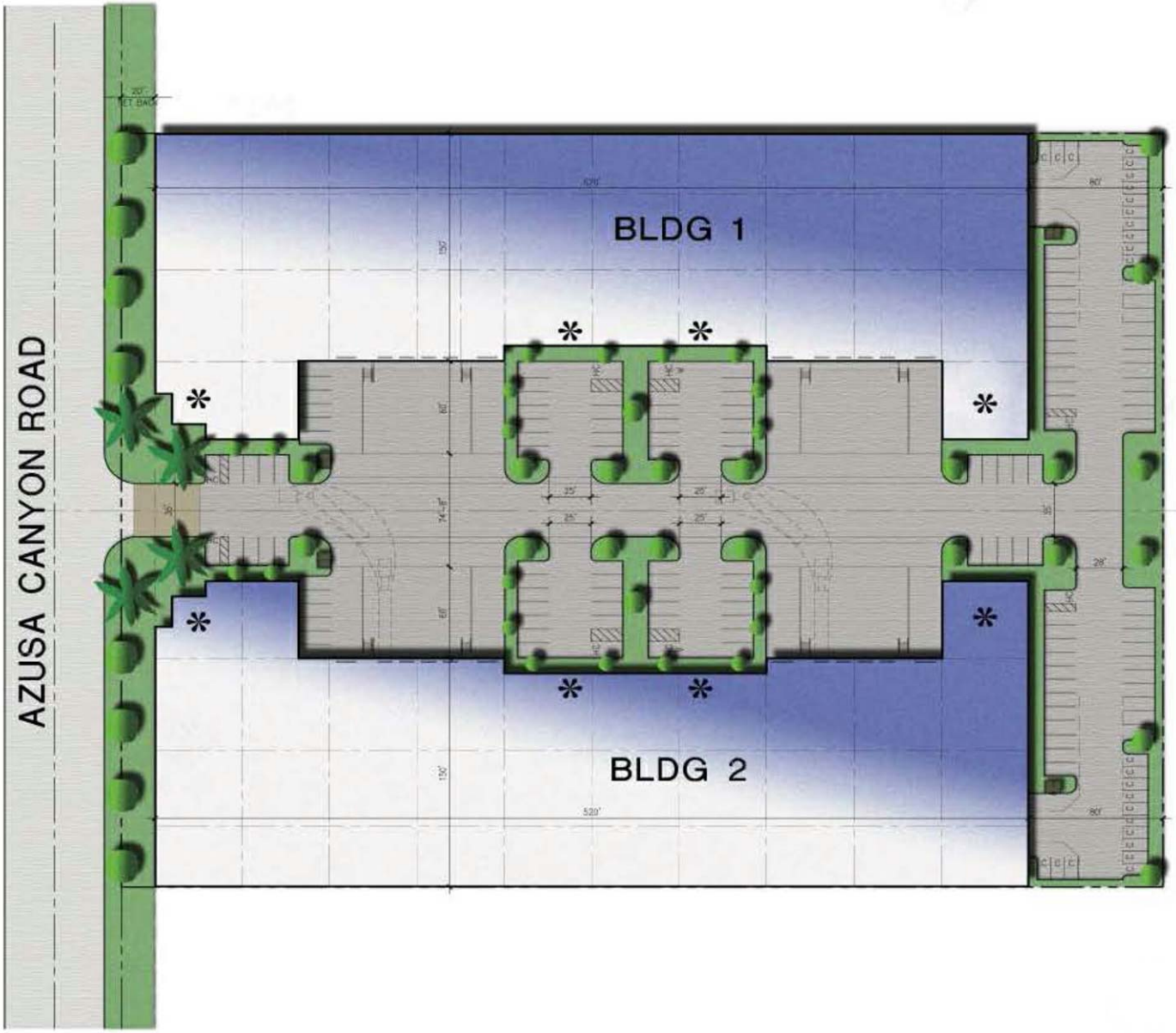
ORGANIZATION OF REPORT

This report is divided into 11 chapters, including this introduction. Chapter 2 describes the methodology used to analyze intersection operating characteristics and assess significant traffic impacts. Chapter 3 describes the existing circulation system, traffic volumes, and traffic conditions in the Study Area. The methodologies used to forecast future background traffic volumes are described and applied in Chapter 4. Chapter 5 discusses the methodologies used to forecast Project traffic and the Project-related traffic volumes, and Chapter 6 assesses intersection operating conditions of the existing street system after completion of the Project. Chapter 7 assesses intersection operating conditions in the future after completion of the Project, and Chapter 8 identifies traffic impacts caused by the Project under existing and future conditions at buildout. The Congestion Management Program review is provided in Chapter 9. Site access and internal circulation are evaluated in Chapter 10. Chapter 11 summarizes the analyses and study conclusions.



STUDY AREA

FIGURE 1



Source: GAA Architects

SITE PLAN

FIGURE 2

Chapter 2

Traffic Impact Analysis Methodology

This chapter describes the traffic scenarios analyzed, the methodologies used for assessing intersection and street segment operating conditions, and the significant traffic impact criteria for the jurisdictions overseeing the analysis.

STUDY SCOPE AND METHODOLOGY

This traffic study follows the City of Irwindale's *Policy Guidelines for Traffic Impact Reports* (August 2004) ["City Policy Guidelines"], which establishes the methodology for determining the appropriate traffic analysis for a project, analysis methodologies, significance thresholds, etc. The scope of analysis for this study was developed in consultation with City staff as well as the City Policy Guidelines. The base assumptions and technical methodologies (i.e., trip generation, study locations, analysis methodology, etc.) were identified through discussions with the City Traffic Engineer and using the City Policy Guidelines.

Additionally, three of the study intersections have shared jurisdiction with the City of Baldwin Park and are analyzed with the City of Baldwin Park's methodologies and significance thresholds.

The traffic impact study evaluates the potential for impacts caused by the Project on the street system surrounding the Project Site. Consistent with the City Policy Guidelines, the following analysis conditions are analyzed for the Project:

- <u>Existing Conditions (2013)</u> – The analysis of existing traffic conditions provides a basis for the assessment of Existing Plus Project and Future traffic conditions. The Existing Conditions analysis includes a description of key area streets and highways, traffic volumes, and current operating conditions.

  Intersection turning movement counts for typical weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) peak periods were collected in early September 2013, with applicable conversion of passenger vehicle traffic with the influence of large

trucks in the corridor. Field work (lane configurations, signal phasing, parking restrictions, etc.) for the study intersections was collected in August 2013.

- Existing Plus Project Conditions (2013) – The California Environmental Quality Act (CEQA) requires an evaluation of project traffic impacts on the existing environment as part of traffic impact analyses. This analysis evaluates the potential Project-related traffic impacts as compared to existing conditions.

- Future without Project Conditions (2016) – This analysis projects the future traffic growth and intersection operating conditions that could be expected as a result of regional growth and related projects in the vicinity of the Project Site by year 2016. The Future without Project traffic conditions are projected by adding ambient traffic growth and traffic from related projects to existing conditions. This analysis provides the baseline conditions by which Project impacts are evaluated at full buildout.

- Future Plus Project Conditions (2016) – This analysis identifies the potential incremental impacts of the Project at full buildout, prior to mitigation, on projected future traffic operating conditions by adding the net Project-generated traffic to the Future without Project (2016) traffic forecasts.

INTERSECTION LEVEL OF SERVICE METHODOLOGY

As required by the City Policy Guidelines, the study intersections were evaluated using the *2010 Highway Capacity Manual (*Transportation Research Board, 2010) (HCM) methodology, which determines the average delay, in seconds, for each vehicle passing through the intersection. The overall intersection delay is subsequently assigned a level of service (LOS) value to describe intersection operations. LOS is a qualitative measure used to describe the traffic flow conditions. Table 1 presents a description of the LOS categories, which range from excellent, nearly free-flow traffic at LOS A to stop-and-go conditions at LOS F.

A total of five of the six study intersections are currently controlled by traffic signals. The remaining intersection is unsignalized. The Synchro software was used to calculate the HCM methodology at the study intersections.

For the intersections with shared jurisdiction with the City of Baldwin Park, supplemental analysis was conducted using the Intersection Capacity Utilization (ICU) methodology.

IMPACT CRITERIA AND SIGNIFICANCE THRESHOLDS

The significance of the potential impacts of Project-generated traffic at each study intersection was identified using criteria identified in the City Policy Guidelines, which considers LOS D to be the minimum acceptable LOS for a signalized intersection. The City implements a "sliding scale" type methodology for calculating the level of impact due to traffic generated by a proposed project, a significant transportation impact is determined based on the criteria presented below:

Intersection Type	Existing or Future Baseline Intersection LOS Conditions	Considered Significant With Project Conditions
Signalized Intersection	Mid-range LOS D or better	E or F
	Mid-range LOS E or better	LOS F
	LOS F	Project adds 50 or more trips
Unsignalized Intersection	Minor stop-controlled approach operates at LOS F and total control delay is less than[a] 4.0 vehicle-hours for single lane approach or 5.0 vehicle land hours for a multi-lane approach	Project trips increase total control delay to more than 4.0 vehicle-hours for single lane approach or 5.0 vehicle land hours for a multi-lane approach
	Minor stop-controlled approach operates at LOS F and total control delay exceeds 4.0 vehicle-hours for single lane approach or 5.0 vehicle land hours for a multi-lane approach	Project adds 50 or more trips

The relative impact of the added traffic volumes to be generated by the Project was evaluated based on analysis of operating conditions at the study intersections, with and without the Project.

The City of Baldwin Park defines significant impacts for intersections operating at LOS F where the Project increases the pre-Project ICU value by more than 0.02.

Congestion Management Program Analysis

The Congestion Management Program (CMP) is a State-mandated program that serves as the monitoring and analytical basis for transportation funding decisions in the County made through the Regional Transportation Improvement Program (RTIP) and State Transportation Improvement Program (STIP) processes.

The CMP requires that a Traffic Impact Analysis (TIA) be performed for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the morning or afternoon weekday peak hours and all mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the morning or afternoon weekday peak hours.

The operating conditions analysis at all CMP arterial and freeway monitoring stations that may be impacted by the Project was performed, as detailed in Chapter 9, in accordance with the TIA guidelines referenced in the *2010 Congestion Management Program for Los Angeles County* (Los Angeles County Metropolitan Transportation Authority, 2010).

TABLE 1
HCM LEVELS OF SERVICE DEFINITIONS

Level of Service (LOS)	Signalized Intersection Average Delay per Vehicle (sec)	Stop-Controlled Intersection Average Delay per Vehicle (sec)
A	0 - 10	0 - 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

Source: *Highway Capacity Manual* (Transportation Research Board, 2010)

Chapter 3
Existing Conditions

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the Project Study Area, as described below. The existing conditions analysis relevant to this study includes an assessment of the existing street system, an analysis of traffic volumes and current operating conditions, and an analysis of the existing public transit service.

STUDY AREA

This Study Area was established in consultation with the City's Traffic Engineer and the City Policy Guidelines. Generally, the Project Study Area includes intersections were the Project traffic is anticipated to add 50 directional peak hour trips, which is a threshold wherein traffic impacts could be experienced.

A traffic analysis Study Area comprises those locations with the greatest potential to experience significant traffic impacts due to a project, as defined by the lead agency. In the traffic engineering practice, a Study Area generally includes those intersections that are:

1. Immediately adjacent or in close proximity to the Project Site;
2. In the vicinity of the Project Site that are documented to have current or projected future adverse operational issues;
3. In the vicinity of the Project Site that are forecast to experience a relatively greater percentage of Project-related vehicular turning movements.

The Project Study Area was designed to ensure that all potentially significantly impacted intersections, prior to any mitigation, were analyzed.

A total of five signalized intersections and one unsignalized intersection in the Study Area were identified for analysis as part of this Transportation Study. Figure 1 illustrates the location of the Site in relation to the surrounding street system and the six study intersections.

The six intersections selected for evaluation, along with the traffic control and jurisdiction, are:

1. Maine Avenue & Arrow Highway (signalized - Irwindale/Baldwin Park)
2. Azusa Canyon Road & Arrow Highway (signalized – Irwindale/Baldwin Park)
3. Azusa Canyon Road & Olive Street (signalized – Irwindale/Baldwin Park)
4. Azusa Canyon Road & Cypress Street (signalized – Irwindale)
5. Azusa Canyon Road & Los Angeles Street (unsignalized - Irwindale)
6. Irwindale Avenue & Arrow Highway (signalized – Irwindale)

EXISTING STREET SYSTEM

The existing street system in the Study Area consists of a regional roadway system including principal and secondary arterials and collector and local streets. The secondary arterials, collectors, and selected local streets in the Study Area offer sub-regional and local access and circulation opportunities. These transportation facilities generally provide two to four travel lanes and usually allow parking on either side of the street. Typically, the speed limits range between 25 and 40 miles per hour (mph) on the principal and secondary arterials, collector, and local streets.

Roadway Descriptions

Primary regional access to the Project Site is provided by the San Gabriel River Freeway (I-605), which runs in the north-south direction west of the Site; the San Bernardino Freeway (I-10), which runs in the east-west direction south of the Site; and the Foothill Freeway (I-210), which runs in the east-west direction north of the Site. I-605 is located approximately 2.5 miles to the west of the Site, with access available via interchanges at Live Oak Avenue and Los Angeles Street. I-10 is located approximately two miles south of the Site, with access available via an interchange at Irwindale Avenue/Sunset Avenue. I-210 is approximately two miles north of the Project with

primary access provided at South Irwindale Avenue. The major arterials providing regional and sub-regional access to the Project vicinity include Arrow Highway, Maine Avenue, Azusa Canyon Road, Cypress Street, Los Angeles Street, and Irwindale Avenue.

The following is a brief description of the major streets in the Study Area:

- Maine Avenue – Maine Avenue is a designated Collector Street that runs in the north-south direction and is located west of the Project Site. It provides four travel lanes, two in each direction, and left-turn lanes at major intersections. It provides sub-regional and local access to the Project Site. Parking is available during off-peak periods within the Study Area. The posted speed limit is 35 mph.

- Azusa Canyon Road – Azusa Canyon Road is a designated Secondary Highway that runs in the north-south direction adjacent to the Project site. It provides four travel lanes, two in each direction, and left-turn lanes at major intersections. It provides regional and local access to the Project site. Parking is generally available on both sides of the street within the Study Area. The posted speed limit is 40 mph.

- Irwindale Avenue – Irwindale Avenue is a designated Secondary Highway that runs in the north-south direction and is located east of the Project site. It provides four travel lanes, two in each direction, and left-turn lanes at major intersections. It provides regional and local access to the Project site. Parking is not permitted within the Study Area. The posted speed limit is 35 mph.

- Olive Street – Olive Street is a designated Collector Street that runs in the east-west direction and is located south of the Project site. It provides two travel lanes, one in each direction, with left-turn lanes at major intersections. It provides local access to the Project site. Parking is generally available on the north side of the street within the Study Area. The posted speed limit is 35 mph.

- Cypress Street – Cypress Street is a designated Secondary Highway that runs in the east-west direction and is located south of the Project site. It provides four travel lanes, one in each direction, and left-turn lanes at major intersections. It provides sub-regional and local access to the Project site. Parking is generally not permitted within the Study Area. The posted speed limit is 35 mph.

- Los Angeles Street – Los Angeles Street is a designated Secondary Highway that runs in the east-west direction and is located south of the Project site. It provides two travel lanes, one in each direction, with left-turn lanes at major intersections. It provides sub-regional and local access to the Project site. Parking is generally available on both sides of the street within the Study Area. The posted speed limit is 45 mph.

The existing lane configurations at the study intersections are provided in Figure 3.

EXISTING TRANSIT SYSTEM

The Project area is served by Foothill Transit, which provides bus transit service in the Project vicinity along the following streets:

- Arrow Highway
- Irwindale Avenue

Figure 4 illustrates the existing transit service in the Study Area. Table 2 summarizes the various transit lines operating in the Study Area for each of the service providers in the region, the type of service (peak vs. off-peak, express vs. local), and frequency of service. The following provides a brief description of the bus lines providing service in Project vicinity:

- Foothill Transit Line 185 – Line 185 is a local line that travels in the north-south direction on Irwindale Avenue in the vicinity of the Project Site with average headways of 30 minutes during the morning and afternoon peak hours. This line travels from Azusa to Hacienda Heights via Irwindale Avenue and provides service to West Covina, La Puente, and City of Industry.

- Foothill Transit Line 272 – Line 272 is a local line that travels in the east-west direction on Arrow Highway in the vicinity of the Project Site with average headways of 40 minutes during the morning peak hours and 50 minutes during the afternoon peak hours. This line travels from Duarte to West Covina and provides service to Irwindale and Baldwin Park.

- Foothill Transit Line 492 – Line 492 is a local line that travels in the east-west direction on Arrow Highway in the vicinity of the Project Site with average headways of 30 minutes during the morning and afternoon peak hours. This line travels from Montclair to El Monte via Arrow Highway and provides service to La Verne, Covina, and Arcadia.

Truck Routes

The City of Irwindale has established truck routes for vehicles exceeding a gross vehicular weight of 6,000 pounds (three tons) on the following streets in the Study Area:

- Arrow Highway
- Azusa Canyon Road
- Irwindale Avenue

Coordinated Traffic Signal System

In 1988, the County of Los Angeles began implementation of the Traffic Signal Synchronization Program (TSSP), a system through which the County estimates a reduction in travel time of up to 29% along certain roadway corridors. Implementation of the first phase was completed in 1995, while implementation of the second phase is on-going. According to the TSSP website, the program has already been implemented along more than 100 corridors in Los Angeles County, including the Live Oak/Arrow Highway corridor from Santa Anita Avenue to San Dimas Avenue (which covers the entirety of that corridor in the Study Area), and along Irwindale Avenue between I-210 and Gladstone Avenue in the vicinity of the Study Area.

The signal coordination program includes all of the signalized study intersections along Live Oak Avenue from the western intersection with Arrow Highway, and along Arrow Highway to Vincent Avenue (east of Irwindale Avenue). The benefits of the system are increased traffic flow and decreased control delay from the coordination of traffic signal timings. The traffic signal timings are used in the LOS calculations; therefore, the benefits of this system are reflected in the LOS calculations. Information about the TSSP is available at http://ladpw.org/traffic/TSSP.cfm.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

This section presents the existing peak hour turning movement traffic volumes for the intersections analyzed in the study, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each intersection indicating volume-to-capacity (V/C) ratios and LOS.

Existing Traffic Volumes

Intersection turning movement counts during the typical weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) commuter peak periods were conducted at the six study intersections on September 17, 2013, when local schools were in session. Due to the relatively high level of truck traffic in the area, truck axle classification factors were applied to the base

existing traffic counts to account for the influence of heavy trucks, which occupy more space than a standard passenger vehicle and also take longer to accelerate/decelerate. This adjustment factor converts trucks traffic into equivalent sized passenger cars. This is done using passenger car equivalent (PCE) factors.

Neither the City Policy Guidelines, which is the official document specifying study approach and methodology for traffic impact studies in Irwindale, nor the CMP dictate specific PCE factors. Therefore, numerous sources were consulted, including the HCM and *Congestion Management Program for San Bernardino County* (San Bernardino Associated Governments, 2007). Generally accepted values from those sources were applied to the traffic counts in this study as follows:

- Passenger vehicles – 1.0
- Two-axle trucks and buses – 1.5
- Three-axle trucks – 2.0
- Four or more axle trucks – 3.0

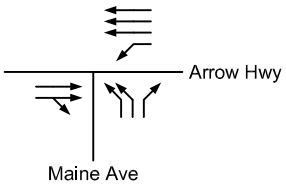
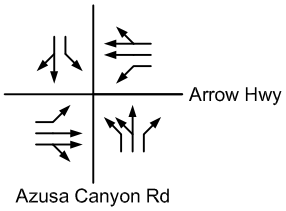
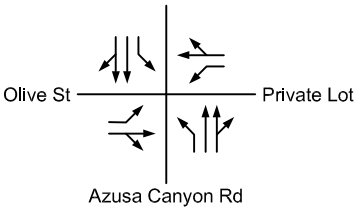
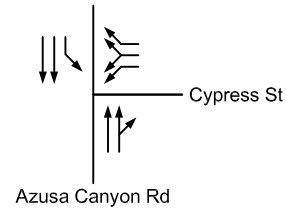
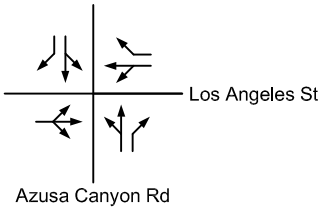
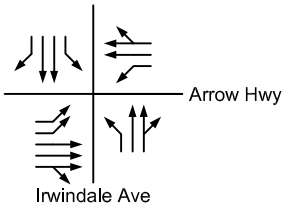
The base traffic volumes used in this analysis (i.e., traffic volume figures, LOS calculations, etc.) reflect these PCE adjustments. These traffic volumes, illustrated in Figure 5, represent the existing conditions for the purposes of this analysis with PCE applied. Summary data worksheets of the manual traffic counts and the development of the PCE adjusted traffic volumes at the study intersections are contained in Appendix A. The traffic volumes illustrated in Figure 5 were analyzed to determine the existing operating conditions at the study intersections.

Existing Intersection Levels of Service

Table 3 summarizes the existing weekday morning and afternoon peak hour delays and the corresponding LOS for each of the study intersections. As summarized in Table 3, deficiencies are reported at three of the six study intersections, which operate at LOS E or worse during one or more peak hours:

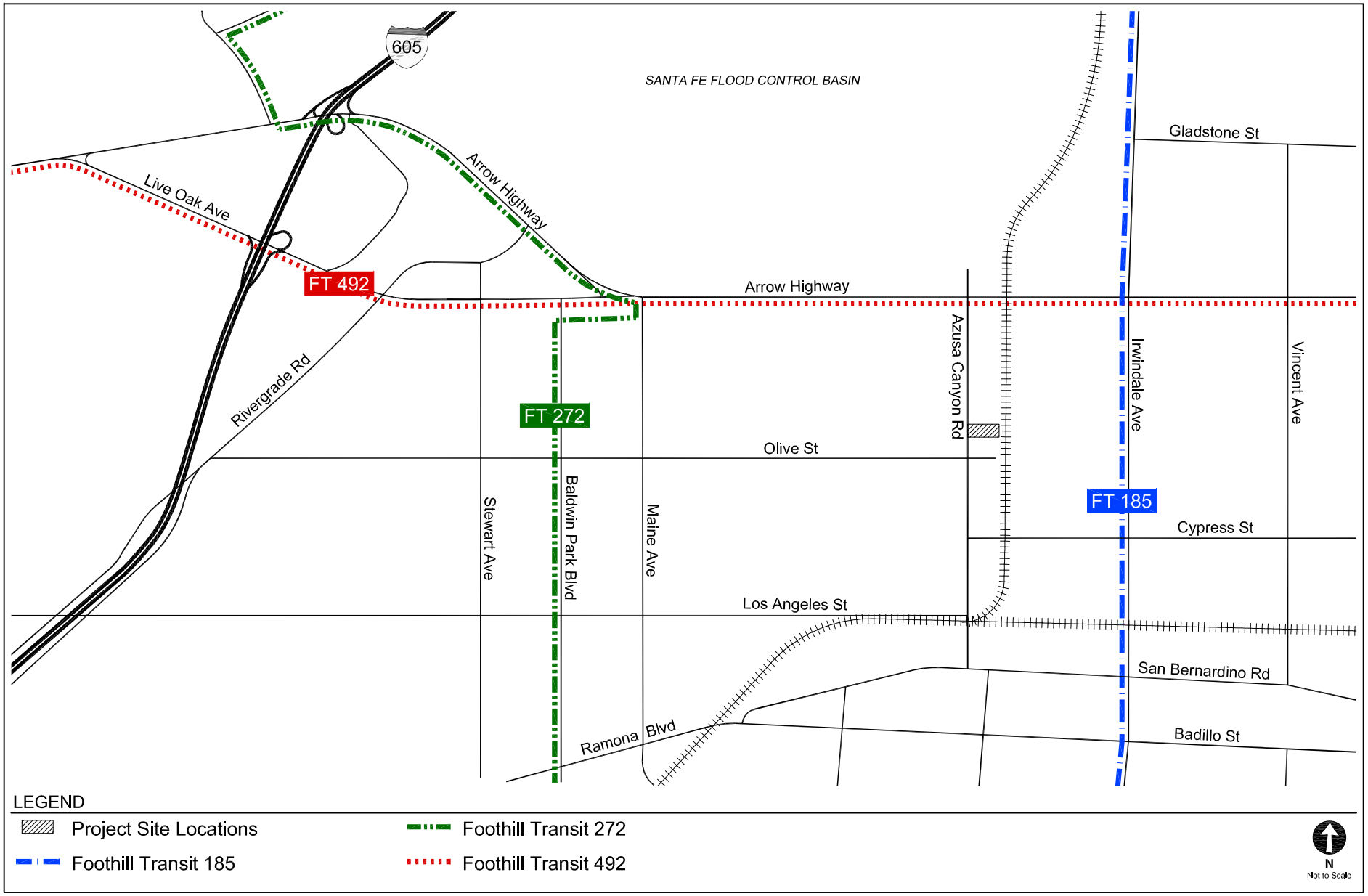
- Azusa Canyon Road & Arrow Highway
- Azusa Canyon Road & Los Angeles Street
- Irwindale Avenue & Arrow Highway

The LOS calculation worksheets are provided in Appendix B.

	EXISTING CONDITIONS (YEAR 2013)	FUTURE CONDITIONS (YEAR 2016)
1. Maine Avenue & Arrow Highway		Same as Existing Conditions
2. Azusa Canyon Road & Arrow Highway		Same as Existing Conditions
3. Azusa Canyon Road & Olive Street		Same as Existing Conditions
4. Azusa Canyon Road & Cypress Street		Same as Existing Conditions
5. Azusa Canyon Road & Los Angeles Street		Same as Existing Conditions
6. Irwindale Avenue & Arrow Highway		Same as Existing Conditions

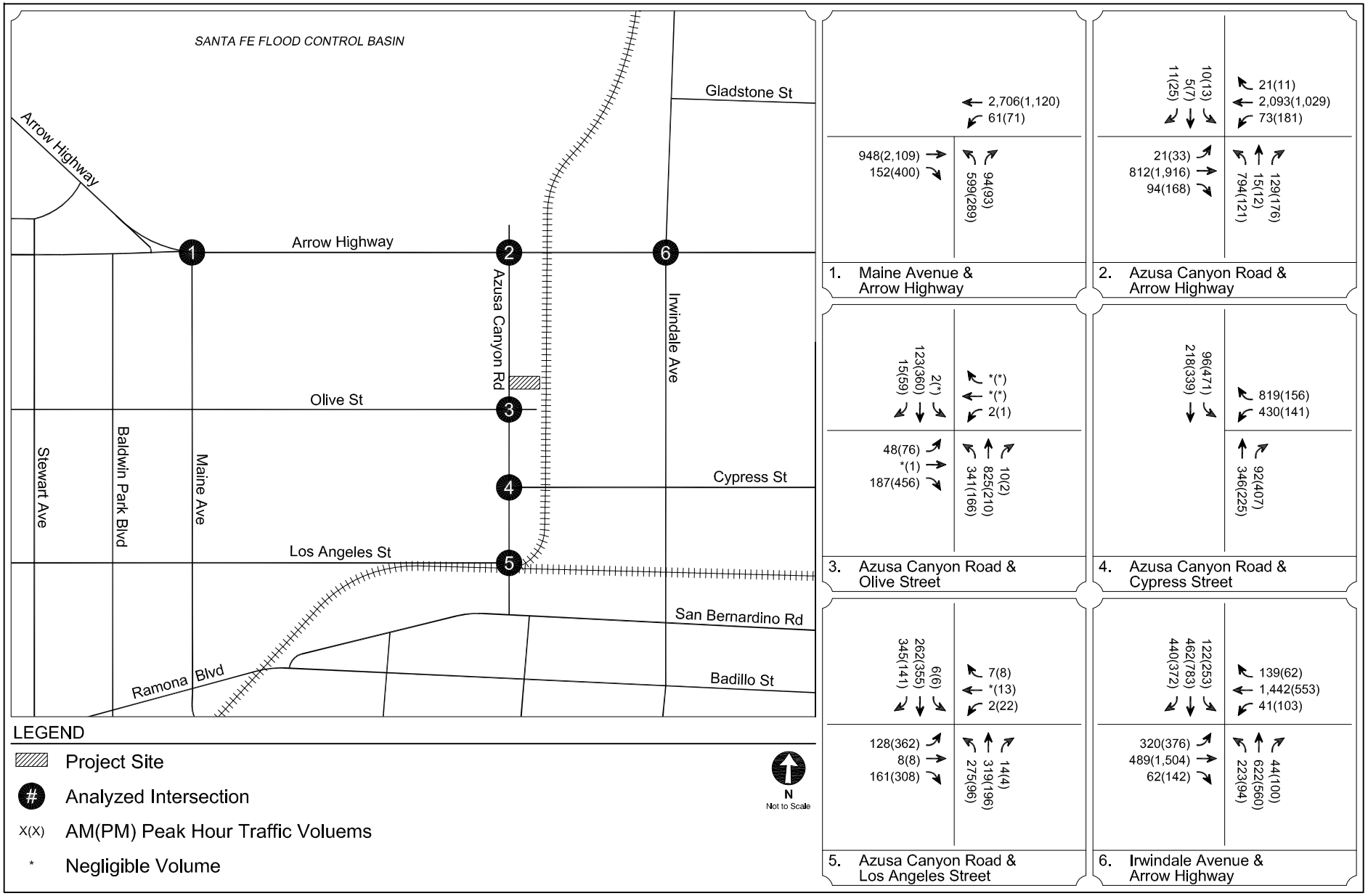
INTERSECTION LANE CONFIGURATIONS

FIGURE 3



EXISTING TRANSIT SERVICE

FIGURE 4



EXISTING CONDITIONS (YEAR 2013)
INTERSECTION PEAK HOUR TRAFFIC VOLUMES

FIGURE 5

TABLE 2
EXISTING TRANSIT SERVICE

Provider, Route, and Service Area		Service Type	Hours of Operation	Average Headway (minutes)			
				A.M. Peak Period		P.M. Peak Period	
Foothill Transit				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
185	Azusa - West Covina - Hacienda Heights via Irwindale	Local	5:00 A.M. - 10:00 P.M.	30	30	30	30
272	Duarte - Baldwin Park - West Covina	Local	5:30 A.M. - 7:30 P.M.	42	40	48	48
492	Montclair - Arcadia - El Monte via Arrow Highway	Local	5:00 A.M. - 10:00 P.M.	30	30	30	30

TABLE 3
EXISTING CONDITIONS (YEAR 2013)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No	Intersection	Peak Hour	Existing Condition	
			Delay	HCM LOS
1.	Maine Avenue &	AM	17.3	B
	Arrow Highway	PM	23.2	C
2.	Azusa Canyon Road &	AM	91.4	F
	Arrow Highway	PM	62.0	E
3.	Azusa Canyon Road &	AM	14.8	B
	Olive Street	PM	25.9	C
4.	Azusa Canyon Road &	AM	24.6	C
	Cypress Street	PM	16.3	B
5.	Azusa Canyon Road &	AM	37.6	E
[a]	Los Angeles Street	PM	45.0	E
6.	Irwindale Avenue &	AM	73.5	E
	Arrow Highway	PM	46.3	D

Notes
[a] = unsignalized intersection
Delay is measured in seconds
LOS = Level of service based on delay

Chapter 4

Future without Project Traffic Conditions

Estimates of future traffic conditions both with and without the Project were developed to evaluate the potential impacts of the Project on the local street system. This discussion details the assumptions used to develop the future 2016 conditions without the Project.

In order to develop the Future without Project (2016) traffic conditions, the existing traffic volumes were factored upward by a 1% per year ambient growth rate to approximate regional growth and development. In addition to this ambient growth, background and other related projects/cumulative development traffic must also be added to estimate the Future without Project (2016) traffic conditions.

CEQA GUIDELINES REGARDING FUTURE TRAFFIC CONDITIONS

The forecast of Future without Project conditions was prepared in accordance with procedures outlined in Section 15130 of *Guidelines for Implementation of the California Environmental Quality Act*, *Chapter 3, Title 14, California Code of Regulations* (California Natural Resources Agency, amended July 27, 2007). Specifically, *Guidelines* provides two options for developing the cumulative traffic volume forecast:

> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or
>
> (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency."

Accordingly, the traffic analysis provides a highly conservative estimate of Future without Project traffic volumes as it incorporates both the “A” and “B” options outlined in *Guidelines* for purposes of developing the forecast.

FUTURE WITHOUT PROJECT TRAFFIC VOLUMES

The existing plus ambient growth traffic volumes were combined with the related project volumes to form the Future without Project (2016) conditions. This scenario forms the basis of the evaluation of Project impacts in the Future plus Project (2016) conditions.

Ambient Traffic Growth

Existing traffic is expected to increase as a result of regional growth and development. Based on historical trends and the City Policy Guidelines, an ambient growth factor of 1% per year was used to adjust the existing traffic volumes to reflect the effects of regional growth and development by the year 2016.

Related Projects

In accordance with the CEQA requirements, this study considers the effects of the Project in relation to other developments either proposed, approved, or under construction in the Study Area. These development proposals (called related projects) are expected to be implemented in the vicinity of the Site prior to the buildout date of the Project. With this information, the potential impact of the Project can be evaluated within the context of the cumulative impact of all ongoing development. The list of related projects was obtained from information provided by the City Planning Department for Irwindale, and by the adjacent Cities of Azusa, Baldwin Park, West Covina, Glendora, Covina, and Duarte. The related projects are detailed in Table 4. The locations of these related projects are shown in Figure 6.

The development of estimated traffic volumes added to the Study Area as a result of related projects involves the use of a three-step process: trip generation, trip distribution, and traffic assignment.

Trip generation estimates for the related projects were calculated using a combination of previous study findings and the trip generation rates contained in *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012). These projections are conservative in that they do not in every case account for either the existing uses to be removed or the likely use of other travel modes (transit, walk, etc.)

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which the employees/residents and potential patrons of the proposed developments are drawn, and the location of these projects in relation to the surrounding street system. These factors are considered along with logical travel routes through the street system to develop a reasonable pattern of trip distribution.

The trip generation estimates for the related projects were assigned to the local street system using the trip distribution pattern described immediately above. These volumes were then added to the existing traffic volumes after adjustment for ambient growth through the projected buildout year of 2016. These volumes represent the Future without Project conditions (i.e., cumulative traffic volumes, ambient traffic growth, and related project traffic growth).

The resulting Future without Project study intersection peak hour traffic volumes are illustrated in Figure 7.

Planned Roadway Improvements

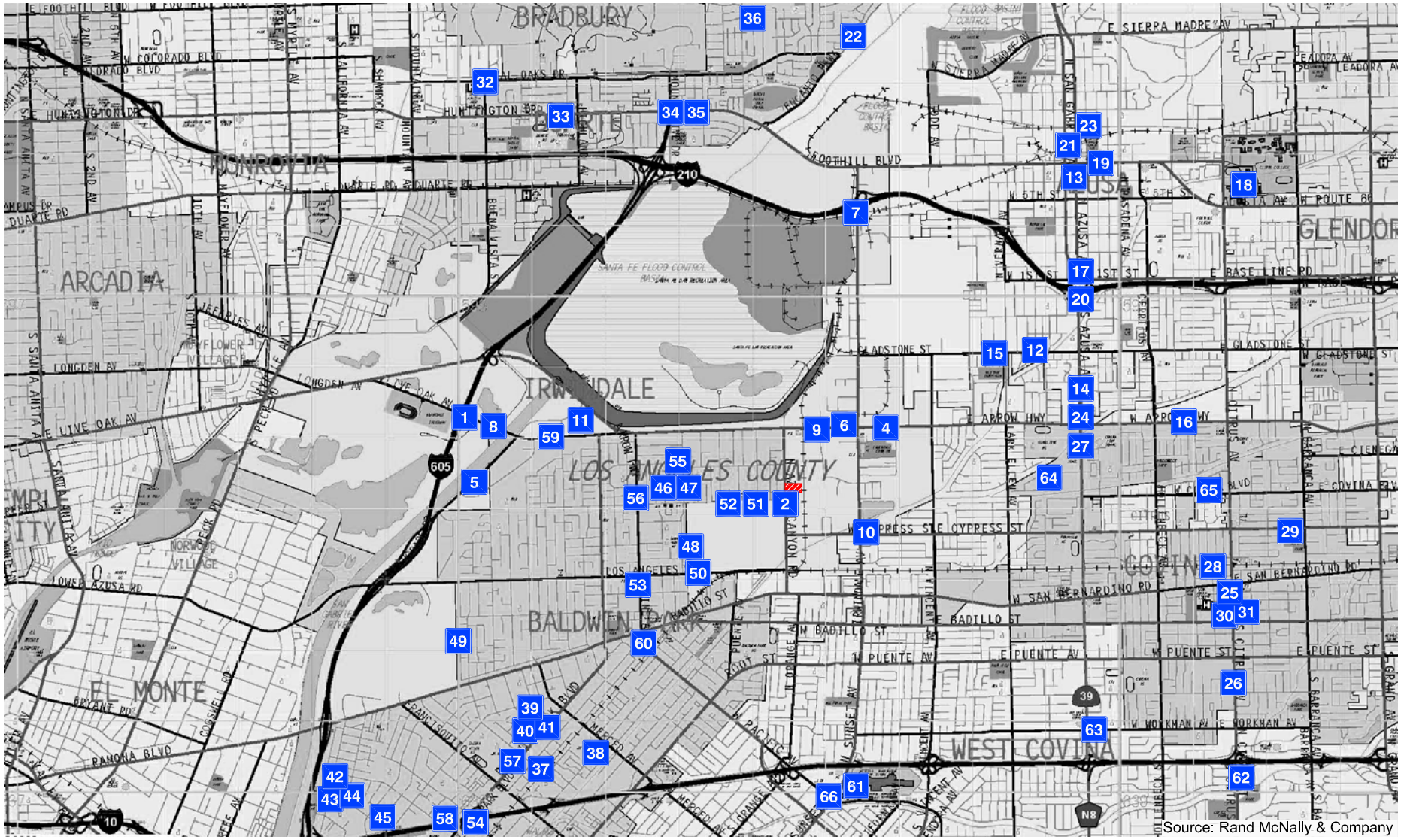
This traffic study did not identify any planned major roadway improvements in the Project vicinity that would be implemented prior to the Project's opening day (2016). As such, all analyses contained herein are performed on the existing circulation network with existing lane configurations and traffic controls.

Future without Project Intersection Levels of Service

Table 5 shows the results of the Future without Project analysis at the study intersections. As summarized in Table 5, deficiencies are reported at four of the six study intersections, which operate at LOS E or worse during one or more peak hours:

- Maine Avenue & Arrow Highway
- Azusa Canyon Road & Arrow Highway
- Azusa Canyon Road & Los Angeles Street
- Irwindale Avenue & Arrow Highway

The LOS calculation worksheets are provided in Appendix B.



LEGEND

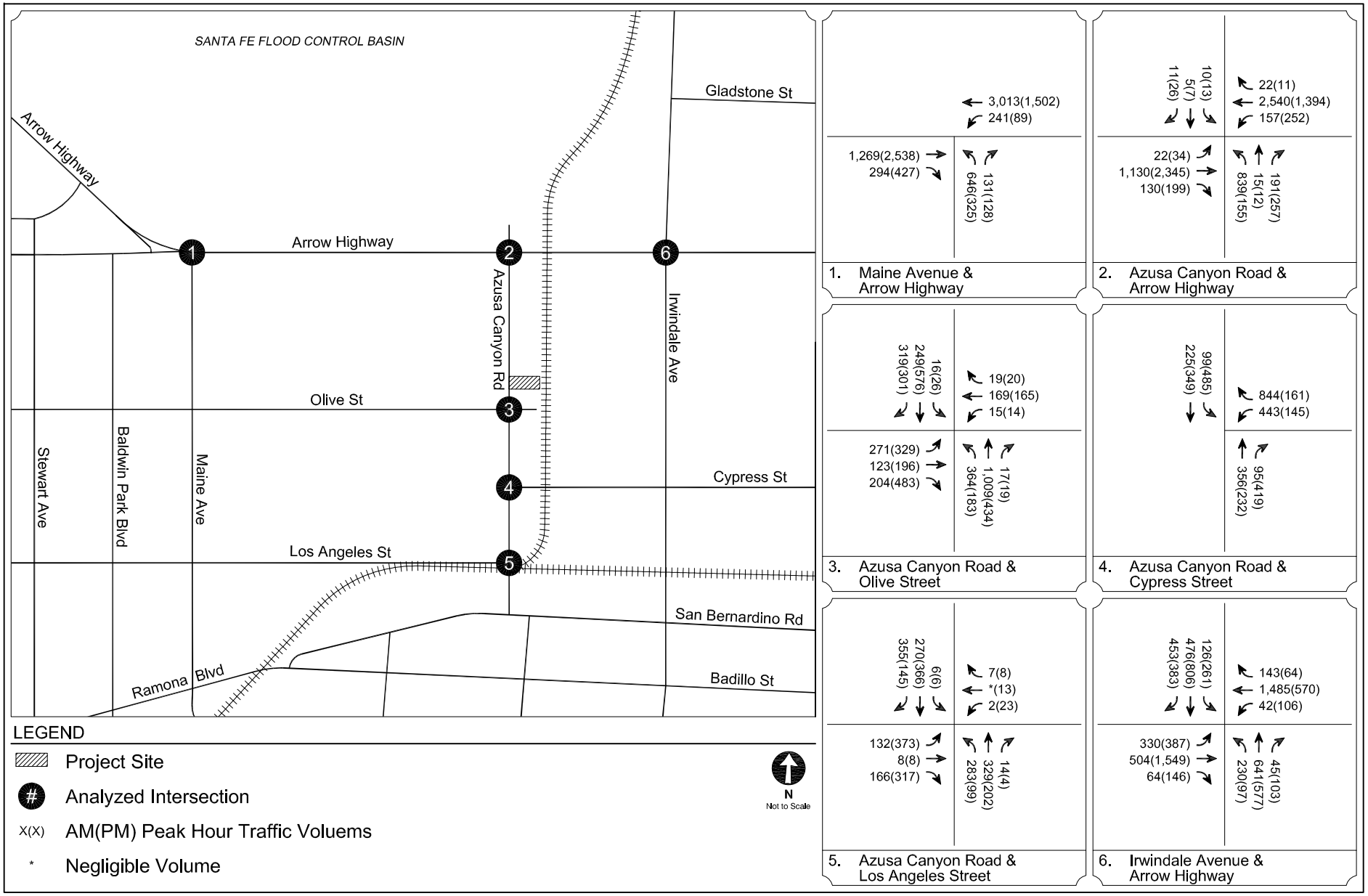
Project Site

X Related Project

N
Not to Scale

LOCATION OF RELATED PROJECTS

FIGURE 6



FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2016)
INTERSECTION PEAK HOUR TRAFFIC VOLUMES

FIGURE 7

TABLE 4

TRIP GENERATION ESTIMATES FOR RELATED PROJECTS

CITY OF IRWINDALE

Map ID	Project Name/Location	Description/Land Use	Size	Units [c]	Source	Net Daily Trips	Net A.M. Peak Hour Trips			Net P.M. Peak Hour Trips		
							In	Out	Total	In	Out	Total
1.	Kare Youth League/Santa Fe Dam Sports Park NE Corner of Arrow Highway & I-605	Youth sports park	17	Acres	City of Irwindale/Previous Traffic Study	710	15	13	28	40	40	80
2.	Huy Fong Foods	Warehouse	454,000	SF	City of Irwindale/Previous Traffic Study	775	154	90	244	105	127	232
		Food Manufacturing	150,000	SF								
	4800 Azuza Canyon Road	Administrative Office	22,184	SF								
3.	City Infill Housing Project Various Locations	Single Family Units	7	DU	City of Irwindale	-	-	-	-	-	-	-
4.	City Senior Housing Project 16140 Arrow Highway	Senior Housing	9	DU	City of Irwindale	33	2	4	7	1	0	2
5.	5200 Rivergrade Road Restaurant, Convienince Store, and Gas	Service Station with Convienience Store	18	Fueling Pumps	City of Irwindale/Previous Traffic Study	2,751	109	105	214	128	123	251
	Station	Fast Food Restaurant with Drive-Thru	2,800	SF		1,389	70	68	138	49	45	94
		15% Pass-by Credit	-	-		*(621)*	*(27)*	*(26)*	*(53)*	*(27)*	*(25)*	*(52)*
	5200 Rivergrade Road	Subtotal				3,519	152	147	299	150	143	293
6.	Drive-through Car Wash 15875 Arrow Highway	Car wash structure added to existing gas station with convienience store	12	Fueling Pumps	City of Irwindale	1,834	73	70	143	85	82	167
7.	Parking Structure 6000 Irwindale Avenue	Four level 480 space (249 net new spaces) parking garage to serve the Gateway Business Center	249	Parking Spaces	City of Irwindale	-	-	-	-	-	-	-
8.	Ahern Rentals 13645 Live Oak Lane	Replace 23,000 square foot building with 29,000 square foot building	6,000	SF	Previous study/ Waste Management MRF EIR	42	5	1	6	1	5	6
9.	Hotel 15744 Arrow Highway	New hotel	120	Rooms	Previous study/ Waste Management MRF EIR	980	41	26	67	37	34	71
10.	Mod 4-06 to CUP 67-6 16025 Cypress Street	Our Lady of Guadalupe Church Expansion	12,227	SF	Downtown Baldwin Park Area Redevelopment Project Traffic Study	111	4	3	7	3	4	7

CITY OF AZUSA

Map ID	Project Name/Location	Description/Land Use	Size	Units [c]	Source	Net Daily Trips	Net A.M. Peak Hour Trips			Net P.M. Peak Hour Trips		
							In	Out	Total	In	Out	Total
11.	Waste Management Materials Recycling Facility and Transfer Station 501 West Gladstone	125,000 sf processing building with offices to receive, process and transfer up to 3,800 tons per day of solid waste	3,800	Tons/Day	City of Irwindale/Waste Management MRF EIR	4,294	224	148	372	400	320	720
12	Downtown Azusa Project 1	Restaurant	3,900	SF	City of Azusa	496	23	22	45	26	18	43
		Office	1,035	SF		11	1	0	2	0	1	2
	619/621 North Azusa Avenue											
13.	Residential Project 710 South Azusa Avenue	Residential Condominiums	81	DU	City of Azusa	471	6	30	36	28	14	42
14	Gladstone Mixed Use	Residential Apartments	9	DU	City of Azusa	60	1	4	5	4	2	6
		Retail/Commercial	4,443	SF		191	3	2	4	10	6	17
	890 Gladstone Street											
15.	Residential Project 523-531 Arrow Highway	Residential Condominiums	28	DU	City of Azusa	163	2	10	12	10	5	15
16.	Monrovia Nursery Specific Plan	Single Family Residential	752	DU	City of Azusa	7,197	141	423	564	478	281	760
		Residential Condominiums	823	DU		4,782	62	301	362	287	141	428
		Elementary School	245	Students		316	61	50	110	18	19	37
		Middle School	175	Students		284	52	43	95	14	14	28
		Park	6	Acres		9	--	--	--	--	--	--
		Transit Commercial	50,000	SF		2,147	31	20	50	114	73	187
17.	Azusa Pacific University Specific Plan	East Campus	874	Students	City of Azusa	2,080	147	37	184	55	128	184
		West Campus	2,550	Students		6,069	428	107	536	161	375	536
	Azusa Pacific University - East & West Campuses											
18.	Mixed Use Project	Residential	73	DU	City of Azusa	485	7	30	37	29	16	45
		Retail	8,000	SF		344	5	3	8	18	12	30
	NE Corner of Dalton Avenue & Foothill Boulevard											
19.	Block 36	Residential Apartments	110	DU	City of Azusa	732	11	45	56	44	24	68
		Office	29,200	SF		321	40	5	45	7	36	44
		Retail/Commercial	30,000	SF		1,288	18	12	30	68	44	112
	SE Corner of Azusa Avenue & Foothill Boulevard	Restaurant	7,500	SF		954	45	41	86	49	34	84
20.	Target Project 809 N Azusa Avenue	Retail	150,000	SF	City of Azusa	6,441	92	59	150	341	218	560
21.	Azusa Rock Revised Conditional Use Permit and Reclamation Plan [a] Northerly terminus of Encanto Parkway & Fish Canyon Road	Mineral Resource - Mining	Revised Conditional Use Permit and Reclamation Plan; Modify operations and reclamation approach		City of Azusa	--	56	56	112	19	19	37
22.	Residential Project 9th Street & Alameda Avenue	Residential Townhomes	14	DU	City of Azusa	81	1	5	6	5	2	7
23.	Commercial Retail Project 880 S Azusa Avenue	Commercial	47,000	SF	City of Azusa	2,018	29	18	47	107	68	175

TABLE 4 (continued)
TRIP GENERATION ESTIMATES FOR RELATED PROJECTS

CITY OF BALDWIN PARK												
Map ID	Project Name/Location	Description/Land Use	Size	Units [c]	Source	Net Daily Trips	Net A.M. Peak Hour Trips			Net P.M. Peak Hour Trips		
							In	Out	Total	In	Out	Total
36.	Residential 13655 Foster Avenue	Medium-Density Residential	10	DU	City of Baldwin Park	67	1	4	5	4	2	6
37.	Residential 3346 Vineland Avenue	Medium-Density Residential	15	DU	City of Baldwin Park	100	2	6	8	6	3	9
38.	Residential 13732 Monterey Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
39.	Residential 13734 Monterey Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
40.	Residential 13736 Monterey Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
41.	Residential 12723 Bess Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
42.	Residential 12725 Bess Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
43.	Residential 12727 Bess Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
44.	Residential 3138 Magum Street	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
45.	Residential 4859 Marion Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
46.	Residential 4861 Marion Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
47.	Residential 4503 Park Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
48.	Residential 4143 Hornbrook Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
49.	Residential 4455 Park Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
50.	Residential 4819 Lante Street	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
51.	Residential 4820-28 Fortin Avenue	Single Family Residential	1	DU	City of Baldwin Park	10	0	1	1	1	0	1
52.	Commercial Development 4341 Maine Avenue	Commercial	4,500	SF	City of Baldwin Park	193	3	2	5	10	7	17
53.	Restaurant 14622 Dalewood Street	Restaurant	15,295	SF	City of Baldwin Park	1,945	92	85	176	101	70	171
54.	Warehouse 5029 Bleecker Street	Warehouse	8,748	SF	City of Baldwin Park	31	2	1	**3**	1	2	2
55.	Office 4814 Maine Avenue	Office	6,300	SF	City of Baldwin Park	69	9	1	10	0	2	2
56.	Office 3323 Baldwin Park Boulevard	Office	4,950	SF	City of Baldwin Park	54	7	1	8	1	6	7
57.	Office and Warehouse 13329 Garvey Avenue	Office / Warehouse	13,620	SF	City of Baldwin Park	150	19	3	21	3	17	20
58.	Fueling Facility for Truck Fleet [b] 13940 Live Oak Avenue	Fueling Station	- -		City of Baldwin Park	--	--	--	--	--	--	--
59.	Institutional Facility with Parking Structure 14403 Pacific Avenue	Institution	176,200	SF	City of Baldwin Park	12,145	870	166	1,036	66	147	213

TABLE 4 (continued)
TRIP GENERATION ESTIMATES FOR RELATED PROJECTS

CITY OF WEST COVINA

Map ID	Project Name/Location	Description/Land Use	Size	Units [c]	Source	Net Daily Trips	Net A.M. Peak Hour Trips			Net P.M. Peak Hour Trips		
							In	Out	Total	In	Out	Total
60.	Westfield Expansion 112 Plaza Drive	Shopping Center	32,000	SF	City of West Covina	1,418	20	12	32	73	47	119
61.	McIntyre Square Expansion 2612-1698 E Garvey Avenue	Restaurant	4,800	SF	City of West Covina	610	29	27	55	32	22	54
		Retail	4,800	SF		206	3	2	5	11	7	18
62.	West Covina Senior Villas 1838 E Workman Avenue	High-Density Residential	65	DU	City of West Covina	432	7	27	33	22	12	34
63.	Mixed-Use Project 1045-1052 West Grondahl Street	Residential	412	DU	City of West Covina	2,740	42	168	210	166	89	255
		Commercial	20,000	SF		859	12	8	20	46	29	75
64.	Medical Imaging Center 1700 West Covina Parkway	Medical Office	9,300	SF	City of West Covina	102	13	2	14	2	12	14
65.	Medical / Professional Office SE Corner of West Covina Parkway & W Garvey South	Office	55,000	SF	City of West Covina	606	75	10	85	14	68	82

CITY OF GLENDORA

Map ID	Project Name/Location	Description/Land Use	Size	Units [c]	Source	Net Daily Trips	Net A.M. Peak Hour Trips			Net P.M. Peak Hour Trips		
							In	Out	Total	In	Out	Total
66.	Diamond Ridge	Quality Restaurant	6,500	SF	City of Glendora	585	N/A	N/A	5	33	16	49
		Office	30,000	SF		330	41	6	47	8	37	45
67.	Cataract	Condominiums	17	DU	City of Glendora	99	1	6	7	6	3	9
68.	JPI Sevilla Project	Condomiums	161	DU	City of Glendora	935	12	59	71	56	28	84
		Office	12,000	SF		132	16	2	19	3	15	18
69.	Glendora Station	Residential	87	DU	City of Glendora	579	9	35	44	35	19	54
		Office	5,000	SF		55	7	1	8	1	6	7
70.	Tract 46680	Single Family Residential	14	DU	City of Glendora	134	3	8	11	9	5	14
71.	Tract 46916	Single Family Residential	16	DU	City of Glendora	153	3	9	12	10	6	16
72.	Tract 45858	Single Family Residential	13	DU	City of Glendora	124	2	7	10	8	5	13
73.	Glendora Marketplace	Retail	50,000	SF	City of Glendora	2,147	31	20	50	114	73	187
		Quality Restaurant	4,200	SF		378	N/A	N/A	3	21	10	31
74.	Wildwood Canyon	Single Family Residential	54	DU	City of Glendora	517	10	30	41	34	20	55
75.	Monrovia Nursery	Single Family Residential	54	DU	City of Glendora	517	10	30	41	34	20	55
76.	Grand-Foothill	Townhouses	18	DU	City of Glendora	105	6	30	36	29	14	43
		Condominiums	64	DU		372	2	12	14	12	6	17
77.	Grand Avenue Retail Center	General Commercial	14,000	SF	City of Glendora	601	9	5	14	32	20	52
		Quality Restaurant	4,200	SF		378	N/A	N/A	3	21	10	31
78.	WalMart Expansion	Retail/Grocery	20,000	SF	City of Glendora	1,145	14	7	21	50	50	100
79.	Route 66 Specific Plan	Office	750,000	SF	City of Glendora	8,258	1,023	140	1,163	190	928	1,118
		Commercial	750,000	SF		32,205	458	293	750	1,706	1,091	2,798
		Apartments	225	DU		1,496	23	92	115	91	49	140
TOTAL - ALL RELATED PROJECTS						**134,287**	**5,226**	**3,555**	**8,793**	**6,284**	**5,750**	**12,035**

Sources:
Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), 2012.
Notes:
[a] Materials processed through conveyor belts, trucks pick up material at Foothill & Irwindale; study intersections not impacted
[b] Assumed conversion of existing truck fleet fueling station; no net additional trips
[c] DU:Dwelling Unit; SF: Square Feet

TABLE 4 (continued)

TRIP GENERATION ESTIMATES FOR RELATED PROJECTS

CITY OF COVINA

Map ID	Project Name/Location	Description/Land Use	Size	Units [c]	Source	Net Daily Trips	Net A.M. Peak Hour Trips			Net P.M. Peak Hour Trips		
							In	Out	Total	In	Out	Total
24.	Taco Bell 301 N Citrus Avenue	Fast-Food Restaurant with Drive-Thru	3,445	SF	City of Covina	1,709	87	83	170	60	55	115
25.	Commercial Center	Fast-Food Restaurant with Drive-Thru	1,188	SF		589	30	29	59	21	19	40
	Jack in the Box and CVS Pharmacy 545 S Citrus Avenue	Pharmacy / Drug Store	10,658	SF	City of Covina	960	20	14	34	45	45	90
26.	Lowes Home Improvements 1348 N Azusa Avenue	Home Improvement Store	111,348	SF	City of Covina	3,318	80	60	140	127	137	264
27.	Condominiums 615 N 3rd Street	Condominiums	30	DU	City of Covina	174	2	11	13	10	5	16
28.	Single Family Home 436 E Cypress Street	Single Family Residential	1	DU	City of Covina	10	0	1	1	1	0	1
29.	Condominiums Citrus Avenue & Italia Street	Condominiums	37	DU	City of Covina	215	3	14	16	13	6	19
30.	Mixed Use Condominiums	Retail	4,366	SF		187	3	2	4	10	6	16
	Citrus Avenue & Italia Street	Residential Condominiums	4	DU	City of Covina	23	0	1	2	1	1	2

CITY OF DUARTE

Map ID	Project Name/Location	Description/Land Use	Size	Units [c]	Source	Net Daily Trips	Net A.M. Peak Hour Trips			Net P.M. Peak Hour Trips		
							In	Out	Total	In	Out	Total
31.	Rose Gardens at Santa Teresita 800 Buena Vista Street	Nursing Facility, Assisted Living	229,292	SF	City of Duarte	610	21	11	32	22	28	50
32.	Andres Duarte Terrace Phase II 1700 Huntington Drive	High-Density Residential	43	DU	City of Duarte	286	4	18	22	17	9	27
33.	Huntington Counts Phase III 2400 Huntington Drive	Medium-Density Residential	16	DU	City of Duarte	106	2	7	8	6	3	10
34.	Huntington Courts Phase II 2400 Huntington Drive	Residential (Single/Multi-Family)	14	DU	City of Duarte	93	1	6	7	6	3	9
35.	Attalla Ranch (Las Lomas Estates) NE Corner of Sunnydale & Woodbluff	Single Family Residential	15	DU	City of Duarte	144	3	8	11	10	6	15

TABLE 5
FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2016)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No	Intersection	Peak Hour	Future Conditions	
			Delay	LOS
1.	Maine Avenue &	AM	27.8	C
	Arrow Highway	PM	56.0	E
2.	Azusa Canyon Road &	AM	144.1	F
	Arrow Highway	PM	184.3	F
3.	Azusa Canyon Road &	AM	23.7	C
	Olive Street	PM	47.4	D
4.	Azusa Canyon Road &	AM	25.6	C
	Cypress Street	PM	14.7	B
5.	Azusa Canyon Road &	AM	38.4	E
[a]	Los Angeles Street	PM	46.4	E
6.	Irwindale Avenue &	AM	80.1	F
	Arrow Highway	PM	47.8	D

Notes
[a] = unsignalized intersection
Delay is measured in seconds
LOS = Level of service based on delay

Chapter 5
Project Traffic

A trip generation estimate, trip distribution pattern and trip assignment were prepared for the Project. These components form the basis of the Project's traffic impact analysis.

PROJECT TRAFFIC VOLUMES

The first step of the forecasting process is trip generation, which estimates the total arriving and departing traffic volumes generated by the Project on a peak hour and daily basis by applying the appropriate vehicle trip generation equations or rates to the size of the Project development.

The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound Project trips. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the Study Area. Localized routes of travel through the Study Area are developed based on existing traffic patterns and relative travel times on various corridors.

The third step of the forecasting process is traffic assignment. This involves applying the traffic generated by the Project (the trip generation) to the intersections and street segments in the Study Area according to the projected trip distribution patterns. These traffic volumes can then be added to existing or future background conditions to represent traffic volumes under existing or future background conditions once the Project is complete.

With the forecasting process complete and Project traffic assignments developed, the impact of the proposed Project is isolated by comparing operational (i.e., LOS) conditions at the study intersections using expected future traffic volumes without and with forecast Project traffic. The need for site-specific and/or cumulative local area traffic improvements may then be evaluated and the significance of the Project's impacts identified.

Project Trip Generation

The most recent trip generation rates from *Trip Generation, 9th Edition* for Land Use Code 110 (General Light Industrial) were utilized to develop the Project trip generation estimates.

As described, the Project proposes to construct 172,000 sf of light industrial uses. As part of the Project, the existing buildings, which include four residential units and 32,012 sf of general light industrial, will be removed. As such, the Project trip generation forecast accounts for the existing uses that will be removed and reflects the net new trips associated with the Project.

Additionally, since the Project is expected to utilize trucks in daily operations, an estimate of 33% of the traffic was converted to PCE (an average of 2.0) to account for the influence of heavy vehicles.

The Project trip generation potential is shown in Table 6. As shown in Table 6, with the PCE applied, the Project is anticipated to generate 1,333 net new trips per day, which includes 178 net new trips (159 inbound, 19 outbound) during the morning peak hour and 186 net new trips (20 inbound, 166 outbound) in the afternoon peak hour.

Project Trip Distribution

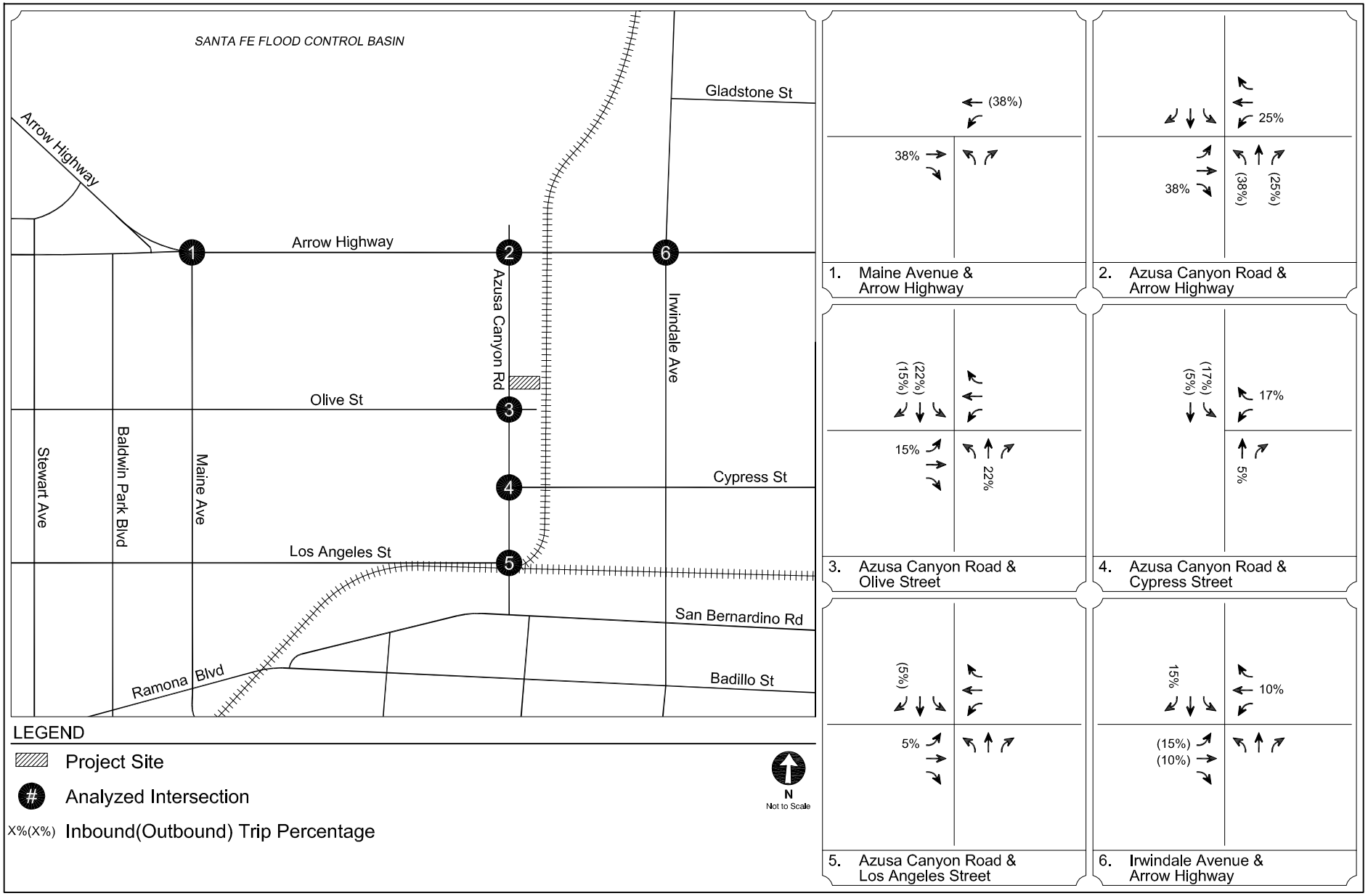
Project traffic volumes both entering and exiting the Project Site have been distributed and assigned to the local street system based on the location of nearby freeways, residential, entertainment and employment centers, and the characteristics of the street system serving the Project Site. The Project has a single driveway on Azusa Canyon Road.

Project Trip Assignment

Project traffic was assigned to the surrounding street system based the following distribution pattern: approximately 63% of the traffic was assigned north and 37% south at the Project driveway, with an influence of westerly and southerly destinations due to freeway access.

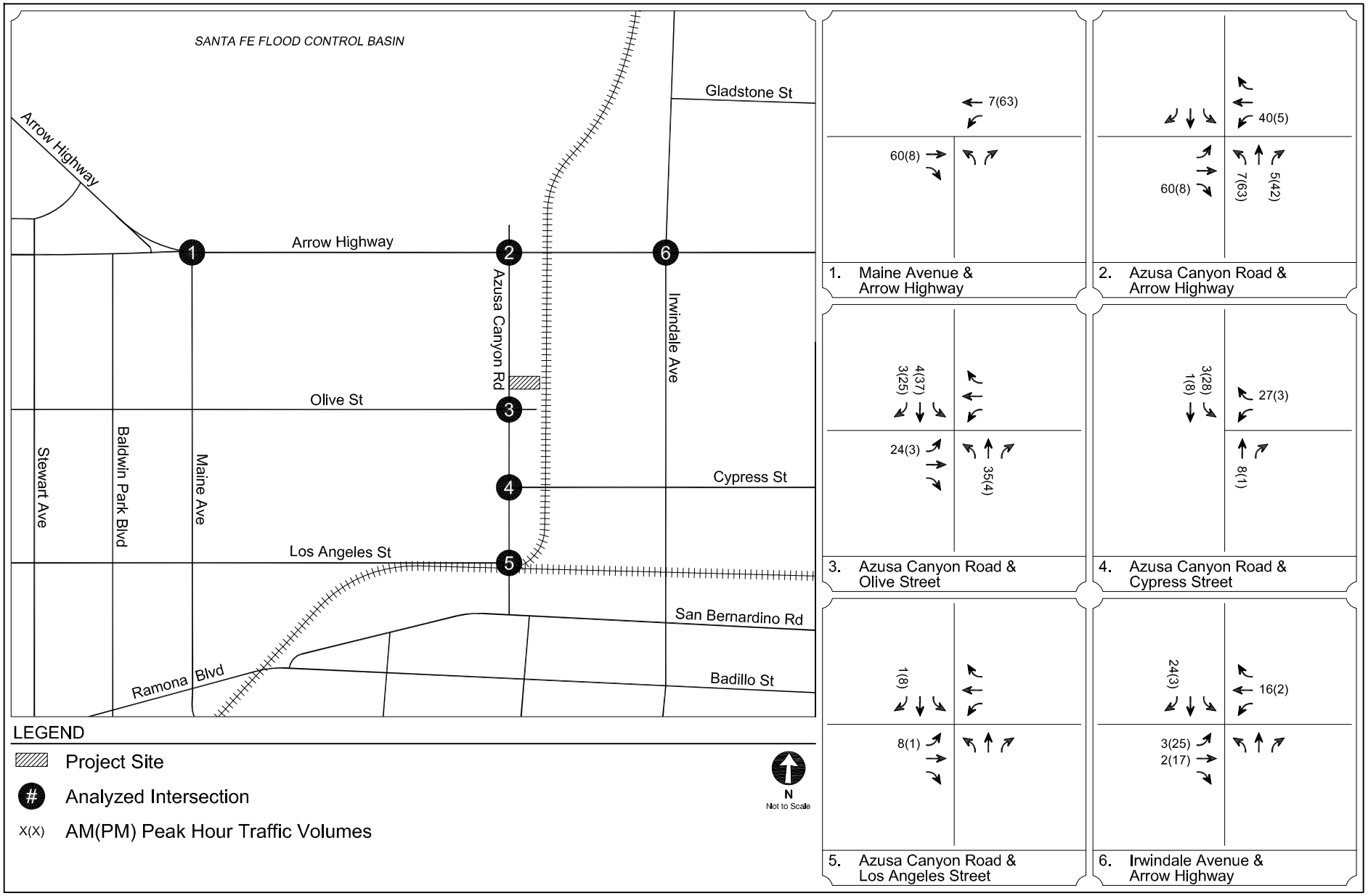
The distribution percentages of Project traffic through the Study Area is illustrated in Figure 8.

The Project-only traffic assignments are illustrated in Figure 9.



TRIP DISTRIBUTION

FIGURE 8



PROJECT-ONLY
INTERSECTION PEAK HOUR TRAFFIC VOLUMES

FIGURE 9

TABLE 6
PROJECT TRIP GENERATION

Land Use	Time Period	Rates	In	Out
General Light Industrial	ADT	6.97 /per 1000 sq ft		
(Code 110)	AM	0.92 /per 1000 sq ft	88%	12%
	PM	0.97 /per 1000 sq ft	12%	88%
Single Family Residential	ADT	9.52 /per dwelling unit		
(Code 210)	AM	0.75 /per dwelling unit	25%	75%
	PM	1.00 /per dwelling unit	63%	37%

Existing Industrial Project

Land Use	Size		ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
General Light Industrial	32,012	sf	223	26	4	30	4	28	32
Single Family Residential	4	du	38	1	2	3	3	1	4
Total Existing			261	27	6	33	7	29	36

Proposed Industrial Project

Land Use	Size		ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
General Light Industrial	172,000	sf	1,199	140	19	159	20	147	167
Truck Influence (33%) PCE 2.0			396	46	6	52	7	48	55
Total Proposed			1594	186	25	211	27	195	222

Net Increase Existing vs. Proposed Industrial Project

Total Net New Project Trips		**1333**	**159**	**19**	**178**	**20**	**166**	**186**

ADT=Average Daily Traffic, sf = square feet; number rounding may occur in spreadsheet background
Rates per ITE, 9th Edition; PCE = passenger car equivalency

Chapter 6

Existing Plus Project Conditions

This Chapter describes the results of the analysis measuring the impact of Project traffic on the existing environment.

TRAFFIC VOLUMES

The Project-only traffic volumes described in Chapter 5 and shown in Figure 9 were added to the Existing traffic volumes shown in Figure 5. The resulting Existing Plus Project traffic volumes are illustrated in Figure 10. These volumes are the result of the Project being constructed, to full buildout, in the Year 2013 without any ambient or related project traffic growth.

INTERSECTION OPERATIONS

Existing Plus Project Level of Service

Table 7 shows the results of the Existing Plus Project analysis at the study intersections. As summarized in Table 7, deficiencies are reported at three of the six study intersections, which operate at LOS E or worse during one or more peak hours:

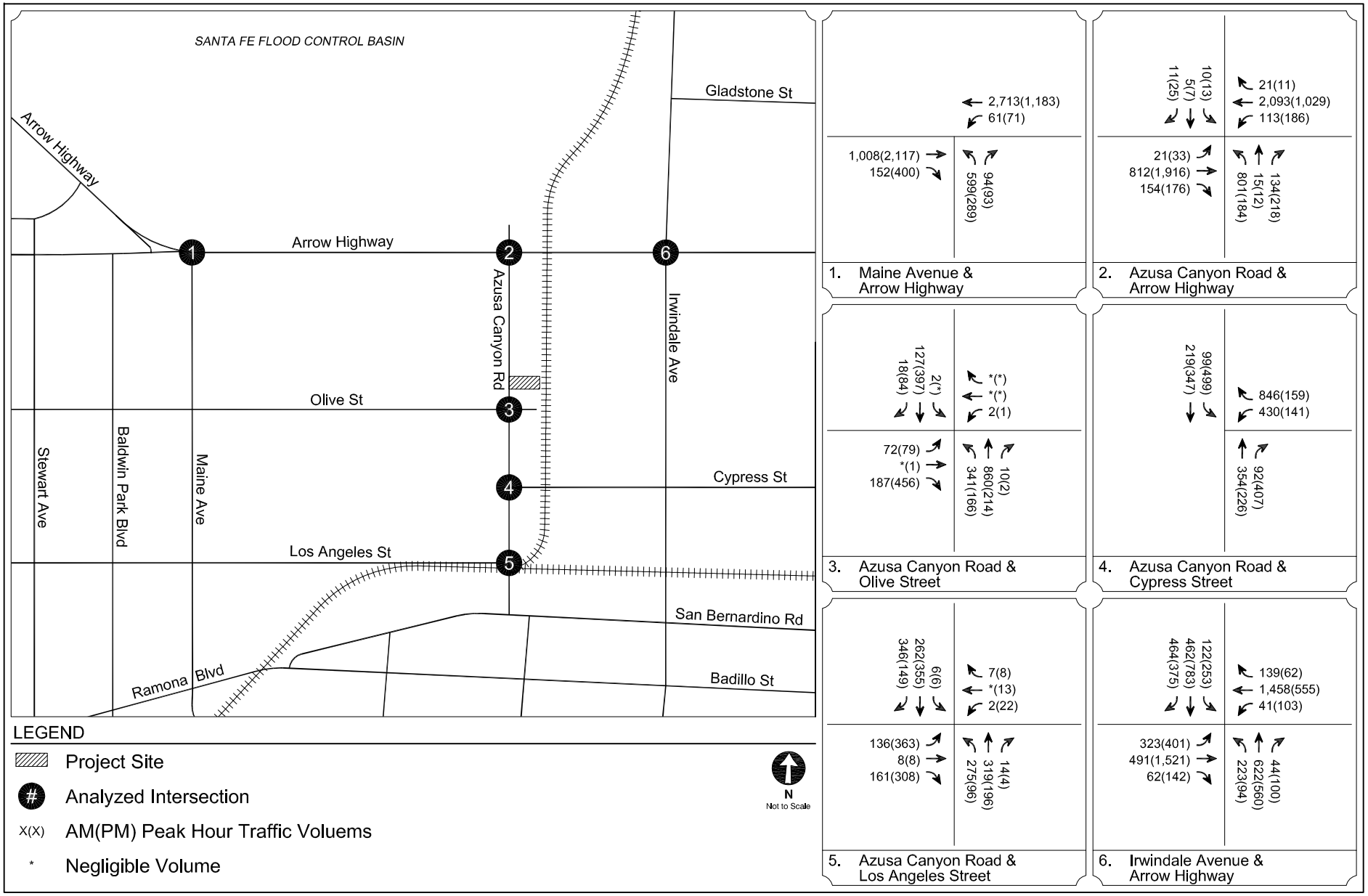
- Azusa Canyon Road & Arrow Highway
- Azusa Canyon Road & Los Angeles Street
- Irwindale Avenue & Arrow Highway

The LOS calculation worksheets are provided in Appendix B.

Additionally, the three intersections with shared jurisdiction with Baldwin Park were analyzed using Baldwin Park methodology. The analysis resulted in deficiencies at Maine Avenue &

Arrow Highway (LOS E in the afternoon peak hour) and Azusa Canyon Road & Arrow Highway (LOS F in the morning peak hour).

A summary and worksheets for the shared intersection analysis are provided in Appendix C.



EXISTING PLUS PROJECT CONDITIONS (YEAR 2013)
INTERSECTION PEAK HOUR TRAFFIC VOLUMES

FIGURE 10

TABLE 7
EXISTING PLUS PROJECT CONDITIONS (YEAR 2013)
INTERSECTION PEAK HOUR LEVELS OF SERVICE AND IMPACTS

No	Intersection	Peak Hour	Existing Condition		Existing Plus Project				
			Delay	LOS	Delay	LOS	Change in Delay	Project Trips	Impact
1.	Maine Avenue &	AM	17.3	B	17.4	B	0.1	67	NO
	Arrow Highway	PM	23.2	C	23.3	C	0.1	71	NO
2.	**Azusa Canyon Road &**	**AM**	**91.4**	**F**	**92.1**	**F**	**0.7**	**112**	**YES**
	Arrow Highway	PM	62.0	E	65.4	E	3.4	118	NO
3.	Azusa Canyon Road &	AM	14.8	B	14.8	B	0.0	66	NO
	Olive Street	PM	25.9	C	27.1	C	1.2	69	NO
4.	Azusa Canyon Road &	AM	24.6	C	24.6	C	0.0	39	NO
	Cypress Street	PM	16.3	B	16.7	B	0.4	40	NO
5.	Azusa Canyon Road &	AM	37.6	E	37.9	E	0.3	9	NO
[a]	Los Angeles Street	PM	45.0	E	45.0	E	0.0	9	NO
6.	Irwindale Avenue &	AM	73.5	E	77.1	E	3.6	45	NO
	Arrow Highway	PM	46.3	D	46.5	D	0.2	47	NO

Notes
[a] = unsignalized intersection
Delay is measured in seconds
LOS = Level of service based on delay

Chapter 7

Future Plus Project Conditions

This Chapter describes the results of the analysis measuring the impact of Project traffic on the future environment. The horizon year (2016) corresponds with the anticipated buildout year of the Project, and all future background traffic growth (i.e., ambient growth and related project traffic) is assumed in this analysis.

TRAFFIC VOLUMES

The Project-only traffic volumes described in Chapter 5 and shown in Figure 9 were added to the Future without Project traffic volumes shown in Figure 7. The resulting Future Plus Project peak hour traffic volumes are illustrated in Figure 11. These volumes are the sum of the existing traffic volumes, ambient growth, related project traffic, and Project-only traffic. They represent Future Plus Project conditions, i.e., future conditions after the development of the Project in the year 2016.

INTERSECTION OPERATIONS

Future Plus Project Level of Service

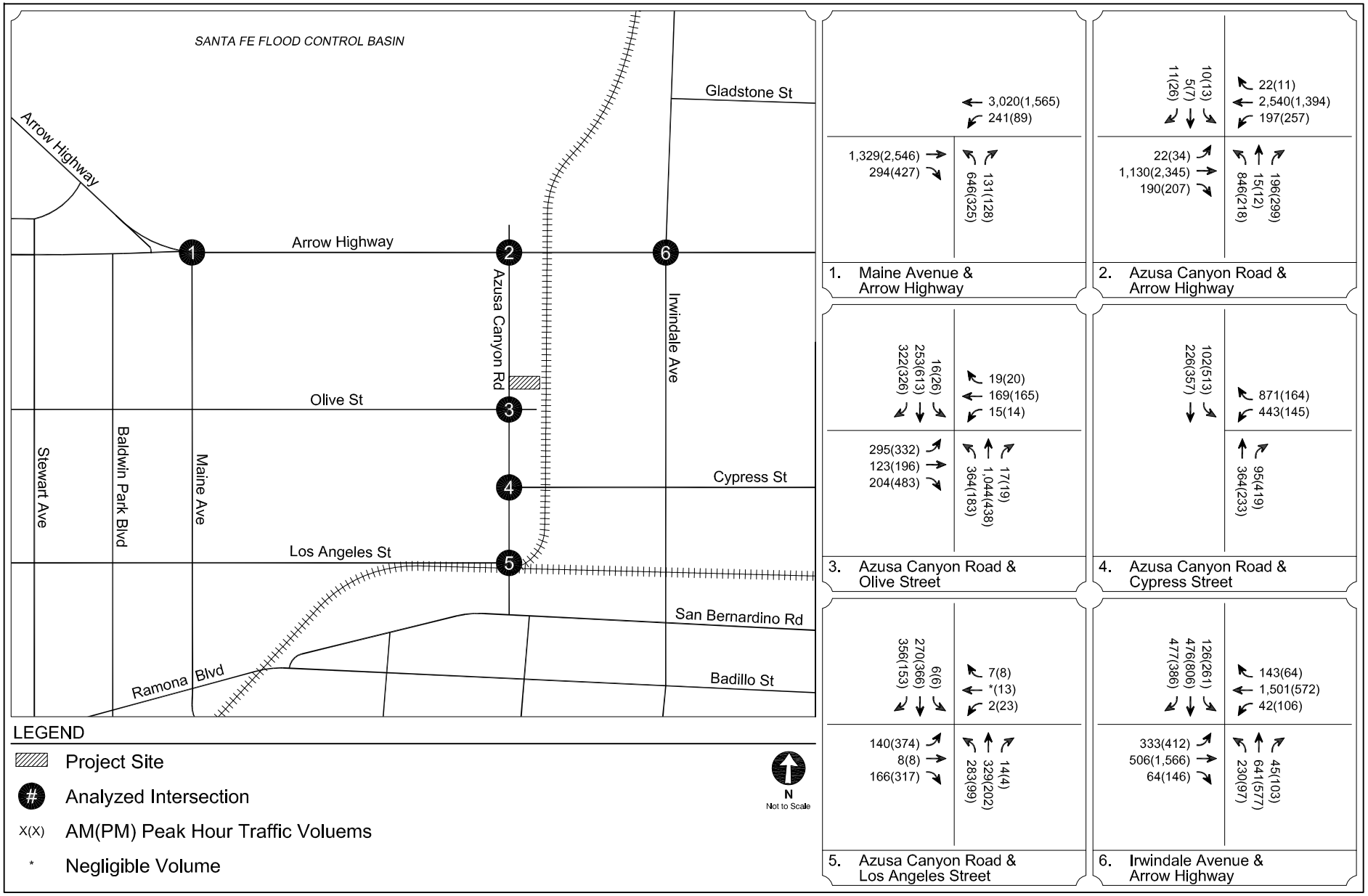
Table 8 shows the result of the Future Plus Project analysis at the study intersections. As summarized in Table 8, deficiencies are reported at four of the six study intersections, which operate at LOS E or worse during one or more peak hours:

- Main Avenue & Arrow Highway
- Azusa Canyon Road & Arrow Highway
- Azusa Canyon Road & Los Angeles Street
- Irwindale Avenue & Arrow Highway

The LOS calculation worksheets are provided in Appendix B.

The three intersections with shared jurisdiction with Baldwin Park were analyzed using Baldwin Park methodology. The analysis resulted in deficiencies at Maine Avenue & Arrow Highway (LOS F in the afternoon peak hour) and Azusa Canyon Road & Arrow Highway (LOS F in both peak hours).

A summary and worksheets for the shared intersection analysis are provided in Appendix C.



FUTURE PLUS PROJECT CONDITIONS (YEAR 2016)
INTERSECTION PEAK HOUR TRAFFIC VOLUMES

FIGURE 11

TABLE 8
FUTURE PLUS PROJECT CONDITIONS (YEAR 2016)
INTERSECTION PEAK HOUR LEVELS OF SERVICE AND IMPACTS

No	Intersection	Peak Hour	Future Condition		Future Plus Project				
			Delay	LOS	Delay	LOS	Change in Delay	Project Trips	Impact
1.	Maine Avenue &	AM	27.8	C	29.6	C	1.8	67	NO
	Arrow Highway	PM	56.0	E	56.0	E	0.0	71	NO
2.	**Azusa Canyon Road &**	**AM**	**144.1**	**F**	**144.1**	**F**	**0.0**	**112**	**YES**
	Arrow Highway	**PM**	**184.3**	**F**	**186.4**	**F**	**2.1**	**118**	**YES**
3.	Azusa Canyon Road &	AM	23.7	C	30.3	C	6.6	66	NO
	Olive Street	PM	47.4	D	50.4	D	3.0	69	NO
4.	Azusa Canyon Road &	AM	25.6	C	25.6	C	0.0	39	NO
	Cypress Street	PM	14.7	B	15.5	B	0.8	40	NO
5.	Azusa Canyon Road &	AM	38.4	E	38.8	E	0.4	9	NO
[a]	Los Angeles Street	PM	46.4	E	46.4	E	0.0	9	NO
6.	Irwindale Avenue &	AM	80.1	F	80.9	F	0.8	45	NO
	Arrow Highway	PM	47.8	D	48.0	D	0.2	47	NO

Notes
[a] = unsignalized intersection
Delay is measured in seconds
LOS = Level of service based on delay

Chapter 8

Traffic Impact Analysis

The relative impact of the added Project traffic volumes during the peak hours was evaluated based on analysis of both existing and future operating conditions at the study intersections without and with the Project. The previously discussed significance criteria and thresholds outlined in Chapter 2 were used to determine the significance of a traffic impact caused by the Project on the study intersections.

EXISTING PLUS PROJECT CONDITIONS

The LOS summaries under Existing Plus Project conditions for the study intersections during the weekday morning and afternoon peak hours are shown in Table 7. As shown, application of the City's significant impact criteria to the Existing Plus Project scenario indicates that the Project is anticipated to have a significant impact at the following intersection:

- Azusa Canyon Road & Arrow Highway: This intersection operates at LOS F for the morning peak hour and LOS E for the afternoon peak hour. The Project's impact is based on the City's threshold, which states that if a signalized intersection is operating at LOS F under existing or future baseline conditions, and the addition of more than 50 peak hour Project trips contributes to the continuing operational failure at the intersection, the Project mitigation should bring the facility to pre-Project conditions. The Project contributes more than 50 peak hour trips and is considered to be part of a significant impact to a deficient location.

Although other study intersections were determined to be deficient and operate at LOS E during one or more peak hours, the City significant impact thresholds are not met for these locations as the Project does not degrade the LOS to F. These conditions exist with or without the Project traffic volumes.

Using the Baldwin Park significance thresholds at the shared intersections, the Project does not meet the criteria of increasing the ICU value by more than 0.02 at a failing (LOS F) intersection

to trigger a significant impact. No impacts for the City of Baldwin Park are identified. Appendix C contains the summary and worksheets for the shared intersection analysis.

FUTURE PLUS PROJECT CONDITIONS

Table 8 summarizes the LOS for the Future Plus Project Conditions. As shown in Table 8, application of the City's significant impact criteria to the Future Plus Project scenario indicates that the Project has a significant impact at the following intersection:

- Azusa Canyon Road & Arrow Highway: This intersection operates at LOS F for both peak hours. The Project's impact is based on the City's threshold, which states that if a signalized intersection is operating at LOS F under existing or future baseline conditions, and the addition of more than 50 peak hour Project trips contributes to the continuing operational failure at the intersection, the Project mitigation should bring the facility to pre-Project conditions. The Project contributes more than 50 peak hour trips to this intersection and is considered to be part of a significant impact to a deficient location.

Although other study intersections were determined to be deficient and operate at LOS E or worse during one or more peak hours, the City significant impact thresholds are not met for these locations as the Project does not degrade the LOS to F or add more than 50 trips to a failing (LOS F) intersection. These conditions exist with or without the Project traffic volumes.

Applying the Baldwin Park significance thresholds at the shared intersections, the Project meets the criteria of increasing the ICU value by more than 0.02 at a failing (LOS F) intersection and is considered to have a significant impact at Azusa Canyon Road & Arrow Highway. No additional impacts are identified. Appendix C contains the summary and worksheets for the shared intersection analysis.

TRAFFIC IMPROVEMENT MEASURES

As summarized above, the Project is anticipated to significantly impact one study intersection (Azusa Canyon Road & Arrow Highway) under the Existing Plus Project conditions. The Project is anticipated to contribute toward a significant impact at two intersections in the Future Plus Project condition. The following mitigation measures are anticipated to reduce the significant impact to

less than significant levels for both the existing and future conditions with the Project as described below:

- Azusa Canyon Road & Arrow Highway: Mitigation for this intersection consists of roadway restriping to provide an exclusive eastbound right-turn lane. The resulting eastbound approach would consist of one left-turn lane, two through lanes, and one right-turn lane. The eastbound right-turn lane will improve intersection operations to better than pre-Project conditions, thereby mitigating the identified impacts.

Table 9 summarizes the results of the intersection operation at the impacted location with the recommended mitigation included. As shown in Table 9, with improvements, this intersection is expected to operate at better than pre-Project conditions, thereby mitigating the identified significant traffic impacts at this location.

PROJECT FAIR SHARE

In terms of fair share contributions to deficient locations, the City Policy Guidelines state:

> "The project fair share contribution for an impacted intersection that fails operationally under existing or future baseline shall be determined through the use of traffic volumes during the critical peak hour. The fair share for the project shall be calculated as the ratio of the project trips over the trips under Existing Plus Project conditions. Projects only pay based on what trips they add to pre-project conditions."

Calculation of the Project's fair share of the improvement is shown in Table 10. Consistent with City methodology, the fair share is calculated on the Existing Plus Project traffic volumes. As shown in Table 10, the Project is responsible for 3% of the future improvement at Azusa Canyon Road & Arrow Highway.

TABLE 9
INTERSECTION MITIGATION LEVEL OF SERVICE

EXISTING PLUS PROJECT CONDITIONS									
No	**Intersection**	**Mitigation**	**Peak Hour**	**Existing without Project**		**Existing with Project**			
				Delay	**LOS**	**Mitigated Delay**	**Mitigated LOS**	**Change in Delay**	**Mitigated**
2.	Azusa Canyon Road & Arrow Highway	Eastbound Right	AM	92.1	F	90.4	F	-1.7	YES
			PM	65.4	E	38.3	D	-27.1	YES
FUTURE PLUS PROJECT CONDITIONS									
No	**Intersection**	**Mitigation**	**Peak Hour**	**Future without Project**		**Future with Project**			
				Delay	**LOS**	**Mitigated Delay**	**Mitigated LOS**	**Change in Delay**	**Mitigated**
2.	Azusa Canyon Road & Arrow Highway	Eastbound Right	AM	144.1	F	140.5	F	-3.6	YES
			PM	186.4	F	140.8	F	-45.6	YES

Notes
Mitigated = better than pre-project condition
Delay is measured in seconds
LOS = Level of service based on delay

TABLE 10
FAIR SHARE CALCULATIONS

PROJECT FAIR SHARE OF IMPROVEMENTS					
No	**Intersection**	**Mitigation**	**Existing+Project**		
			Entering Vol	**Project Vol**	**Fair Share Percent**
2.	Azusa Canyon Road & Arrow Highway	Stripe Eastbound Right	3810	118	3%

Notes
Fair share percent based on existing+project volumes per City of Irwindale Guideliens

Chapter 9

Congestion Management Program Analysis

CMP ANALYSIS

The CMP requires that, when a TIA is prepared for a project, traffic and transit impact analyses be conducted for select regional facilities based on the amount of project traffic expected to use these facilities.

CMP SIGNIFICANT TRAFFIC IMPACT CRITERIA

The CMP guidelines state that a CMP freeway analysis must be conducted if 150 or more trips attributable to the proposed development are added to a mainline freeway monitoring location in either direction during the morning or afternoon weekday peak hours. Similarly, a CMP arterial monitoring station analysis must be conducted if 50 or more peak hour project trips are added to a CMP arterial monitoring station during the morning or afternoon weekday peak hours of adjacent street traffic.

A significant project-related CMP impact would be identified if the CMP facility is projected to operate at LOS F (V/C > 1.00) and if the project traffic causes an incremental change in the V/C ratio of 0.02 or greater. The proposed development would not be considered to have a regionally significant impact, regardless of the increase in V/C ratio, if the analyzed facility is projected to operate at LOS E or better after the addition of the project traffic.

CMP FREEWAY ANALYSIS

Based on the Project trip generation estimates shown in Table 6, the Project is expected to generate approximately 178 net new trips in the morning peak hour and 186 net new trips in the afternoon peak hour. According to the Project traffic volumes illustrated in Figure 9, there would

be fewer than 150 peak hour trips distributed to the a monitored freeway segment in the Study Area; therefore, the Project's CMP freeway impacts are considered to be less than significant and no further analysis is required.

CMP ARTERIAL MONITORING STATION ANALYSIS

There are three CMP arterial monitoring intersections within approximately four miles of the Study Area. The locations are as follows:

- Azusa Avenue & Arrow Highway
- Azusa Avenue/San Gabriel Avenue & Foothill Boulevard
- Azusa Avenue & Workman Avenue

According to the Project traffic volumes illustrated in Figure 9, the Project will meet the 50 trip criteria for Azusa Avenue & Arrow Highway, which is included in the analysis Study Area and analyzed previously, with impacts and mitigation provided.

Project trips traveling past the other two intersection monitoring stations are nominal and considered insignificant. No further analysis is required on these arterial monitoring stations.

REGIONAL TRANSIT IMPACT ANALYSIS

Section B.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the number of vehicle trips. This methodology assumes average vehicle occupancy (AVO) factor of 1.4 in order to estimate the number of person trips to and from a project. The CMP guidelines estimate that approximately 3.5% of total project person trips may use public transit to travel to and from the site.

As shown in Table 6, the worst-case Project volume occurs in the afternoon peak hour and is expected to generate approximately 186 trips. Assuming an AVO of 1.4, the Project's vehicle trips result in an estimated increase of 260 person trips during the afternoon peak hour. Using the 3.5% mode split suggested in the CMP, the Project could generate approximately nine net

new transit trips in the worst-case weekday afternoon peak hour. The Project location is served by established transit routes. It is anticipated that the existing transit service in the Project vicinity will adequately accommodate the potential for Project-generated transit trips.

Thus, based on the calculated number of generated transit trips, impacts on existing or future transit services in the Project vicinity are not expected to be significant.

Chapter 10

Site Access and Internal Circulation

PROJECT SITE ACCESS

Access to the Site is currently provided a single driveway on the east side of Azusa Canyon Road, north of Olive Street. The existing driveway will be maintained as part of the Project. The westbound driveway approach (egress) will continue to be stop-controlled. Southbound left turns can be accommodated within the existing two-way left-turn lane on Azusa Canyon Road. Northbound right turning traffic will utilize the curbside through lane without requiring a deceleration or dedicated right-turn lane. The Project driveway will be maintained to City standards, including appropriate width and turning radii.

As shown in Table 11, analysis of the Project driveway determined that the driveway will operate at LOS C for both the morning and afternoon peak hours.

CIRCULATION

The Project site plan demonstrates adequate on-site turning radii are provided to accommodate large vehicles into proposed loading docks. Passenger vehicle parking is provided in central islands as well as to the rear (east end) of the development footprint with adequate 28 foot driveway aisles.

TABLE 11
PROJECT DRIVEWAY ANALYSIS

Intersection	Peak Hour	Direction	Existing+Project		Future+Project	
			Delay	LOS	Delay	LOS
Azusa Canyon Road & Project Driveway	AM	Southbound Left	11.3	B	15.2	C
		Westbound	15.4	C	22.7	C
	PM	Southbound Left	8.0	A	9.8	A
		Westbound	12.1	B	21.5	C

Notes
Unsignalized driveway with single egress lane

Chapter 11

Summary and Conclusions

This study was undertaken to analyze the potential traffic impacts of the Azusa Canyon Industrial Park located on Azusa Canyon Road in the City of Irwindale, California. The following summarizes the results of this analysis:

- A detailed TIA was conducted at six study intersections, three solely in the City of Irwindale and three that share jurisdiction with the City of Baldwin Park. Three study intersections currently operate at LOS D or better during both the morning and afternoon peak hours, while three intersections report existing deficiencies (LOS E or worse).

- The Project is expected to generate a total of approximately 1,333 net new daily trips, including 178 net new morning peak hour trips and 186 net new afternoon peak hour trips on a typical weekday. These values include PCEs applied to estimate truck traffic, as well as a small credit for existing uses.

- Analysis of projected Existing (2013) plus Project conditions indicates that, using the significance criteria established by the City of Irwindale, the Project demonstrates a significant impact at the intersection of Azusa Canyon Road & Arrow Highway. Using the City of Baldwin Park methodology, no significant impacts were identified for this condition.

- Analysis of projected Future (2016) plus Project conditions indicates that, using the significance criteria established by the City of Irwindale and City of Baldwin Park, the Project has significant traffic impacts at the intersection of Azusa Canyon Road & Arrow Highway.

- Mitigation for the Azusa Canyon Road & Arrow Highway intersection consists of restriping the eastbound approach to provide an eastbound right-turn lane. This mitigation improves the intersection operation to better than pre-Project conditions.

- The Project's fair share of the improvement at Azusa Canyon Road & Arrow Highway is 3%.

References

2010 Congestion Management Program for Los Angeles County, Los Angeles County Metropolitan Transportation Authority, 2010.

2010 Highway Capacity Manual, Transportation Research Board, 2010.

Congestion Management Program for San Bernardino County, San Bernardino Associated Governments, 2007.

Guidelines for Implementation of the California Environmental Quality Act, Chapter 3, Title 14, California Code of Regulations, California Natural Resources Agency, amended July 27, 2007.

Highway Design Manual, 6th Edition, California Department of Transportation, June 21, 2013.

Policy Guidelines for Traffic Impact Reports, City of Irwindale*,* August 2004.

Trip Generation, 9th Edition, Institute of Transportation Engineers, 2012.

Appendix A

Existing Traffic Volumes
Truck Axle Conversions

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-001 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

AM

NS/EW Streets:	Maine Ave			Maine Ave			Arrow Hwy			Arrow Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	0	1	0	0	0	0	2	0	1	2	0	
7:00 AM	135	0	17	0	0	0	0	135	28	9	650	0	974
7:15 AM	181	0	15	0	0	0	0	161	28	10	695	0	1090
7:30 AM	155	0	18	0	0	0	0	211	31	15	707	0	1137
7:45 AM	121	0	26	0	0	0	0	269	40	21	616	0	1093
8:00 AM	128	0	30	0	0	0	0	247	46	12	575	0	1038
8:15 AM	103	0	16	0	0	0	0	213	26	7	577	0	942
8:30 AM	77	0	21	0	0	0	0	207	30	17	467	0	819
8:45 AM	75	0	31	0	0	0	0	213	36	10	374	0	739
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	975	0	174	0	0	0	0	1656	265	101	4661	0	7832
APPROACH %'s :	84.86%	0.00%	15.14%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	86.21%	13.79%	2.12%	97.88%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	585	0	89	0	0	0	0	888	145	58	2593	0	4358
PEAK HR FACTOR :		0.860			0.000			0.836			0.918		0.958

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-001 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

PM

NS/EW Streets:	Maine Ave			Maine Ave			Arrow Hwy			Arrow Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	0	1	0	0	0	0	2	0	1	2	0	
4:00 PM	75	0	31	0	0	0	0	469	89	24	239	0	927
4:15 PM	58	0	11	0	0	0	0	481	93	22	180	0	845
4:30 PM	70	0	26	0	0	0	0	505	87	15	284	0	987
4:45 PM	70	0	22	0	0	0	0	468	86	18	212	0	876
5:00 PM	71	0	24	0	0	0	0	511	125	18	341	0	1090
5:15 PM	66	0	18	0	0	0	0	540	95	20	238	0	977
5:30 PM	68	0	15	0	0	0	0	500	137	14	251	0	985
5:45 PM	45	0	16	0	0	0	0	486	102	23	199	0	871
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	523	0	163	0	0	0	0	3960	814	154	1944	0	7558
APPROACH %'s :	76.24%	0.00%	23.76%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	82.95%	17.05%	7.34%	92.66%	0.00%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	277	0	90	0	0	0	0	2024	393	71	1075	0	3930
PEAK HR FACTOR :		0.956			0.000			0.950			0.798		0.901

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-002 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

AM

NS/EW Streets:	Azusa Canyon Rd			Azusa Canyon Rd			Arrow Hwy			Arrow Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1.5	0.5	1	1	0.5	0.5	1	2	0	1	2	0	
7:00 AM	196	2	31	3	1	4	4	132	13	8	475	5	874
7:15 AM	196	6	24	3	2	2	4	138	18	14	507	2	916
7:30 AM	191	1	33	1	1	0	2	175	27	11	552	4	998
7:45 AM	199	1	37	3	1	1	5	222	17	23	489	3	1001
8:00 AM	165	7	29	3	1	7	10	225	24	21	465	12	969
8:15 AM	141	3	38	2	1	7	3	201	18	14	450	6	884
8:30 AM	90	1	30	2	0	3	9	190	17	27	420	4	793
8:45 AM	78	1	34	2	2	7	6	217	11	15	354	1	728
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1256	22	256	19	9	31	43	1500	145	133	3712	37	7163
APPROACH %'s :	81.88%	1.43%	16.69%	32.20%	15.25%	52.54%	2.55%	88.86%	8.59%	3.43%	95.62%	0.95%	

PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	751	15	123	10	5	10	21	760	86	69	2013	21	3884
PEAK HR FACTOR :		0.938			0.568			0.837			0.927		0.970

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-002 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

PM

NS/EW Streets:	Azusa Canyon Rd			Azusa Canyon Rd			Arrow Hwy			Arrow Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1.5	0.5	1	1	0.5	0.5	1	2	0	1	2	0	
4:00 PM	35	0	35	5	2	8	3	425	50	25	210	1	799
4:15 PM	24	1	36	6	5	7	1	451	35	31	201	3	801
4:30 PM	30	1	45	2	3	9	2	463	42	40	240	0	877
4:45 PM	40	2	30	3	1	8	6	433	39	32	196	2	792
5:00 PM	35	1	39	5	4	14	2	474	41	41	270	1	927
5:15 PM	24	5	39	5	0	6	3	470	40	35	246	7	880
5:30 PM	34	5	39	3	3	2	16	436	30	55	240	2	865
5:45 PM	24	1	58	0	0	3	11	472	44	44	230	1	888
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	246	16	321	29	18	57	44	3624	321	303	1833	17	6829
APPROACH %'s :	42.20%	2.74%	55.06%	27.88%	17.31%	54.81%	1.10%	90.85%	8.05%	14.07%	85.14%	0.79%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	117	12	175	13	7	25	32	1852	155	175	986	11	3560
PEAK HR FACTOR :		0.916			0.489			0.967			0.939		0.960

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-003 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

AM

NS/EW Streets:	Azusa Canyon Rd			Azusa Canyon Rd			Olive St			Olive St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	1	0	1	0.5	0.5	
7:00 AM	69	195	2	0	15	0	6	0	39	0	0	0	326
7:15 AM	87	201	1	0	21	6	12	0	53	0	0	0	381
7:30 AM	92	200	3	1	40	7	20	0	71	0	0	0	434
7:45 AM	93	207	4	1	43	2	10	0	24	2	0	0	386
8:00 AM	36	172	1	0	36	5	8	0	46	0	0	0	304
8:15 AM	33	145	2	0	44	7	11	0	35	0	0	0	277
8:30 AM	20	101	1	0	44	4	6	0	15	0	0	0	191
8:45 AM	23	92	0	0	34	3	11	0	21	0	0	0	184
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	453	1313	14	2	277	34	84	0	304	2	0	0	2483
APPROACH %'s :	25.45%	73.76%	0.79%	0.64%	88.50%	10.86%	21.65%	0.00%	78.35%	100.00%	0.00%	0.00%	

PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	341	803	10	2	119	15	48	0	187	2	0	0	1527
PEAK HR FACTOR :		0.949			0.708			0.646			0.250		0.880

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-003 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

PM

NS/EW Streets:	Azusa Canyon Rd			Azusa Canyon Rd			Olive St			Olive St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	1	1	0	1	0.5	0.5	
4:00 PM	41	62	1	0	69	9	14	0	67	3	1	1	268
4:15 PM	42	38	1	0	73	3	20	0	83	0	0	0	260
4:30 PM	31	48	1	0	79	8	16	0	87	4	0	2	276
4:45 PM	40	46	0	0	82	6	12	0	106	1	0	0	293
5:00 PM	45	56	1	0	82	14	18	0	118	1	0	0	335
5:15 PM	43	51	0	0	92	8	23	0	104	0	0	0	321
5:30 PM	42	53	1	0	92	23	16	0	126	0	0	0	353
5:45 PM	36	46	0	0	90	14	19	1	108	0	0	0	314
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	320	400	5	0	659	85	138	1	799	9	1	3	2420
APPROACH %'s :	44.14%	55.17%	0.69%	0.00%	88.58%	11.42%	14.71%	0.11%	85.18%	69.23%	7.69%	23.08%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	166	206	2	0	356	59	76	1	456	1	0	0	1323
PEAK HR FACTOR :		0.917			0.902			0.938			0.250		0.937

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-004 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

AM

NS/EW Streets:	Azusa Canyon Rd			Azusa Canyon Rd			Cypress St			Cypress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	1.5	
7:00 AM	0	77	16	21	33	0	0	0	0	102	0	190	439
7:15 AM	0	81	21	23	50	0	0	0	0	109	0	209	493
7:30 AM	0	68	28	24	87	0	0	0	0	122	0	227	556
7:45 AM	0	111	27	28	41	0	0	0	0	97	0	193	497
8:00 AM	0	66	33	40	43	0	0	0	0	81	0	144	407
8:15 AM	0	64	23	38	41	0	0	0	0	62	0	116	344
8:30 AM	0	54	20	26	33	0	0	0	0	63	0	68	264
8:45 AM	0	48	16	12	44	0	0	0	0	40	0	67	227
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	569	184	212	372	0	0	0	0	676	0	1214	3227
APPROACH %'s :	0.00%	75.56%	24.44%	36.30%	63.70%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	35.77%	0.00%	64.23%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	0	337	92	96	211	0	0	0	0	430	0	819	1985
PEAK HR FACTOR :		0.777			0.691			0.000			0.895		0.893

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-004 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

PM

NS/EW Streets:	Azusa Canyon Rd			Azusa Canyon Rd			Cypress St			Cypress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	1	2	0	0	0	0	1.5	0	1.5	
4:00 PM	0	60	67	68	71	0	0	0	0	37	0	44	347
4:15 PM	0	52	101	88	69	0	0	0	0	22	0	29	361
4:30 PM	0	47	91	94	76	0	0	0	0	28	0	34	370
4:45 PM	0	51	113	111	79	0	0	0	0	34	0	35	423
5:00 PM	0	62	95	109	92	0	0	0	0	38	0	40	436
5:15 PM	0	53	114	118	79	0	0	0	0	39	0	40	443
5:30 PM	0	55	85	133	85	0	0	0	0	30	0	41	429
5:45 PM	0	60	82	123	75	0	0	0	0	37	0	22	399
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	440	748	844	626	0	0	0	0	265	0	285	3208
APPROACH %'s :	0.00%	37.04%	62.96%	57.41%	42.59%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	48.18%	0.00%	51.82%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	221	407	471	335	0	0	0	0	141	0	156	1731
PEAK HR FACTOR :		0.940			0.924			0.000			0.940		0.977

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-005 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

AM

NS/EW Streets:	Azusa Canyon Rd			Azusa Canyon Rd			Los Angeles St			Los Angeles St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	1	0	1	0	0.5	0.5	1	
7:00 AM	51	72	2	1	42	91	28	1	14	1	0	1	304
7:15 AM	68	80	3	2	56	90	22	2	34	0	0	2	359
7:30 AM	70	72	5	0	96	104	32	2	54	1	0	0	436
7:45 AM	70	87	1	3	44	76	43	2	44	1	0	2	373
8:00 AM	67	72	5	1	57	75	31	2	29	0	0	3	342
8:15 AM	46	60	6	3	40	65	34	4	21	0	0	0	279
8:30 AM	34	44	10	7	34	48	36	12	17	1	2	1	246
8:45 AM	24	45	9	8	45	41	21	9	31	3	2	2	240
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	430	532	41	25	414	590	247	34	244	7	4	11	2579
APPROACH %'s :	42.87%	53.04%	4.09%	2.43%	40.23%	57.34%	47.05%	6.48%	46.48%	31.82%	18.18%	50.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	275	311	14	6	253	345	128	8	161	2	0	7	1510
PEAK HR FACTOR :		0.949			0.755			0.834			0.750		0.866

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-005 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

PM

NS/EW Streets:	Azusa Canyon Rd			Azusa Canyon Rd			Los Angeles St			Los Angeles St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	1	0	1	0	0.5	0.5	1	
4:00 PM	22	60	2	0	64	38	58	1	76	16	8	2	347
4:15 PM	15	49	0	2	63	24	83	4	73	2	2	3	320
4:30 PM	25	38	1	4	71	30	87	4	81	2	3	3	349
4:45 PM	18	47	2	3	83	35	105	4	67	5	4	1	374
5:00 PM	21	55	0	2	90	39	87	3	73	8	6	3	387
5:15 PM	27	44	1	0	84	36	93	0	86	4	0	0	375
5:30 PM	30	46	1	1	94	31	77	1	82	5	3	4	375
5:45 PM	32	46	0	2	82	38	86	0	70	2	2	1	361
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	190	385	7	14	631	271	676	17	608	44	28	17	2888
APPROACH %'s :	32.65%	66.15%	1.20%	1.53%	68.89%	29.59%	51.96%	1.31%	46.73%	49.44%	31.46%	19.10%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	96	192	4	6	351	141	362	8	308	22	13	8	1511
PEAK HR FACTOR :		0.948			0.950			0.947			0.632		0.976

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-006 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

AM

NS/EW Streets:	Irwindale Ave			Irwindale Ave			Arrow Hwy			Arrow Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	2	3	0	1	2	0	
7:00 AM	67	147	8	19	77	77	49	69	6	7	342	38	906
7:15 AM	56	137	6	21	89	94	63	76	11	13	377	16	959
7:30 AM	52	146	11	20	100	109	65	100	10	9	374	27	1023
7:45 AM	71	176	10	25	85	90	80	122	17	4	355	43	1078
8:00 AM	46	145	8	35	129	108	83	124	19	14	341	38	1090
8:15 AM	48	137	14	40	135	109	68	120	11	13	323	27	1045
8:30 AM	62	123	6	34	105	102	58	115	16	25	262	34	942
8:45 AM	30	108	14	20	101	83	73	120	16	23	240	35	863
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	432	1119	77	214	821	772	539	846	106	108	2614	258	7906
APPROACH %'s :	26.54%	68.73%	4.73%	11.84%	45.43%	42.72%	36.15%	56.74%	7.11%	3.62%	87.72%	8.66%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	217	604	43	120	449	416	296	466	57	40	1393	135	4236
PEAK HR FACTOR :		0.840			0.867			0.906			0.956		0.972

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5480-006 **Day:** Tuesday

City: Irwindale **Date:** 9/17/2013

PM

NS/EW Streets:	Irwindale Ave			Irwindale Ave			Arrow Hwy			Arrow Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	2	3	0	1	2	0	
4:00 PM	23	135	22	51	192	65	82	310	30	24	115	21	1070
4:15 PM	23	108	21	64	122	59	73	384	38	17	110	9	1028
4:30 PM	23	129	23	56	228	119	113	377	35	28	120	17	1268
4:45 PM	15	149	23	56	174	68	72	334	32	27	130	10	1090
5:00 PM	32	134	28	81	192	101	80	375	35	19	133	17	1227
5:15 PM	23	137	24	57	181	67	81	396	40	28	149	15	1198
5:30 PM	26	116	22	71	193	75	102	335	22	17	148	9	1136
5:45 PM	31	106	16	47	184	66	103	384	34	24	130	7	1132
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	196	1014	179	483	1466	620	706	2895	266	184	1035	105	9149
APPROACH %'s :	14.11%	73.00%	12.89%	18.80%	57.07%	24.13%	18.26%	74.86%	6.88%	13.90%	78.17%	7.93%	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	93	549	98	250	775	355	346	1482	142	102	532	59	4783
PEAK HR FACTOR :		0.954			0.856			0.938			0.902		0.943

CONTROL : Signalized

TRUCK AXLE FACTORS

		AM												PM												
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
		SBR	**SBT**	**SBL**	**WBR**	**WBT**	**WBL**	**NBR**	**NBT**	**NBL**	**EBR**	**EBT**	**EBL**	**SBR**	**SBT**	**SBL**	**WBR**	**WBT**	**WBL**	**NBR**	**NBT**	**NBL**	**EBR**	**EBT**	**EBL**	PCE
1 Maine Ave.	Arrow Hwy.	1.000	1.000	1.000	1.000	0.957	0.963	0.954	1.000	0.966	0.936	0.927	1.000	1.000	1.000	1.000	1.000	0.961	0.993	0.965	1.000	0.956	0.976	0.956	1.000	1.0
	2-Axle	0.000	0.000	0.000	0.000	0.019	0.015	0.013	0.000	0.025	0.034	0.043	0.000	0.000	0.000	0.000	0.000	0.019	0.007	0.020	0.000	0.013	0.016	0.016	0.000	1.5
	3-Axle	0.000	0.000	0.000	0.000	0.014	0.007	0.020	0.000	0.006	0.026	0.014	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.010	0.000	0.024	0.005	0.022	0.000	2.0
	4-Axle	0.000	0.000	0.000	0.000	0.010	0.015	0.013	0.000	0.003	0.004	0.016	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.005	0.000	0.007	0.003	0.006	0.000	3.0
2 Azusa Canyon Rd.	Arrow Hwy.	0.840	1.000	1.000	1.000	0.960	0.929	0.925	1.000	0.939	0.888	0.926	0.968	0.974	1.000	1.000	1.000	0.957	0.956	0.986	1.000	0.975	0.925	0.961	0.925	1.0
	2-Axle	0.160	0.000	0.000	0.000	0.021	0.052	0.062	0.000	0.021	0.072	0.044	0.032	0.026	0.000	0.000	0.000	0.023	0.035	0.011	0.000	0.005	0.009	0.017	0.075	1.5
	3-Axle	0.000	0.000	0.000	0.000	0.009	0.006	0.009	0.000	0.033	0.020	0.014	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.003	0.000	0.005	0.050	0.018	0.000	2.0
	4-Axle	0.000	0.000	0.000	0.000	0.010	0.013	0.004	0.000	0.007	0.020	0.016	0.000	0.000	0.000	0.000	0.000	0.012	0.009	0.000	0.000	0.015	0.016	0.004	0.000	3.0
3 Azusa Canyon Rd.	Olive St.	1.000	0.962	1.000	1.000	1.000	1.000	1.000	0.967	1.000	1.000	1.000	1.000	1.000	0.988	1.000	1.000	1.000	1.000	1.000	0.980	1.000	1.000	1.000	1.000	1.0
	2-Axle	0.000	0.026	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	1.5
	3-Axle	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	2.0
	4-Axle	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	3.0
4 Azusa Canyon Rd.	Cypress St.	1.000	0.962	1.000	1.000	1.000	1.000	1.000	0.967	1.000	1.000	1.000	1.000	1.000	0.988	1.000	1.000	1.000	1.000	1.000	0.980	1.000	1.000	1.000	1.000	1.0
	2-Axle	0.000	0.026	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	1.5
	3-Axle	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	2.0
	4-Axle	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	3.0
5 Azusa Canyon Rd.	Los Angeles St.	1.000	0.962	1.000	1.000	1.000	1.000	1.000	0.967	1.000	1.000	1.000	1.000	1.000	0.988	1.000	1.000	1.000	1.000	1.000	0.980	1.000	1.000	1.000	1.000	1.0
	2-Axle	0.000	0.026	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	1.5
	3-Axle	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	2.0
	4-Axle	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	3.0
6 N. Irwindale Ave.	Arrow Hwy.	0.940	0.966	0.968	0.975	0.961	0.971	0.944	0.963	0.978	0.937	0.940	0.906	0.958	0.988	0.992	0.952	0.957	0.984	0.986	0.980	0.977	1.000	0.980	0.912	1.0
	2-Axle	0.037	0.025	0.032	0.015	0.024	0.029	0.056	0.028	0.009	0.028	0.041	0.056	0.021	0.007	0.004	0.016	0.026	0.016	0.000	0.011	0.018	0.000	0.012	0.030	1.5
	3-Axle	0.008	0.002	0.000	0.000	0.007	0.000	0.000	0.003	0.004	0.000	0.010	0.022	0.006	0.003	0.000	0.016	0.008	0.000	0.007	0.003	0.005	0.000	0.007	0.045	2.0
	4-Axle	0.015	0.007	0.000	0.010	0.008	0.000	0.000	0.006	0.009	0.035	0.009	0.016	0.015	0.002	0.004	0.016	0.009	0.000	0.007	0.006	0.000	0.000	0.001	0.013	3.0

ADJUSTED VOLUMES WITH TRUCK AXLE FACTOR APPLIED

			AM												PM											
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
			SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NBL	EBR	EBT	EBL	SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NBL	EBR	EBT	EBL
1	Maine Ave.	Arrow Hwy.	0	0	0	0	2706	61	94	0	599	152	948	0	0	0	0	0	1120	71	93	0	289	400	2109	0
2	Azusa Canyon Rd.	Arrow Hwy.	11	5	10	21	2093	73	129	15	794	94	812	21	25	7	13	11	1029	181	176	12	121	168	1916	33
3	Azusa Canyon Rd.	Olive St.	15	123	2	0	0	2	10	825	341	187	0	48	59	360	0	0	0	1	2	210	166	456	1	76
4	Azusa Canyon Rd.	Cypress St.	0	218	96	819	0	430	92	346	0	0	0	0	0	339	471	156	0	141	407	225	0	0	0	0
5	Azusa Canyon Rd.	Los Angeles St.	345	262	6	7	0	2	14	319	275	161	8	128	141	355	6	8	13	22	4	196	96	308	8	362
6	N. Irwindale Ave.	Arrow Hwy.	440	462	122	139	1442	41	44	622	223	62	489	320	372	783	253	62	553	103	100	560	94	142	1504	376

Appendix B

City of Irwindale
HCM Intersection Level of Service Worksheets

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	948	152	61	2706	599	94
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	190.0	186.3	186.3	186.3	186.3
Lanes	2	0	1	3	2	1
Cap, veh/h	2109	337	299	3759	895	412
Arrive On Green	0.67	0.67	0.67	0.67	0.26	0.26
Sat Flow, veh/h	3135	502	466	5588	3442	1583
Grp Volume(v), veh/h	611	584	66	2941	651	102
Grp Sat Flow(s),veh/h/ln	1863	1774	466	1863	1721	1583
Q Serve(g_s), s	19.1	19.1	9.6	43.3	20.6	6.1
Cycle Q Clear(g_c), s	19.1	19.1	28.7	43.3	20.6	6.1
Prop In Lane		0.28	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1253	1194	299	3759	895	412
V/C Ratio(X)	0.49	0.49	0.22	0.78	0.73	0.25
Avail Cap(c_a), veh/h	1266	1206	303	3798	895	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	9.5	9.5	16.5	13.5	40.2	34.9
Incr Delay (d2), s/veh	0.3	0.3	0.0	0.1	5.1	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	8.1	7.7	1.1	18.3	9.8	2.6
Lane Grp Delay (d), s/veh	9.8	9.8	16.5	13.6	45.4	36.3
Lane Grp LOS	A	A	B	B	D	D
Approach Vol, veh/h	1195			3007	753	
Approach Delay, s/veh	9.8			13.6	44.1	
Approach LOS	A			B	D	

Timer						
Assigned Phs	4			8		
Phs Duration (G+Y+Rc), s	84.2			84.2		
Change Period (Y+Rc), s	4.0			4.0		
Max Green Setting (Gmax), s	81.0			81.0		
Max Q Clear Time (g_c+I1), s	21.1			45.3		
Green Ext Time (p_c), s	57.6			34.8		

Intersection Summary						
HCM 2010 Ctrl Delay			17.3			
HCM 2010 LOS			B			

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	812	94	73	2093	21	794	15	129	10	5	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3484		1770	3534		1681	1688	1583	1770	1666	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3484		1770	3534		1681	1688	1583	1770	1666	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	883	102	79	2275	23	863	16	140	11	5	12
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	109	0	12	0
Lane Group Flow (vph)	23	980	0	79	2298	0	440	439	31	11	5	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	4.8	68.6		9.4	73.2		21.8	21.8	21.8	4.2	4.2	
Effective Green, g (s)	4.8	68.6		9.4	73.2		21.8	21.8	21.8	4.2	4.2	
Actuated g/C Ratio	0.04	0.57		0.08	0.61		0.18	0.18	0.18	0.04	0.04	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	70	1991		138	2155		305	306	287	61	58	
v/s Ratio Prot	0.01	0.28		c0.04	c0.65		c0.26	0.26		c0.01	0.00	
v/s Ratio Perm									0.02			
v/c Ratio	0.33	0.49		0.57	1.07		1.44	1.43	0.11	0.18	0.09	
Uniform Delay, d1	56.0	15.3		53.4	23.4		49.1	49.1	41.0	56.2	56.1	
Progression Factor	1.16	0.66		0.84	1.38		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.4	0.2		1.4	32.8		216.8	213.4	0.8	1.4	0.7	
Delay (s)	67.5	10.3		46.4	65.2		265.9	262.5	41.8	57.7	56.8	
Level of Service	E	B		D	E		F	F	D	E	E	
Approach Delay (s)		11.6			64.6			233.7			57.1	
Approach LOS		B			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	91.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	48	0	187	2	0	0	341	825	10	2	123	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	303	0	248	120	292	0	408	2588	32	4	1561	184
Arrive On Green	0.16	0.00	0.16	0.16	0.00	0.00	0.46	1.00	1.00	0.00	0.48	0.48
Sat Flow, veh/h	1412	0	1583	1174	1863	0	1774	3673	45	1774	3273	385
Grp Volume(v), veh/h	52	0	203	2	0	0	371	455	453	2	75	75
Grp Sat Flow(s),veh/h/ln	1412	0	1583	1174	1863	0	1774	1863	1855	1774	1863	1795
Q Serve(g_s), s	2.8	0.0	10.9	0.1	0.0	0.0	17.1	0.0	0.0	0.1	1.9	2.0
Cycle Q Clear(g_c), s	2.8	0.0	10.9	11.1	0.0	0.0	17.1	0.0	0.0	0.1	1.9	2.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.02	1.00		0.21
Lane Grp Cap(c), veh/h	303	0	248	120	292	0	408	1313	1307	4	888	856
V/C Ratio(X)	0.17	0.00	0.82	0.02	0.00	0.00	0.91	0.35	0.35	0.52	0.08	0.09
Avail Cap(c_a), veh/h	403	0	360	203	424	0	948	1313	1307	121	888	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	35.9	41.2	0.0	0.0	22.9	0.0	0.0	43.8	12.5	12.6
Incr Delay (d2), s/veh	0.3	0.0	9.3	0.1	0.0	0.0	7.3	0.7	0.7	79.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.0	0.0	5.0	0.0	0.0	0.0	6.8	0.2	0.2	0.1	0.9	0.9
Lane Grp Delay (d), s/veh	32.7	0.0	45.2	41.3	0.0	0.0	30.2	0.7	0.7	123.7	12.7	12.8
Lane Grp LOS	C		D	D			C	A	A	F	B	B
Approach Vol, veh/h		255			2			1279			152	
Approach Delay, s/veh		42.7			41.3			9.2			14.2	
Approach LOS		D			D			A			B	

Timer							
Assigned Phs		4		8	5	2		1	6
Phs Duration (G+Y+Rc), s		17.8		17.8	24.2	66.0		4.2	46.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0	4.0
Max Green Setting (Gmax), s		20.0		20.0	47.0	62.0		6.0	21.0
Max Q Clear Time (g_c+I1), s		12.9		13.1	19.1	2.0		2.1	4.0
Green Ext Time (p_c), s		0.8		0.7	1.2	8.6		0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	430	819	346	92	96	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.93	0.85	0.97		1.00	1.00
Flt Protected	0.98	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3266	1441	3428		1770	3539
Flt Permitted	0.98	1.00	1.00		0.42	1.00
Satd. Flow (perm)	3266	1441	3428		774	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	467	890	376	100	104	237
RTOR Reduction (vph)	233	319	16	0	0	0
Lane Group Flow (vph)	679	126	460	0	104	237
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	28.4	28.4	52.8		63.6	63.6
Effective Green, g (s)	28.4	28.4	52.8		63.6	63.6
Actuated g/C Ratio	0.28	0.28	0.53		0.64	0.64
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	927	409	1809		559	2250
v/s Ratio Prot	c0.21		c0.13		c0.01	0.07
v/s Ratio Perm		0.09			0.11	
v/c Ratio	0.73	0.31	0.25		0.19	0.11
Uniform Delay, d1	32.4	28.1	12.9		7.4	7.1
Progression Factor	1.00	1.00	1.00		0.93	0.91
Incremental Delay, d2	3.0	0.4	0.3		0.2	0.1
Delay (s)	35.4	28.5	13.2		7.0	6.6
Level of Service	D	C	B		A	A
Approach Delay (s)	33.1		13.2			6.7
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	37.6
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	128	8	161	2	0	7	275	319	14	6	262	345
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	139	9	175	2	0	8	299	347	15	7	285	375
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	22.4	11.1	65.1	18
HCM LOS	C	B	F	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	46%	0%	43%	100%	0%	2%	0%
Vol Thru, %	54%	0%	3%	0%	0%	98%	0%
Vol Right, %	0%	100%	54%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	594	14	297	2	7	268	345
LT Vol	319	0	8	0	0	262	0
Through Vol	0	14	161	0	7	0	345
RT Vol	275	0	128	2	0	6	0
Lane Flow Rate	646	15	323	2	8	291	375
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	1	0.026	0.645	0.006	0.017	0.547	0.63
Departure Headway (Hd)	7.066	6.113	7.195	9.166	7.966	6.756	6.044
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	517	584	504	391	449	536	596
Service Time	4.823	3.87	5.221	6.918	5.718	4.488	3.776
HCM Lane V/C Ratio	1.25	0.026	0.641	0.005	0.018	0.543	0.629
HCM Control Delay	66.4	9	22.4	12	10.9	17.4	18.5
HCM Lane LOS	F	A	C	B	B	C	C
HCM 95th-tile Q	13.8	0.1	4.5	0	0.1	3.3	4.4

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	320	489	62	41	1442	139	223	622	44	122	462	440
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	2	3	0	1	2	0	1	2	0	1	2	1
Cap, veh/h	412	2607	323	75	1531	146	240	728	52	135	568	431
Arrive On Green	0.04	0.18	0.18	0.04	0.46	0.46	0.14	0.21	0.21	0.08	0.15	0.15
Sat Flow, veh/h	3442	4877	605	1774	3350	320	1774	3438	244	1774	3725	1583
Grp Volume(v), veh/h	348	404	195	45	865	853	242	366	358	133	502	478
Grp Sat Flow(s),veh/h/ln	1721	1863	1756	1774	1863	1806	1774	1863	1820	1774	1863	1583
Q Serve(g_s), s	11.9	11.0	11.2	2.9	54.0	54.0	16.0	22.8	22.8	8.8	15.6	18.0
Cycle Q Clear(g_c), s	11.9	11.0	11.2	2.9	54.0	54.0	16.0	22.8	22.8	8.8	15.6	18.0
Prop In Lane	1.00		0.34	1.00		0.18	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	412	1992	939	75	851	826	240	394	385	135	568	431
V/C Ratio(X)	0.84	0.20	0.21	0.60	1.02	1.03	1.01	0.93	0.93	0.98	0.88	1.11
Avail Cap(c_a), veh/h	466	1992	939	240	851	826	240	394	385	135	568	431
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	27.2	27.3	55.6	32.1	32.1	51.1	45.7	45.7	54.5	49.1	43.0
Incr Delay (d2), s/veh	10.8	0.0	0.1	7.5	34.8	40.4	60.0	30.5	31.2	72.4	18.0	76.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	6.2	5.5	5.3	1.5	33.3	33.6	11.3	14.3	14.1	6.8	9.0	22.1
Lane Grp Delay (d), s/veh	66.5	27.2	27.3	63.1	66.8	72.4	111.0	76.2	76.9	126.9	67.1	119.4
Lane Grp LOS	E	C	C	E	F	F	F	E	E	F	E	F
Approach Vol, veh/h		947			1763			966			1113	
Approach Delay, s/veh		41.7			69.5			85.2			96.7	
Approach LOS		D			E			F			F	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	18.2	67.2		9.0	58.0		20.0	29.0		13.0	22.0	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s	16.0	54.0		16.0	54.0		16.0	25.0		9.0	18.0	
Max Q Clear Time (g_c+I1), s	13.9	13.2		4.9	56.0		18.0	24.8		10.8	20.0	
Green Ext Time (p_c), s	0.3	27.1		0.0	0.0		0.0	0.2		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	73.5
HCM 2010 LOS	E

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	2109	400	71	1120	289	93
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	190.0	186.3	186.3	186.3	186.3
Lanes	2	0	1	3	2	1
Cap, veh/h	2451	450	72	4471	459	211
Arrive On Green	0.80	0.80	0.80	0.80	0.13	0.13
Sat Flow, veh/h	3064	563	104	5588	3442	1583
Grp Volume(v), veh/h	1364	1364	77	1217	314	101
Grp Sat Flow(s),veh/h/ln	1863	1763	104	1863	1721	1583
Q Serve(g_s), s	65.5	81.8	14.2	6.7	10.4	7.1
Cycle Q Clear(g_c), s	65.5	81.8	96.0	6.7	10.4	7.1
Prop In Lane		0.32	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1490	1411	72	4471	459	211
V/C Ratio(X)	0.91	0.97	1.06	0.27	0.68	0.48
Avail Cap(c_a), veh/h	1490	1411	72	4471	459	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.88	0.88	1.00	1.00
Uniform Delay (d), s/veh	9.0	10.6	58.8	3.1	49.6	48.1
Incr Delay (d2), s/veh	9.1	16.6	118.3	0.0	8.0	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	27.6	34.5	4.6	2.4	5.1	3.3
Lane Grp Delay (d), s/veh	18.1	27.2	177.1	3.1	57.6	55.7
Lane Grp LOS	B	C	F	A	E	E
Approach Vol, veh/h	2727			1294	415	
Approach Delay, s/veh	22.6			13.5	57.2	
Approach LOS	C			B	E	

Timer						
Assigned Phs	4			8		
Phs Duration (G+Y+Rc), s	100.0			100.0		
Change Period (Y+Rc), s	4.0			4.0		
Max Green Setting (Gmax), s	96.0			96.0		
Max Q Clear Time (g_c+I1), s	83.8			98.0		
Green Ext Time (p_c), s	12.1			0.0		

Intersection Summary			
HCM 2010 Ctrl Delay			23.2
HCM 2010 LOS			C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	33	1916	168	181	1029	11	121	12	176	13	7	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3496		1770	3534		1681	1700	1583	1770	1647	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3496		1770	3534		1681	1700	1583	1770	1647	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	2083	183	197	1118	12	132	13	191	14	8	27
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	171	0	26	0
Lane Group Flow (vph)	36	2262	0	197	1130	0	73	72	20	14	9	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	5.5	67.7		19.0	81.2		12.7	12.7	12.7	4.6	4.6	
Effective Green, g (s)	5.5	67.7		19.0	81.2		12.7	12.7	12.7	4.6	4.6	
Actuated g/C Ratio	0.05	0.56		0.16	0.68		0.11	0.11	0.11	0.04	0.04	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	81	1972		280	2391		177	179	167	67	63	
v/s Ratio Prot	0.02	c0.65		c0.11	0.32		c0.04	0.04		c0.01	0.01	
v/s Ratio Perm									0.01			
v/c Ratio	0.44	1.15		0.70	0.47		0.41	0.40	0.12	0.21	0.14	
Uniform Delay, d1	55.8	26.1		47.8	9.2		50.2	50.1	48.6	55.9	55.8	
Progression Factor	1.13	0.68		0.93	1.97		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	68.2		7.1	0.1		7.0	6.6	1.5	1.6	1.0	
Delay (s)	64.4	86.1		51.7	18.3		57.1	56.7	50.1	57.5	56.8	
Level of Service	E	F		D	B		E	E	D	E	E	
Approach Delay (s)		85.7			23.3			53.0			57.0	
Approach LOS		F			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	62.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	76	1	456	1	0	0	166	210	2	0	360	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	596	1	568	148	669	0	225	2000	18	2	1146	186
Arrive On Green	0.36	0.36	0.36	0.36	0.00	0.00	0.08	0.36	0.36	0.00	0.37	0.37
Sat Flow, veh/h	1412	3	1581	897	1863	0	1774	3687	32	1774	3128	508
Grp Volume(v), veh/h	83	0	497	1	0	0	180	115	115	0	232	223
Grp Sat Flow(s),veh/h/ln	1412	0	1584	897	1863	0	1774	1863	1857	1774	1863	1773
Q Serve(g_s), s	3.2	0.0	23.8	0.1	0.0	0.0	8.1	3.3	3.3	0.0	7.3	7.4
Cycle Q Clear(g_c), s	3.2	0.0	23.8	23.9	0.0	0.0	8.1	3.3	3.3	0.0	7.3	7.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.02	1.00		0.29
Lane Grp Cap(c), veh/h	596	0	569	148	669	0	225	1010	1007	2	683	650
V/C Ratio(X)	0.14	0.00	0.87	0.01	0.00	0.00	0.80	0.11	0.11	0.00	0.34	0.34
Avail Cap(c_a), veh/h	785	0	781	268	918	0	481	1010	1007	87	683	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.94	0.94	0.94	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	0.0	24.3	35.4	0.0	0.0	36.1	12.9	12.9	0.0	18.6	18.6
Incr Delay (d2), s/veh	0.1	0.0	8.2	0.0	0.0	0.0	6.2	0.2	0.2	0.0	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.1	0.0	10.6	0.0	0.0	0.0	4.1	1.5	1.5	0.0	3.5	3.4
Lane Grp Delay (d), s/veh	17.8	0.0	32.5	35.4	0.0	0.0	42.3	13.1	13.1	0.0	19.9	20.1
Lane Grp LOS	B		C	D			D	B	B		B	C
Approach Vol, veh/h		580			1			410			455	
Approach Delay, s/veh		30.4			35.4			25.9			20.0	
Approach LOS		C			D			C			C	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		33.1			33.1		14.3	48.0		0.0	33.7	
Change Period (Y+Rc), s		4.0			4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s		40.0			40.0		22.0	44.0		4.0	26.0	
Max Q Clear Time (g_c+I1), s		25.8			25.9		10.1	5.3		0.0	9.4	
Green Ext Time (p_c), s		3.3			3.3		0.4	4.6		0.0	3.8	

Intersection Summary	
HCM 2010 Ctrl Delay	25.9
HCM 2010 LOS	C

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	141	156	225	407	471	339
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.95	0.85	0.90		1.00	1.00
Flt Protected	0.97	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3332	1441	3198		1770	3539
Flt Permitted	0.97	1.00	1.00		0.32	1.00
Satd. Flow (perm)	3332	1441	3198		591	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	153	170	245	442	512	368
RTOR Reduction (vph)	58	92	196	0	0	0
Lane Group Flow (vph)	163	10	491	0	512	368
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	10.1	10.1	55.6		81.9	81.9
Effective Green, g (s)	10.1	10.1	55.6		81.9	81.9
Actuated g/C Ratio	0.10	0.10	0.56		0.82	0.82
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	336	145	1778		746	2898
v/s Ratio Prot	c0.05		0.15		c0.15	0.10
v/s Ratio Perm		0.01			c0.41	
v/c Ratio	0.48	0.07	0.28		0.69	0.13
Uniform Delay, d1	42.5	40.7	11.6		4.4	1.8
Progression Factor	1.00	1.00	1.00		3.05	0.91
Incremental Delay, d2	1.1	0.2	0.4		2.4	0.1
Delay (s)	43.6	40.9	12.0		15.9	1.7
Level of Service	D	D	B		B	A
Approach Delay (s)	42.7		12.0			10.0
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	45
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	362	8	308	22	13	8	96	196	4	6	355	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	393	9	335	24	14	9	104	213	4	7	386	153
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	67.3	12.5	26.3	28.6
HCM LOS	F	B	D	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	33%	0%	53%	63%	0%	2%	0%
Vol Thru, %	67%	0%	1%	37%	0%	98%	0%
Vol Right, %	0%	100%	45%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	292	4	678	35	8	361	141
LT Vol	196	0	8	13	0	355	0
Through Vol	0	4	308	0	8	0	141
RT Vol	96	0	362	22	0	6	0
Lane Flow Rate	317	4	737	38	9	392	153
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.693	0.008	1	0.096	0.019	0.811	0.287
Departure Headway (Hd)	7.856	6.993	7.176	9.051	8.035	7.439	6.732
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	460	513	509	395	444	487	535
Service Time	5.588	4.725	5.235	6.818	5.802	5.171	4.463
HCM Lane V/C Ratio	0.689	0.008	1.448	0.096	0.02	0.805	0.286
HCM Control Delay	26.5	9.8	67.3	12.8	11	35	12.2
HCM Lane LOS	D	A	F	B	B	D	B
HCM 95th-tile Q	5.2	0	13.7	0.3	0.1	7.7	1.2

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	376	1504	142	103	553	62	94	560	100	253	783	372
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	2	3	0	1	2	0	1	2	0	1	2	1
Cap, veh/h	490	1860	175	143	1015	113	127	737	132	299	1252	758
Arrive On Green	0.05	0.12	0.12	0.08	0.31	0.31	0.07	0.24	0.24	0.17	0.34	0.34
Sat Flow, veh/h	3442	5032	473	1774	3294	367	1774	3079	550	1774	3725	1583
Grp Volume(v), veh/h	409	1210	579	112	339	329	102	368	350	275	851	404
Grp Sat Flow(s),veh/h/ln	1721	1863	1779	1774	1863	1798	1774	1863	1766	1774	1863	1583
Q Serve(g_s), s	13.3	36.0	36.1	7.0	17.4	17.5	6.4	21.1	21.2	17.2	22.2	20.2
Cycle Q Clear(g_c), s	13.3	36.0	36.1	7.0	17.4	17.5	6.4	21.1	21.2	17.2	22.2	20.2
Prop In Lane	1.00		0.27	1.00		0.20	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	490	1377	658	143	574	554	127	446	423	299	1252	758
V/C Ratio(X)	0.83	0.88	0.88	0.78	0.59	0.59	0.80	0.83	0.83	0.92	0.68	0.53
Avail Cap(c_a), veh/h	641	1387	662	252	611	590	157	446	423	299	1252	758
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	47.0	47.1	50.9	33.0	33.1	51.6	40.7	40.7	46.2	32.2	20.6
Incr Delay (d2), s/veh	0.7	0.7	1.4	8.9	1.4	1.4	21.0	15.9	16.9	32.2	3.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	6.3	18.5	17.8	3.6	8.5	8.3	3.7	12.0	11.5	10.5	10.9	8.3
Lane Grp Delay (d), s/veh	53.2	47.7	48.5	59.7	34.4	34.5	72.6	56.6	57.6	78.3	35.2	23.3
Lane Grp LOS	D	D	D	E	C	C	E	E	E	E	D	C
Approach Vol, veh/h		2198			780			820			1530	
Approach Delay, s/veh		48.9			38.1			59.0			39.8	
Approach LOS		D			D			E			D	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	20.1	45.7		13.1	38.8		12.1	31.0		23.0	41.9	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s	21.0	42.0		16.0	37.0		10.0	27.0		19.0	36.0	
Max Q Clear Time (g_c+I1), s	15.3	38.1		9.0	19.5		8.4	23.2		19.2	24.2	
Green Ext Time (p_c), s	0.8	3.6		0.1	14.3		0.0	3.1		0.0	8.5	

Intersection Summary												
HCM 2010 Ctrl Delay			46.3									
HCM 2010 LOS			D									

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1008	152	61	2713	599	94
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	190.0	186.3	186.3	186.3	186.3
Lanes	2	0	1	3	2	1
Cap, veh/h	2131	320	279	3761	895	412
Arrive On Green	0.67	0.67	0.67	0.67	0.26	0.26
Sat Flow, veh/h	3166	476	438	5588	3442	1583
Grp Volume(v), veh/h	644	617	66	2949	651	102
Grp Sat Flow(s),veh/h/ln	1863	1779	438	1863	1721	1583
Q Serve(g_s), s	20.6	20.7	10.6	43.6	20.6	6.1
Cycle Q Clear(g_c), s	20.6	20.7	31.3	43.6	20.6	6.1
Prop In Lane		0.27	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1254	1197	279	3761	895	412
V/C Ratio(X)	0.51	0.52	0.24	0.78	0.73	0.25
Avail Cap(c_a), veh/h	1265	1208	282	3795	895	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	9.7	9.8	17.6	13.5	40.3	34.9
Incr Delay (d2), s/veh	0.3	0.4	0.0	0.1	5.2	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	8.7	8.5	1.1	18.3	9.8	2.6
Lane Grp Delay (d), s/veh	10.1	10.1	17.6	13.6	45.4	36.3
Lane Grp LOS	B	B	B	B	D	D
Approach Vol, veh/h	1261			3015	753	
Approach Delay, s/veh	10.1			13.7	44.2	
Approach LOS	B			B	D	

Timer						
Assigned Phs	4			8		
Phs Duration (G+Y+Rc), s	84.3			84.3		
Change Period (Y+Rc), s	4.0			4.0		
Max Green Setting (Gmax), s	81.0			81.0		
Max Q Clear Time (g_c+I1), s	22.7			45.6		
Green Ext Time (p_c), s	56.4			34.7		

Intersection Summary						
HCM 2010 Ctrl Delay			17.4			
HCM 2010 LOS			B			

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	812	154	113	2093	21	801	15	134	10	5	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3455		1770	3534		1681	1688	1583	1770	1666	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3455		1770	3534		1681	1688	1583	1770	1666	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	883	167	123	2275	23	871	16	146	11	5	12
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	112	0	12	0
Lane Group Flow (vph)	23	1040	0	123	2298	0	444	443	34	11	5	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	4.8	64.4		13.6	73.2		21.9	21.9	21.9	4.2	4.2	
Effective Green, g (s)	4.8	64.4		13.6	73.2		21.9	21.9	21.9	4.2	4.2	
Actuated g/C Ratio	0.04	0.54		0.11	0.61		0.18	0.18	0.18	0.03	0.03	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	70	1852		200	2153		306	307	288	61	58	
v/s Ratio Prot	0.01	0.30		c0.07	c0.65		c0.26	0.26		c0.01	0.00	
v/s Ratio Perm									0.02			
v/c Ratio	0.33	0.56		0.61	1.07		1.45	1.44	0.12	0.18	0.09	
Uniform Delay, d1	56.1	18.5		50.8	23.4		49.1	49.1	41.0	56.3	56.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.7	0.4		5.5	40.2		220.4	216.9	0.8	1.4	0.7	
Delay (s)	58.8	18.9		56.3	63.7		269.5	266.0	41.9	57.7	56.8	
Level of Service	E	B		E	E		F	F	D	E	E	
Approach Delay (s)		19.7			63.3			235.8			57.2	
Approach LOS		B			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	92.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	101.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	72	0	187	2	0	0	341	860	10	2	127	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	304	0	249	121	293	0	408	2588	30	4	1520	216
Arrive On Green	0.16	0.00	0.16	0.16	0.00	0.00	0.46	1.00	1.00	0.00	0.48	0.48
Sat Flow, veh/h	1412	0	1583	1174	1863	0	1774	3675	43	1774	3191	454
Grp Volume(v), veh/h	78	0	203	2	0	0	371	474	472	2	80	78
Grp Sat Flow(s),veh/h/ln	1412	0	1583	1174	1863	0	1774	1863	1855	1774	1863	1783
Q Serve(g_s), s	4.3	0.0	10.9	0.1	0.0	0.0	17.1	0.0	0.0	0.1	2.1	2.1
Cycle Q Clear(g_c), s	4.3	0.0	10.9	11.1	0.0	0.0	17.1	0.0	0.0	0.1	2.1	2.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.02	1.00		0.25
Lane Grp Cap(c), veh/h	304	0	249	121	293	0	408	1312	1306	4	887	849
V/C Ratio(X)	0.26	0.00	0.82	0.02	0.00	0.00	0.91	0.36	0.36	0.52	0.09	0.09
Avail Cap(c_a), veh/h	403	0	360	203	423	0	947	1312	1306	121	887	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	0.0	35.9	41.2	0.0	0.0	22.9	0.0	0.0	43.9	12.6	12.6
Incr Delay (d2), s/veh	0.4	0.0	9.1	0.1	0.0	0.0	7.3	0.7	0.7	79.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.6	0.0	5.0	0.0	0.0	0.0	6.8	0.3	0.3	0.1	1.0	0.9
Lane Grp Delay (d), s/veh	33.5	0.0	45.0	41.3	0.0	0.0	30.2	0.7	0.7	123.8	12.8	12.8
Lane Grp LOS	C		D	D			C	A	A	F	B	B
Approach Vol, veh/h		281			2			1317			160	
Approach Delay, s/veh		41.8			41.3			9.0			14.2	
Approach LOS		D			D			A			B	

Timer							
Assigned Phs		4		8	5	2		1	6	
Phs Duration (G+Y+Rc), s		17.8		17.8	24.2	66.0		4.2	45.9	
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s		20.0		20.0	47.0	62.0		6.0	21.0	
Max Q Clear Time (g_c+I1), s		12.9		13.1	19.1	2.0		2.1	4.1	
Green Ext Time (p_c), s		0.8		0.8	1.2	9.2		0.0	6.6	

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	430	846	354	92	99	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.93	0.85	0.97		1.00	1.00
Flt Protected	0.98	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3263	1441	3430		1770	3539
Flt Permitted	0.98	1.00	1.00		0.41	1.00
Satd. Flow (perm)	3263	1441	3430		755	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	467	920	385	100	108	238
RTOR Reduction (vph)	239	323	16	0	0	0
Lane Group Flow (vph)	688	137	469	0	108	238
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	29.0	29.0	50.9		63.0	63.0
Effective Green, g (s)	29.0	29.0	50.9		63.0	63.0
Actuated g/C Ratio	0.29	0.29	0.51		0.63	0.63
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	946	417	1745		557	2229
v/s Ratio Prot	c0.21		c0.14		c0.02	0.07
v/s Ratio Perm		0.10			0.11	
v/c Ratio	0.73	0.33	0.27		0.19	0.11
Uniform Delay, d1	31.9	27.9	14.0		7.7	7.3
Progression Factor	1.00	1.00	1.00		0.93	0.91
Incremental Delay, d2	2.8	0.5	0.4		0.2	0.1
Delay (s)	34.8	28.3	14.3		7.3	6.7
Level of Service	C	C	B		A	A
Approach Delay (s)	32.6		14.3			6.9
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	37.9
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	136	8	161	2	0	7	275	319	14	6	262	346
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	148	9	175	2	0	8	299	347	15	7	285	376
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	23.4	11.1	65.4	18.3
HCM LOS	C	B	F	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	46%	0%	45%	100%	0%	2%	0%
Vol Thru, %	54%	0%	3%	0%	0%	98%	0%
Vol Right, %	0%	100%	53%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	594	14	305	2	7	268	346
LT Vol	319	0	8	0	0	262	0
Through Vol	0	14	161	0	7	0	346
RT Vol	275	0	136	2	0	6	0
Lane Flow Rate	646	15	332	2	8	291	376
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	1	0.026	0.664	0.006	0.017	0.55	0.636
Departure Headway (Hd)	7.114	6.161	7.212	9.209	8.009	6.803	6.091
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	510	579	504	389	447	530	594
Service Time	4.872	3.919	5.237	6.961	5.761	4.537	3.825
HCM Lane V/C Ratio	1.267	0.026	0.659	0.005	0.018	0.549	0.633
HCM Control Delay	66.7	9.1	23.4	12	10.9	17.6	18.9
HCM Lane LOS	F	A	C	B	B	C	C
HCM 95th-tile Q	13.7	0.1	4.8	0	0.1	3.3	4.5

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	324	491	62	41	1458	139	223	622	44	122	462	472
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	2	3	0	1	2	0	1	2	0	1	2	1
Cap, veh/h	416	2611	323	75	1531	144	240	727	52	135	567	432
Arrive On Green	0.04	0.18	0.18	0.04	0.46	0.46	0.14	0.21	0.21	0.08	0.15	0.15
Sat Flow, veh/h	3442	4879	603	1774	3353	316	1774	3438	244	1774	3725	1583
Grp Volume(v), veh/h	352	406	195	45	873	863	242	366	358	133	502	513
Grp Sat Flow(s),veh/h/ln	1721	1863	1756	1774	1863	1807	1774	1863	1820	1774	1863	1583
Q Serve(g_s), s	12.0	11.0	11.2	2.9	54.0	54.0	16.0	22.8	22.9	8.9	15.6	18.0
Cycle Q Clear(g_c), s	12.0	11.0	11.2	2.9	54.0	54.0	16.0	22.8	22.9	8.9	15.6	18.0
Prop In Lane	1.00		0.34	1.00		0.17	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	416	1994	940	75	850	825	240	394	385	135	567	432
V/C Ratio(X)	0.85	0.20	0.21	0.60	1.03	1.05	1.01	0.93	0.93	0.99	0.89	1.19
Avail Cap(c_a), veh/h	466	1994	940	240	850	825	240	394	385	135	567	432
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.7	27.2	27.3	55.7	32.1	32.1	51.1	45.8	45.8	54.6	49.1	43.0
Incr Delay (d2), s/veh	10.5	0.0	0.1	7.5	37.9	44.1	60.3	30.7	31.4	72.8	18.2	105.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	6.2	5.6	5.4	1.5	34.0	34.4	11.4	14.3	14.1	6.8	9.0	25.6
Lane Grp Delay (d), s/veh	66.2	27.2	27.4	63.2	70.0	76.2	111.5	76.5	77.2	127.4	67.3	148.2
Lane Grp LOS	E	C	C	E	F	F	F	E	E	F	E	F
Approach Vol, veh/h		953			1781			966			1148	
Approach Delay, s/veh		41.6			72.9			85.5			110.4	
Approach LOS		D			E			F			F	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	18.3	67.3		9.0	58.0		20.0	29.0		13.0	22.0	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s	16.0	54.0		16.0	54.0		16.0	25.0		9.0	18.0	
Max Q Clear Time (g_c+I1), s	14.0	13.2		4.9	56.0		18.0	24.9		10.9	20.0	
Green Ext Time (p_c), s	0.3	27.4		0.0	0.0		0.0	0.1		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	78.1
HCM 2010 LOS	E

Notes

Intersection	
Intersection Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	7	12	873	56	103	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	13	949	61	112	152

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1279	505	0	0	1010	0
Stage 1	979	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	158	512	-	-	682	-
Stage 1	325	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	132	512	-	-	682	-
Mov Capacity-2 Maneuver	246	-	-	-	-	-
Stage 1	325	-	-	-	-	-
Stage 2	606	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	4.8
HCM LOS	C		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	366	682	-
HCM Lane V/C Ratio	-	-	0.056	0.164	-
HCM Control Delay (s)	-	-	15.4	11.312	-
HCM Lane LOS			C	B	
HCM 95th %tile Q(veh)	-	-	0.179	0.584	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	2117	400	71	1183	289	93
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	190.0	186.3	186.3	186.3	186.3
Lanes	2	0	1	3	2	1
Cap, veh/h	2453	449	71	4471	459	211
Arrive On Green	0.80	0.80	0.80	0.80	0.13	0.13
Sat Flow, veh/h	3066	561	103	5588	3442	1583
Grp Volume(v), veh/h	1368	1368	77	1286	314	101
Grp Sat Flow(s),veh/h/ln	1863	1764	103	1863	1721	1583
Q Serve(g_s), s	66.4	83.0	13.0	7.2	10.4	7.1
Cycle Q Clear(g_c), s	66.4	83.0	96.0	7.2	10.4	7.1
Prop In Lane		0.32	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1490	1411	71	4471	459	211
V/C Ratio(X)	0.92	0.97	1.08	0.29	0.68	0.48
Avail Cap(c_a), veh/h	1490	1411	71	4471	459	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.88	0.88	1.00	1.00
Uniform Delay (d), s/veh	9.0	10.7	59.0	3.1	49.6	48.1
Incr Delay (d2), s/veh	9.4	17.2	123.8	0.0	8.0	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	28.2	35.2	4.7	2.6	5.1	3.3
Lane Grp Delay (d), s/veh	18.4	27.9	182.7	3.1	57.6	55.7
Lane Grp LOS	B	C	F	A	E	E
Approach Vol, veh/h	2736			1363	415	
Approach Delay, s/veh	23.1			13.3	57.2	
Approach LOS	C			B	E	

Timer						
Assigned Phs	4			8		
Phs Duration (G+Y+Rc), s	100.0			100.0		
Change Period (Y+Rc), s	4.0			4.0		
Max Green Setting (Gmax), s	96.0			96.0		
Max Q Clear Time (g_c+I1), s	85.0			98.0		
Green Ext Time (p_c), s	11.0			0.0		

Intersection Summary			
HCM 2010 Ctrl Delay			23.3
HCM 2010 LOS			C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	33	1916	176	186	1029	11	184	12	218	13	7	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3495		1770	3534		1681	1695	1583	1770	1647	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3495		1770	3534		1681	1695	1583	1770	1647	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	2083	191	202	1118	12	200	13	237	14	8	27
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	212	0	26	0
Lane Group Flow (vph)	36	2269	0	202	1130	0	106	107	25	14	9	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	5.5	67.2		19.5	81.2		12.7	12.7	12.7	4.6	4.6	
Effective Green, g (s)	5.5	67.2		19.5	81.2		12.7	12.7	12.7	4.6	4.6	
Actuated g/C Ratio	0.05	0.56		0.16	0.68		0.11	0.11	0.11	0.04	0.04	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	81	1957		287	2391		177	179	167	67	63	
v/s Ratio Prot	0.02	c0.65		c0.11	0.32		0.06	c0.06		c0.01	0.01	
v/s Ratio Perm									0.02			
v/c Ratio	0.44	1.16		0.70	0.47		0.60	0.60	0.15	0.21	0.14	
Uniform Delay, d1	55.8	26.4		47.5	9.2		51.2	51.2	48.7	55.9	55.8	
Progression Factor	1.13	0.68		0.93	1.99		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	73.7		6.9	0.1		14.1	13.9	1.9	1.6	1.0	
Delay (s)	64.1	91.8		51.2	18.5		65.3	65.1	50.6	57.5	56.8	
Level of Service	E	F		D	B		E	E	D	E	E	
Approach Delay (s)		91.3			23.4			57.5			57.0	
Approach LOS		F			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	65.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	79	1	456	1	0	0	166	214	2	0	397	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	587	1	561	140	661	0	223	2027	17	2	1124	235
Arrive On Green	0.35	0.35	0.35	0.35	0.00	0.00	0.08	0.37	0.37	0.00	0.38	0.38
Sat Flow, veh/h	1412	3	1581	897	1863	0	1774	3688	32	1774	2990	625
Grp Volume(v), veh/h	86	0	497	1	0	0	180	118	117	0	268	255
Grp Sat Flow(s),veh/h/ln	1412	0	1584	897	1863	0	1774	1863	1857	1774	1863	1752
Q Serve(g_s), s	3.5	0.0	24.7	0.1	0.0	0.0	8.3	3.5	3.5	0.0	8.8	8.9
Cycle Q Clear(g_c), s	3.5	0.0	24.7	24.8	0.0	0.0	8.3	3.5	3.5	0.0	8.8	8.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.02	1.00		0.36
Lane Grp Cap(c), veh/h	587	0	562	140	661	0	223	1024	1021	2	700	659
V/C Ratio(X)	0.15	0.00	0.88	0.01	0.00	0.00	0.81	0.11	0.12	0.00	0.38	0.39
Avail Cap(c_a), veh/h	727	0	719	229	846	0	466	1024	1021	85	700	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.94	0.94	0.94	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	0.0	25.4	37.0	0.0	0.0	37.3	13.0	13.0	0.0	19.0	19.1
Incr Delay (d2), s/veh	0.1	0.0	10.5	0.0	0.0	0.0	6.3	0.2	0.2	0.0	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.2	0.0	11.2	0.0	0.0	0.0	4.3	1.6	1.6	0.0	4.3	4.1
Lane Grp Delay (d), s/veh	18.7	0.0	35.9	37.1	0.0	0.0	43.6	13.2	13.2	0.0	20.6	20.8
Lane Grp LOS	B		D	D			D	B	B		C	C
Approach Vol, veh/h		583			1			415			523	
Approach Delay, s/veh		33.4			37.1			26.4			20.7	
Approach LOS		C			D			C			C	

Timer												
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		33.7			33.7		14.5	50.0		0.0	35.5	
Change Period (Y+Rc), s		4.0			4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s		38.0			38.0		22.0	46.0		4.0	28.0	
Max Q Clear Time (g_c+I1), s		26.7			26.8		10.3	5.5		0.0	10.9	
Green Ext Time (p_c), s		2.9			2.9		0.4	5.3		0.0	4.3	

Intersection Summary	
HCM 2010 Ctrl Delay	27.1
HCM 2010 LOS	C

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	141	159	226	407	499	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.95	0.85	0.90		1.00	1.00
Flt Protected	0.97	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3330	1441	3198		1770	3539
Flt Permitted	0.97	1.00	1.00		0.31	1.00
Satd. Flow (perm)	3330	1441	3198		578	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	153	173	246	442	542	377
RTOR Reduction (vph)	60	93	206	0	0	0
Lane Group Flow (vph)	162	11	482	0	542	377
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	10.1	10.1	53.4		81.9	81.9
Effective Green, g (s)	10.1	10.1	53.4		81.9	81.9
Actuated g/C Ratio	0.10	0.10	0.53		0.82	0.82
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	336	145	1707		765	2898
v/s Ratio Prot	c0.05		0.15		c0.17	0.11
v/s Ratio Perm		0.01			c0.41	
v/c Ratio	0.48	0.07	0.28		0.71	0.13
Uniform Delay, d1	42.5	40.7	12.8		5.1	1.8
Progression Factor	1.00	1.00	1.00		2.59	0.92
Incremental Delay, d2	1.1	0.2	0.4		2.8	0.1
Delay (s)	43.6	40.9	13.2		16.0	1.8
Level of Service	D	D	B		B	A
Approach Delay (s)	42.7		13.2			10.1
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	44.9
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	363	8	308	22	13	8	96	196	4	6	355	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	395	9	335	24	14	9	104	213	4	7	386	162
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	67.3	12.5	26.4	28.4
HCM LOS	F	B	D	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	33%	0%	53%	63%	0%	2%	0%
Vol Thru, %	67%	0%	1%	37%	0%	98%	0%
Vol Right, %	0%	100%	45%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	292	4	679	35	8	361	149
LT Vol	196	0	8	13	0	355	0
Through Vol	0	4	308	0	8	0	149
RT Vol	96	0	363	22	0	6	0
Lane Flow Rate	317	4	738	38	9	392	162
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.693	0.008	1	0.096	0.019	0.811	0.303
Departure Headway (Hd)	7.862	6.999	7.181	9.059	8.043	7.439	6.732
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	460	512	509	395	444	487	534
Service Time	5.594	4.731	5.241	6.826	5.81	5.171	4.463
HCM Lane V/C Ratio	0.689	0.008	1.45	0.096	0.02	0.805	0.303
HCM Control Delay	26.6	9.8	67.3	12.8	11	35	12.4
HCM Lane LOS	D	A	F	B	B	D	B
HCM 95th-tile Q	5.2	0	13.7	0.3	0.1	7.7	1.3

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	401	1521	142	103	555	62	94	560	100	253	783	375
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	2	3	0	1	2	0	1	2	0	1	2	1
Cap, veh/h	516	1864	173	143	991	110	127	736	132	299	1251	769
Arrive On Green	0.05	0.12	0.12	0.08	0.30	0.30	0.07	0.24	0.24	0.17	0.34	0.34
Sat Flow, veh/h	3442	5037	468	1774	3296	365	1774	3079	550	1774	3725	1583
Grp Volume(v), veh/h	436	1222	585	112	340	330	102	368	350	275	851	408
Grp Sat Flow(s),veh/h/ln	1721	1863	1780	1774	1863	1798	1774	1863	1766	1774	1863	1583
Q Serve(g_s), s	14.2	36.4	36.5	7.0	17.6	17.7	6.4	21.1	21.2	17.2	22.2	20.1
Cycle Q Clear(g_c), s	14.2	36.4	36.5	7.0	17.6	17.7	6.4	21.1	21.2	17.2	22.2	20.1
Prop In Lane	1.00		0.26	1.00		0.20	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	516	1378	659	143	560	541	127	446	422	299	1251	769
V/C Ratio(X)	0.84	0.89	0.89	0.78	0.61	0.61	0.80	0.83	0.83	0.92	0.68	0.53
Avail Cap(c_a), veh/h	640	1386	662	251	611	589	157	446	422	299	1251	769
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	47.2	47.3	50.9	33.8	33.8	51.6	40.7	40.8	46.2	32.3	20.1
Incr Delay (d2), s/veh	0.8	0.7	1.6	8.9	1.5	1.6	21.0	15.9	16.9	32.3	3.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	6.7	18.7	18.1	3.6	8.6	8.3	3.7	12.0	11.5	10.5	10.9	8.3
Lane Grp Delay (d), s/veh	53.2	48.0	48.8	59.8	35.3	35.4	72.6	56.6	57.7	78.5	35.3	22.7
Lane Grp LOS	D	D	D	E	D	D	E	E	E	E	D	C
Approach Vol, veh/h		2243			782			820			1534	
Approach Delay, s/veh		49.2			38.8			59.1			39.7	
Approach LOS		D			D			E			D	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	20.9	45.8		13.1	38.0		12.1	31.0		23.0	41.9	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s	21.0	42.0		16.0	37.0		10.0	27.0		19.0	36.0	
Max Q Clear Time (g_c+I1), s	16.2	38.5		9.0	19.7		8.4	23.2		19.2	24.2	
Green Ext Time (p_c), s	0.7	3.2		0.1	14.2		0.0	3.1		0.0	8.5	

Intersection Summary	
HCM 2010 Ctrl Delay	46.5
HCM 2010 LOS	D

Notes

Intersection	
Intersection Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	61	105	293	7	13	477
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	114	318	8	14	518

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	610	163	0	0	326	0
Stage 1	322	-	-	-	-	-
Stage 2	288	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	426	853	-	-	1230	-
Stage 1	707	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	421	853	-	-	1230	-
Mov Capacity-2 Maneuver	519	-	-	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0.2
HCM LOS	B		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	690	1230	-
HCM Lane V/C Ratio	-	-	0.261	0.011	-
HCM Control Delay (s)	-	-	12.1	7.961	-
HCM Lane LOS			B	A	
HCM 95th %tile Q(veh)	-	-	1.045	0.035	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1269	294	241	3013	646	131
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	190.0	186.3	186.3	186.3	186.3
Lanes	2	0	1	3	2	1
Cap, veh/h	2181	495	205	4145	660	303
Arrive On Green	0.74	0.74	0.74	0.74	0.19	0.19
Sat Flow, veh/h	2941	667	288	5588	3442	1583
Grp Volume(v), veh/h	862	837	262	3275	702	142
Grp Sat Flow(s),veh/h/ln	1863	1745	288	1863	1721	1583
Q Serve(g_s), s	26.7	28.6	60.4	43.9	23.0	9.6
Cycle Q Clear(g_c), s	26.7	28.6	89.0	43.9	23.0	9.6
Prop In Lane		0.38	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1382	1294	205	4145	660	303
V/C Ratio(X)	0.62	0.65	1.28	0.79	1.06	0.47
Avail Cap(c_a), veh/h	1382	1294	205	4145	660	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	7.5	7.7	38.6	9.7	48.5	43.1
Incr Delay (d2), s/veh	0.9	1.1	129.2	0.1	53.4	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	10.9	11.1	13.7	17.3	15.1	4.3
Lane Grp Delay (d), s/veh	8.3	8.8	167.8	9.8	101.9	48.2
Lane Grp LOS	A	A	F	A	F	D
Approach Vol, veh/h	1699			3537	844	
Approach Delay, s/veh	8.6			21.5	92.8	
Approach LOS	A			C	F	

Timer						
Assigned Phs	4			8		
Phs Duration (G+Y+Rc), s	93.0			93.0		
Change Period (Y+Rc), s	4.0			4.0		
Max Green Setting (Gmax), s	89.0			89.0		
Max Q Clear Time (g_c+I1), s	30.6			91.0		
Green Ext Time (p_c), s	58.0			0.0		

Intersection Summary						
HCM 2010 Ctrl Delay			27.8			
HCM 2010 LOS			C			

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	1130	130	157	2540	22	839	15	191	10	5	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3485		1770	3535		1681	1688	1583	1770	1666	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3485		1770	3535		1681	1688	1583	1770	1666	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	1228	141	171	2761	24	912	16	208	11	5	12
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	153	0	12	0
Lane Group Flow (vph)	24	1363	0	171	2785	0	465	463	55	11	5	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	4.9	62.0		17.1	74.2		20.7	20.7	20.7	4.2	4.2	
Effective Green, g (s)	4.9	62.0		17.1	74.2		20.7	20.7	20.7	4.2	4.2	
Actuated g/C Ratio	0.04	0.52		0.14	0.62		0.17	0.17	0.17	0.04	0.04	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	72	1800		252	2185		289	291	273	61	58	
v/s Ratio Prot	0.01	0.39		c0.10	c0.79		c0.28	0.27		c0.01	0.00	
v/s Ratio Perm									0.03			
v/c Ratio	0.33	0.76		0.68	1.27		1.61	1.59	0.20	0.18	0.09	
Uniform Delay, d1	56.0	23.0		48.8	22.9		49.6	49.6	42.6	56.2	56.1	
Progression Factor	1.09	0.84		0.90	1.33		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	1.4		3.7	125.4		289.6	281.7	1.7	1.4	0.7	
Delay (s)	63.2	20.8		47.7	155.9		339.3	331.4	44.2	57.7	56.8	
Level of Service	E	C		D	F		F	F	D	E	E	
Approach Delay (s)		21.5			149.6			282.0			57.1	
Approach LOS		C			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	144.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	114.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	271	123	204	15	169	19	364	1009	17	16	249	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	413	231	384	277	602	69	426	1792	29	27	495	421
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.48	0.98	0.98	0.02	0.27	0.27
Sat Flow, veh/h	1172	632	1046	1021	1642	187	1774	3655	60	1774	1863	1583
Grp Volume(v), veh/h	295	0	356	16	0	205	396	559	556	17	271	347
Grp Sat Flow(s),veh/h/ln	1172	0	1678	1021	0	1830	1774	1863	1852	1774	1863	1583
Q Serve(g_s), s	22.5	0.0	16.0	1.2	0.0	7.5	19.7	1.4	1.4	0.9	11.7	19.3
Cycle Q Clear(g_c), s	30.0	0.0	16.0	17.2	0.0	7.5	19.7	1.4	1.4	0.9	11.7	19.3
Prop In Lane	1.00		0.62	1.00		0.10	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	413	0	615	277	0	671	426	913	908	27	495	421
V/C Ratio(X)	0.71	0.00	0.58	0.06	0.00	0.31	0.93	0.61	0.61	0.63	0.55	0.83
Avail Cap(c_a), veh/h	458	0	680	316	0	741	567	913	908	76	495	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	0.0	23.9	30.8	0.0	21.2	23.7	0.5	0.5	45.9	29.6	32.4
Incr Delay (d2), s/veh	4.7	0.0	1.0	0.1	0.0	0.3	17.2	2.7	2.8	21.5	4.3	16.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	7.1	0.0	6.8	0.3	0.0	3.4	9.0	0.9	0.9	0.6	6.0	9.6
Lane Grp Delay (d), s/veh	36.6	0.0	24.9	30.9	0.0	21.5	40.8	3.2	3.2	67.4	33.9	49.1
Lane Grp LOS	D		C	C		C	D	A	A	E	C	D
Approach Vol, veh/h		651			221			1511			635	
Approach Delay, s/veh		30.2			22.1			13.1			43.1	
Approach LOS		C			C			B			D	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		38.4			38.4		26.5	50.0		5.4	28.9	
Change Period (Y+Rc), s		4.0			4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s		38.0			38.0		30.0	46.0		4.0	20.0	
Max Q Clear Time (g_c+I1), s		32.0			19.2		21.7	3.4		2.9	21.3	
Green Ext Time (p_c), s		2.4			4.4		0.8	17.2		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	23.7
HCM 2010 LOS	C

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	443	844	356	95	99	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.93	0.85	0.97		1.00	1.00
Flt Protected	0.98	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3266	1441	3428		1770	3539
Flt Permitted	0.98	1.00	1.00		0.40	1.00
Satd. Flow (perm)	3266	1441	3428		746	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	482	917	387	103	108	245
RTOR Reduction (vph)	228	309	17	0	0	0
Lane Group Flow (vph)	713	149	473	0	108	245
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	29.7	29.7	50.1		62.3	62.3
Effective Green, g (s)	29.7	29.7	50.1		62.3	62.3
Actuated g/C Ratio	0.30	0.30	0.50		0.62	0.62
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	970	427	1717		548	2204
v/s Ratio Prot	c0.22		c0.14		c0.02	0.07
v/s Ratio Perm		0.10			0.11	
v/c Ratio	0.73	0.35	0.28		0.20	0.11
Uniform Delay, d1	31.6	27.6	14.4		8.0	7.6
Progression Factor	1.00	1.00	1.00		1.74	1.69
Incremental Delay, d2	2.9	0.5	0.4		0.2	0.1
Delay (s)	34.5	28.1	14.8		14.0	13.0
Level of Service	C	C	B		B	B
Approach Delay (s)	32.4		14.8			13.3
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	38.4
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	132	8	166	2	0	7	283	329	14	6	270	355
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	143	9	180	2	0	8	308	358	15	7	293	386
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	23.6	11.2	65.5	19
HCM LOS	C	B	F	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	46%	0%	43%	100%	0%	2%	0%
Vol Thru, %	54%	0%	3%	0%	0%	98%	0%
Vol Right, %	0%	100%	54%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	612	14	306	2	7	276	355
LT Vol	329	0	8	0	0	270	0
Through Vol	0	14	166	0	7	0	355
RT Vol	283	0	132	2	0	6	0
Lane Flow Rate	665	15	333	2	8	300	386
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	1	0.026	0.667	0.006	0.017	0.568	0.654
Departure Headway (Hd)	7.146	6.193	7.218	9.242	8.042	6.811	6.099
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	512	576	502	387	445	531	594
Service Time	4.905	3.952	5.243	6.995	5.795	4.544	3.833
HCM Lane V/C Ratio	1.299	0.026	0.663	0.005	0.018	0.565	0.65
HCM Control Delay	66.8	9.1	23.6	12.1	10.9	18.2	19.7
HCM Lane LOS	F	A	C	B	B	C	C
HCM 95th-tile Q	13.7	0.1	4.9	0	0.1	3.5	4.8

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	330	504	64	42	1485	143	230	641	45	126	476	453
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	2	3	0	1	2	0	1	2	0	1	2	1
Cap, veh/h	422	2606	328	76	1527	145	239	726	51	135	566	435
Arrive On Green	0.04	0.18	0.18	0.04	0.46	0.46	0.13	0.21	0.21	0.08	0.15	0.15
Sat Flow, veh/h	3442	4868	613	1774	3351	318	1774	3441	242	1774	3725	1583
Grp Volume(v), veh/h	359	417	201	46	889	880	250	377	369	137	517	492
Grp Sat Flow(s),veh/h/ln	1721	1863	1755	1774	1863	1807	1774	1863	1820	1774	1863	1583
Q Serve(g_s), s	12.3	11.4	11.6	3.0	54.0	54.0	16.0	23.7	23.8	9.0	16.2	18.0
Cycle Q Clear(g_c), s	12.3	11.4	11.6	3.0	54.0	54.0	16.0	23.7	23.8	9.0	16.2	18.0
Prop In Lane	1.00		0.35	1.00		0.18	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	422	1995	939	76	849	823	239	393	384	135	566	435
V/C Ratio(X)	0.85	0.21	0.21	0.61	1.05	1.07	1.04	0.96	0.96	1.02	0.91	1.13
Avail Cap(c_a), veh/h	465	1995	939	239	849	823	239	393	384	135	566	435
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.8	27.3	27.4	55.8	32.3	32.3	51.3	46.3	46.3	54.8	49.5	43.0
Incr Delay (d2), s/veh	8.5	0.0	0.1	7.6	44.1	51.6	70.1	36.4	37.1	82.1	21.7	84.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	6.2	5.8	5.6	1.6	35.4	36.0	12.0	15.4	15.1	7.2	9.5	23.2
Lane Grp Delay (d), s/veh	64.2	27.4	27.5	63.3	76.4	83.8	121.4	82.6	83.4	136.9	71.2	127.5
Lane Grp LOS	E	C	C	E	F	F	F	F	F	F	E	F
Approach Vol, veh/h		977			1815			996			1146	
Approach Delay, s/veh		40.9			79.7			92.6			103.2	
Approach LOS		D			E			F			F	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	18.5	67.5		9.1	58.0		20.0	29.0		13.0	22.0	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s	16.0	54.0		16.0	54.0		16.0	25.0		9.0	18.0	
Max Q Clear Time (g_c+I1), s	14.3	13.6		5.0	56.0		18.0	25.8		11.0	20.0	
Green Ext Time (p_c), s	0.2	28.0		0.0	0.0		0.0	0.0		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	80.1
HCM 2010 LOS	F

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	2538	427	89	1502	325	128
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	190.0	186.3	186.3	186.3	186.3
Lanes	2	0	1	3	2	1
Cap, veh/h	2500	408	60	4471	459	211
Arrive On Green	0.80	0.80	0.80	0.80	0.13	0.13
Sat Flow, veh/h	3125	510	63	5588	3442	1583
Grp Volume(v), veh/h	1611	1612	97	1633	353	139
Grp Sat Flow(s),veh/h/ln	1863	1773	63	1863	1721	1583
Q Serve(g_s), s	96.0	96.0	0.0	9.9	11.9	10.0
Cycle Q Clear(g_c), s	96.0	96.0	96.0	9.9	11.9	10.0
Prop In Lane		0.29	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1490	1418	60	4471	459	211
V/C Ratio(X)	1.08	1.14	1.62	0.37	0.77	0.66
Avail Cap(c_a), veh/h	1490	1418	60	4471	459	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.72	0.72	1.00	1.00
Uniform Delay (d), s/veh	12.0	12.0	60.0	3.4	50.2	49.4
Incr Delay (d2), s/veh	48.7	70.6	326.0	0.0	11.7	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	55.3	61.3	7.3	3.6	6.0	5.0
Lane Grp Delay (d), s/veh	60.7	82.6	386.0	3.4	62.0	64.4
Lane Grp LOS	F	F	F	A	E	E
Approach Vol, veh/h	3223			1730	492	
Approach Delay, s/veh	71.6			24.9	62.6	
Approach LOS	E			C	E	

Timer						
Assigned Phs	4			8		
Phs Duration (G+Y+Rc), s	100.0			100.0		
Change Period (Y+Rc), s	4.0			4.0		
Max Green Setting (Gmax), s	96.0			96.0		
Max Q Clear Time (g_c+I1), s	98.0			98.0		
Green Ext Time (p_c), s	0.0			0.0		

Intersection Summary						
HCM 2010 Ctrl Delay			56.0			
HCM 2010 LOS			E			

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	2345	199	252	1394	11	155	12	257	13	7	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3498		1770	3535		1681	1697	1583	1770	1645	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3498		1770	3535		1681	1697	1583	1770	1645	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	2549	216	274	1515	12	168	13	279	14	8	28
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	247	0	27	0
Lane Group Flow (vph)	37	2760	0	274	1527	0	91	90	32	14	9	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	5.5	58.0		26.7	79.2		13.6	13.6	13.6	5.7	5.7	
Effective Green, g (s)	5.5	58.0		26.7	79.2		13.6	13.6	13.6	5.7	5.7	
Actuated g/C Ratio	0.05	0.48		0.22	0.66		0.11	0.11	0.11	0.05	0.05	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	81	1690		393	2333		190	192	179	84	78	
v/s Ratio Prot	0.02	c0.79		c0.15	0.43		c0.05	0.05		c0.01	0.01	
v/s Ratio Perm									0.02			
v/c Ratio	0.46	1.63		0.70	0.65		0.48	0.47	0.18	0.17	0.12	
Uniform Delay, d1	55.8	31.0		42.9	12.2		49.9	49.8	48.1	54.9	54.7	
Progression Factor	1.11	0.72		0.93	1.67		1.00	0.99	2.37	1.00	1.00	
Incremental Delay, d2	0.4	285.1		5.1	0.6		7.5	7.1	1.9	0.9	0.7	
Delay (s)	62.2	307.5		45.0	21.0		57.2	56.7	116.0	55.8	55.4	
Level of Service	E	F		D	C		E	E	F	E	E	
Approach Delay (s)		304.3			24.7			92.7			55.5	
Approach LOS		F			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	184.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	106.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	329	196	483	14	165	20	183	434	19	26	576	301
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	520	218	538	76	744	91	227	1490	66	36	723	378
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.13	0.42	0.42	0.02	0.31	0.31
Sat Flow, veh/h	1177	478	1177	717	1627	200	1774	3541	157	1774	2307	1205
Grp Volume(v), veh/h	358	0	738	15	0	201	199	248	245	28	505	448
Grp Sat Flow(s),veh/h/ln	1177	0	1655	717	0	1827	1774	1863	1835	1774	1863	1650
Q Serve(g_s), s	31.5	0.0	51.6	2.4	0.0	7.9	13.0	10.5	10.5	1.9	30.2	30.2
Cycle Q Clear(g_c), s	39.4	0.0	51.6	54.0	0.0	7.9	13.0	10.5	10.5	1.9	30.2	30.2
Prop In Lane	1.00		0.71	1.00		0.11	1.00		0.09	1.00		0.73
Lane Grp Cap(c), veh/h	520	0	757	76	0	836	227	784	772	36	584	517
V/C Ratio(X)	0.69	0.00	0.98	0.20	0.00	0.24	0.88	0.32	0.32	0.78	0.87	0.87
Avail Cap(c_a), veh/h	520	0	757	76	0	836	255	784	772	90	584	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	0.0	31.4	57.9	0.0	19.5	50.6	22.9	22.9	57.6	38.2	38.2
Incr Delay (d2), s/veh	3.8	0.0	26.6	1.3	0.0	0.1	24.1	1.0	1.0	28.9	15.8	17.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	9.9	0.0	26.9	0.5	0.0	3.7	7.5	5.1	5.1	1.1	16.9	15.2
Lane Grp Delay (d), s/veh	35.4	0.0	58.0	59.1	0.0	19.7	74.7	23.8	23.9	86.5	54.0	55.7
Lane Grp LOS	D		E	E		B	E	C	C	F	D	E
Approach Vol, veh/h		1096			216			692			981	
Approach Delay, s/veh		50.6			22.4			38.5			55.7	
Approach LOS		D			C			D			E	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		58.0			58.0		19.1	53.7		6.4	41.0	
Change Period (Y+Rc), s		4.0			4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s		54.0			54.0		17.0	48.0		6.0	37.0	
Max Q Clear Time (g_c+I1), s		53.6			56.0		15.0	12.5		3.9	32.2	
Green Ext Time (p_c), s		0.3			0.0		0.1	12.4		0.0	3.4	

Intersection Summary	
HCM 2010 Ctrl Delay	47.4
HCM 2010 LOS	D

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	145	161	232	419	485	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.95	0.85	0.90		1.00	1.00
Flt Protected	0.97	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3332	1441	3198		1770	3539
Flt Permitted	0.97	1.00	1.00		0.30	1.00
Satd. Flow (perm)	3332	1441	3198		562	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	158	175	252	455	527	379
RTOR Reduction (vph)	57	94	212	0	0	0
Lane Group Flow (vph)	171	11	495	0	527	379
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	10.3	10.3	53.4		81.7	81.7
Effective Green, g (s)	10.3	10.3	53.4		81.7	81.7
Actuated g/C Ratio	0.10	0.10	0.53		0.82	0.82
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	343	148	1707		752	2891
v/s Ratio Prot	c0.05		0.15		c0.17	0.11
v/s Ratio Perm		0.01			c0.40	
v/c Ratio	0.50	0.07	0.29		0.70	0.13
Uniform Delay, d1	42.4	40.5	12.8		5.2	1.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.1	0.2	0.4		3.0	0.1
Delay (s)	43.5	40.7	13.3		8.2	2.0
Level of Service	D	D	B		A	A
Approach Delay (s)	42.7		13.3			5.6
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	46.4
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	373	8	317	23	13	8	99	202	4	6	366	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	405	9	345	25	14	9	108	220	4	7	398	158
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	67.7	12.6	28.1	31.2
HCM LOS	F	B	D	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	33%	0%	53%	64%	0%	2%	0%
Vol Thru, %	67%	0%	1%	36%	0%	98%	0%
Vol Right, %	0%	100%	45%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	301	4	698	36	8	372	145
LT Vol	202	0	8	13	0	366	0
Through Vol	0	4	317	0	8	0	145
RT Vol	99	0	373	23	0	6	0
Lane Flow Rate	327	4	759	39	9	404	158
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.718	0.008	1	0.1	0.02	0.84	0.296
Departure Headway (Hd)	7.896	7.033	7.258	9.157	8.136	7.479	6.772
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	458	510	501	391	439	485	531
Service Time	5.629	4.766	5.319	6.926	5.905	5.212	4.505
HCM Lane V/C Ratio	0.714	0.008	1.515	0.1	0.021	0.833	0.298
HCM Control Delay	28.3	9.8	67.7	12.9	11.1	38.5	12.3
HCM Lane LOS	D	A	F	B	B	E	B
HCM 95th-tile Q	5.6	0	13.6	0.3	0.1	8.4	1.2

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	387	1549	146	106	570	64	97	577	103	261	806	383
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	2	3	0	1	2	0	1	2	0	1	2	1
Cap, veh/h	505	1864	176	146	1008	114	130	709	126	311	1236	758
Arrive On Green	0.05	0.12	0.12	0.08	0.31	0.31	0.07	0.23	0.23	0.18	0.33	0.33
Sat Flow, veh/h	3442	5031	474	1774	3289	371	1774	3080	549	1774	3725	1583
Grp Volume(v), veh/h	421	1246	597	115	351	339	105	379	360	284	876	416
Grp Sat Flow(s),veh/h/ln	1721	1863	1779	1774	1863	1797	1774	1863	1766	1774	1863	1583
Q Serve(g_s), s	13.7	37.3	37.4	7.2	18.2	18.2	6.6	22.2	22.3	17.8	23.2	21.0
Cycle Q Clear(g_c), s	13.7	37.3	37.4	7.2	18.2	18.2	6.6	22.2	22.3	17.8	23.2	21.0
Prop In Lane	1.00		0.27	1.00		0.21	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	505	1380	659	146	571	551	130	429	406	311	1236	758
V/C Ratio(X)	0.83	0.90	0.91	0.79	0.61	0.62	0.81	0.88	0.89	0.91	0.71	0.55
Avail Cap(c_a), veh/h	670	1385	662	251	594	573	157	429	406	314	1236	758
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	47.6	47.6	50.8	33.5	33.5	51.5	42.0	42.0	45.8	33.0	20.8
Incr Delay (d2), s/veh	0.7	0.9	1.9	8.9	1.8	1.9	22.0	22.3	23.6	29.7	3.4	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	6.5	19.1	18.6	3.7	8.9	8.6	3.8	13.2	12.7	10.7	11.5	8.7
Lane Grp Delay (d), s/veh	53.0	48.5	49.5	59.8	35.2	35.4	73.6	64.3	65.6	75.4	36.4	23.7
Lane Grp LOS	D	D	D	E	D	D	E	E	E	E	D	C
Approach Vol, veh/h		2264			805			844			1576	
Approach Delay, s/veh		49.6			38.8			66.0			40.1	
Approach LOS		D			D			E			D	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	20.6	45.9		13.3	38.6		12.3	30.0		23.8	41.5	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s	22.0	42.0		16.0	36.0		10.0	26.0		20.0	36.0	
Max Q Clear Time (g_c+I1), s	15.7	39.4		9.2	20.2		8.6	24.3		19.8	25.2	
Green Ext Time (p_c), s	0.9	2.4		0.1	13.3		0.0	1.5		0.0	8.0	

Intersection Summary	
HCM 2010 Ctrl Delay	47.8
HCM 2010 LOS	D

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1329	294	241	3020	646	131
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	190.0	186.3	186.3	186.3	186.3
Lanes	2	0	1	3	2	1
Cap, veh/h	2203	476	191	4145	660	303
Arrive On Green	0.74	0.74	0.74	0.74	0.19	0.19
Sat Flow, veh/h	2971	641	270	5588	3442	1583
Grp Volume(v), veh/h	892	873	262	3283	702	142
Grp Sat Flow(s),veh/h/ln	1863	1750	270	1863	1721	1583
Q Serve(g_s), s	28.5	30.9	58.1	44.1	23.0	9.6
Cycle Q Clear(g_c), s	28.5	30.9	89.0	44.1	23.0	9.6
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1382	1298	191	4145	660	303
V/C Ratio(X)	0.65	0.67	1.37	0.79	1.06	0.47
Avail Cap(c_a), veh/h	1382	1298	191	4145	660	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	7.7	8.0	40.1	9.7	48.5	43.1
Incr Delay (d2), s/veh	1.0	1.4	171.5	0.1	53.4	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	11.8	11.9	15.0	17.7	15.1	4.3
Lane Grp Delay (d), s/veh	8.7	9.4	211.6	9.8	101.9	48.2
Lane Grp LOS	A	A	F	A	F	D
Approach Vol, veh/h	1765			3545	844	
Approach Delay, s/veh	9.0			24.7	92.8	
Approach LOS	A			C	F	

Timer						
Assigned Phs	4			8		
Phs Duration (G+Y+Rc), s	93.0			93.0		
Change Period (Y+Rc), s	4.0			4.0		
Max Green Setting (Gmax), s	89.0			89.0		
Max Q Clear Time (g_c+I1), s	32.9			91.0		
Green Ext Time (p_c), s	55.8			0.0		

Intersection Summary						
HCM 2010 Ctrl Delay			29.6			
HCM 2010 LOS			C			

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	1130	190	197	2540	22	846	15	196	10	5	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3463		1770	3535		1681	1688	1583	1770	1666	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3463		1770	3535		1681	1688	1583	1770	1666	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	1228	207	214	2761	24	920	16	213	11	5	12
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	156	0	12	0
Lane Group Flow (vph)	24	1425	0	214	2785	0	469	467	57	11	5	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	4.9	58.2		20.9	74.2		20.7	20.7	20.7	4.2	4.2	
Effective Green, g (s)	4.9	58.2		20.9	74.2		20.7	20.7	20.7	4.2	4.2	
Actuated g/C Ratio	0.04	0.49		0.17	0.62		0.17	0.17	0.17	0.04	0.04	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	72	1679		308	2185		289	291	273	61	58	
v/s Ratio Prot	0.01	0.41		c0.12	c0.79		c0.28	0.28		c0.01	0.00	
v/s Ratio Perm									0.04			
v/c Ratio	0.33	0.85		0.69	1.27		1.62	1.60	0.21	0.18	0.09	
Uniform Delay, d1	56.0	27.0		46.6	22.9		49.6	49.6	42.6	56.2	56.1	
Progression Factor	1.10	0.84		0.92	1.32		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.0	3.2		3.3	125.3		295.7	287.7	1.7	1.4	0.7	
Delay (s)	63.8	25.9		46.3	155.4		345.3	337.3	44.4	57.7	56.8	
Level of Service	E	C		D	F		F	F	D	E	E	
Approach Delay (s)		26.6			147.7			286.3			57.1	
Approach LOS		C			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	144.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	114.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	295	123	204	15	169	19	364	1044	17	16	253	322
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	427	239	396	291	622	71	432	1758	28	27	470	399
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.32	0.64	0.64	0.02	0.25	0.25
Sat Flow, veh/h	1172	632	1046	1021	1642	187	1774	3657	58	1774	1863	1583
Grp Volume(v), veh/h	321	0	356	16	0	205	396	578	575	17	275	350
Grp Sat Flow(s),veh/h/ln	1172	0	1678	1021	0	1830	1774	1863	1853	1774	1863	1583
Q Serve(g_s), s	25.2	0.0	16.0	1.2	0.0	7.5	20.5	18.2	18.2	0.9	12.4	20.3
Cycle Q Clear(g_c), s	32.8	0.0	16.0	17.2	0.0	7.5	20.5	18.2	18.2	0.9	12.4	20.3
Prop In Lane	1.00		0.62	1.00		0.10	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	427	0	636	291	0	693	432	895	890	27	470	399
V/C Ratio(X)	0.75	0.00	0.56	0.05	0.00	0.30	0.92	0.65	0.65	0.63	0.59	0.88
Avail Cap(c_a), veh/h	449	0	666	310	0	727	556	895	890	74	470	399
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	0.0	23.4	30.2	0.0	20.8	31.4	12.3	12.3	46.9	31.4	34.4
Incr Delay (d2), s/veh	6.6	0.0	1.0	0.1	0.0	0.2	15.6	3.2	3.2	21.8	5.3	22.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	8.1	0.0	6.8	0.3	0.0	3.4	10.5	7.6	7.6	0.6	6.5	10.6
Lane Grp Delay (d), s/veh	38.9	0.0	24.4	30.3	0.0	21.0	47.0	15.4	15.5	68.6	36.7	57.1
Lane Grp LOS	D		C	C		C	D	B	B	E	D	E
Approach Vol, veh/h		677			221			1549			642	
Approach Delay, s/veh		31.3			21.7			23.5			48.7	
Approach LOS		C			C			C			D	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		40.2			40.2		27.3	50.0		5.5	28.1	
Change Period (Y+Rc), s		4.0			4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s		38.0			38.0		30.0	46.0		4.0	20.0	
Max Q Clear Time (g_c+I1), s		34.8			19.2		22.5	20.2		2.9	22.3	
Green Ext Time (p_c), s		1.5			4.5		0.8	14.1		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	30.3
HCM 2010 LOS	C

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	443	871	364	95	102	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.93	0.85	0.97		1.00	1.00
Flt Protected	0.98	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3263	1441	3430		1770	3539
Flt Permitted	0.98	1.00	1.00		0.39	1.00
Satd. Flow (perm)	3263	1441	3430		732	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	482	947	396	103	111	246
RTOR Reduction (vph)	233	302	17	0	0	0
Lane Group Flow (vph)	723	171	482	0	111	246
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	30.3	30.3	49.4		61.7	61.7
Effective Green, g (s)	30.3	30.3	49.4		61.7	61.7
Actuated g/C Ratio	0.30	0.30	0.49		0.62	0.62
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	988	436	1694		537	2183
v/s Ratio Prot	c0.22		c0.14		c0.02	0.07
v/s Ratio Perm		0.12			0.11	
v/c Ratio	0.73	0.39	0.28		0.21	0.11
Uniform Delay, d1	31.2	27.6	14.9		8.3	7.9
Progression Factor	1.00	1.00	1.00		1.80	1.75
Incremental Delay, d2	2.8	0.6	0.4		0.2	0.1
Delay (s)	34.0	28.1	15.3		15.0	13.9
Level of Service	C	C	B		B	B
Approach Delay (s)	32.1		15.3			14.2
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	38.8
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	140	8	166	2	0	7	283	329	14	6	270	356
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	152	9	180	2	0	8	308	358	15	7	293	387
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	24.7	11.2	65.8	19.4
HCM LOS	C	B	F	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	46%	0%	45%	100%	0%	2%	0%
Vol Thru, %	54%	0%	3%	0%	0%	98%	0%
Vol Right, %	0%	100%	53%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	612	14	314	2	7	276	356
LT Vol	329	0	8	0	0	270	0
Through Vol	0	14	166	0	7	0	356
RT Vol	283	0	140	2	0	6	0
Lane Flow Rate	665	15	341	2	8	300	387
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	1	0.026	0.686	0.006	0.017	0.572	0.661
Departure Headway (Hd)	7.197	6.244	7.235	9.286	8.086	6.86	6.148
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	506	571	502	386	442	528	588
Service Time	4.956	4.002	5.259	7.039	5.839	4.593	3.882
HCM Lane V/C Ratio	1.314	0.026	0.679	0.005	0.018	0.568	0.658
HCM Control Delay	67.1	9.2	24.7	12.1	11	18.4	20.1
HCM Lane LOS	F	A	C	B	B	C	C
HCM 95th-tile Q	13.6	0.1	5.2	0	0.1	3.6	4.9

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	333	506	64	42	1501	143	230	641	45	126	476	477
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	2	3	0	1	2	0	1	2	0	1	2	1
Cap, veh/h	420	2585	324	76	1515	142	237	748	53	134	592	445
Arrive On Green	0.12	0.53	0.53	0.04	0.45	0.45	0.13	0.22	0.22	0.08	0.16	0.16
Sat Flow, veh/h	3442	4870	611	1774	3355	315	1774	3441	242	1774	3725	1583
Grp Volume(v), veh/h	362	419	201	46	898	889	250	377	369	137	517	518
Grp Sat Flow(s),veh/h/ln	1721	1863	1755	1774	1863	1807	1774	1863	1820	1774	1863	1583
Q Serve(g_s), s	12.3	7.1	7.3	3.0	54.0	54.0	16.0	23.8	23.8	9.0	16.2	19.0
Cycle Q Clear(g_c), s	12.3	7.1	7.3	3.0	54.0	54.0	16.0	23.8	23.8	9.0	16.2	19.0
Prop In Lane	1.00		0.35	1.00		0.17	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	420	1978	932	76	841	816	237	405	396	134	592	445
V/C Ratio(X)	0.86	0.21	0.22	0.61	1.07	1.09	1.05	0.93	0.93	1.03	0.87	1.16
Avail Cap(c_a), veh/h	460	1978	932	237	841	816	237	405	396	134	592	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.47	0.47	0.47	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	14.8	14.9	56.3	32.8	32.8	51.8	45.9	45.9	55.3	49.1	43.0
Incr Delay (d2), s/veh	7.5	0.0	0.1	7.7	50.5	58.8	73.1	30.3	31.0	85.0	16.3	96.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	5.9	3.3	3.1	1.6	36.8	37.6	12.1	14.8	14.6	7.3	9.2	25.4
Lane Grp Delay (d), s/veh	59.0	14.8	14.9	63.9	83.3	91.6	124.9	76.3	76.9	140.3	65.4	139.3
Lane Grp LOS	E	B	B	E	F	F	F	E	E	F	E	F
Approach Vol, veh/h		982			1833			996			1172	
Approach Delay, s/veh		31.2			86.9			88.7			106.8	
Approach LOS		C			F			F			F	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	18.6	67.5		9.1	58.0		20.0	30.0		13.0	23.0	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s	16.0	54.0		16.0	54.0		16.0	26.0		9.0	19.0	
Max Q Clear Time (g_c+I1), s	14.3	9.3		5.0	56.0		18.0	25.8		11.0	21.0	
Green Ext Time (p_c), s	0.2	30.4		0.0	0.0		0.0	0.2		0.0	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	80.9
HCM 2010 LOS	F

Notes

Intersection	
Intersection Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	7	12	1280	59	100	584
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	13	1391	64	109	635

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1958	728	0	0	1455	0
Stage 1	1423	-	-	-	-	-
Stage 2	535	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	56	366	-	-	461	-
Stage 1	188	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	43	366	-	-	461	-
Mov Capacity-2 Maneuver	135	-	-	-	-	-
Stage 1	188	-	-	-	-	-
Stage 2	421	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.7	0	2.2
HCM LOS	C		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	224	461	-
HCM Lane V/C Ratio	-	-	0.092	0.236	-
HCM Control Delay (s)	-	-	22.7	15.202	-
HCM Lane LOS			C	C	
HCM 95th %tile Q(veh)	-	-	0.301	0.907	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	2546	427	89	1565	325	128
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	190.0	186.3	186.3	186.3	186.3
Lanes	2	0	1	3	2	1
Cap, veh/h	2501	407	60	4471	459	211
Arrive On Green	0.80	0.80	0.80	0.80	0.13	0.13
Sat Flow, veh/h	3126	509	62	5588	3442	1583
Grp Volume(v), veh/h	1616	1616	97	1701	353	139
Grp Sat Flow(s),veh/h/ln	1863	1773	62	1863	1721	1583
Q Serve(g_s), s	96.0	96.0	0.0	10.5	11.9	10.0
Cycle Q Clear(g_c), s	96.0	96.0	96.0	10.5	11.9	10.0
Prop In Lane		0.29	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1490	1418	60	4471	459	211
V/C Ratio(X)	1.08	1.14	1.62	0.38	0.77	0.66
Avail Cap(c_a), veh/h	1490	1418	60	4471	459	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.72	0.72	1.00	1.00
Uniform Delay (d), s/veh	12.0	12.0	60.0	3.5	50.2	49.4
Incr Delay (d2), s/veh	49.7	71.6	325.5	0.0	11.7	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	55.8	61.7	7.3	3.8	6.0	5.0
Lane Grp Delay (d), s/veh	61.7	83.6	385.5	3.5	62.0	64.4
Lane Grp LOS	F	F	F	A	E	E
Approach Vol, veh/h	3231			1798	492	
Approach Delay, s/veh	72.7			24.1	62.6	
Approach LOS	E			C	E	

Timer						
Assigned Phs	4			8		
Phs Duration (G+Y+Rc), s	100.0			100.0		
Change Period (Y+Rc), s	4.0			4.0		
Max Green Setting (Gmax), s	96.0			96.0		
Max Q Clear Time (g_c+I1), s	98.0			98.0		
Green Ext Time (p_c), s	0.0			0.0		

Intersection Summary						
HCM 2010 Ctrl Delay			56.0			
HCM 2010 LOS			E			

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	2345	207	257	1394	11	218	12	299	13	7	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3496		1770	3535		1681	1694	1583	1770	1645	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3496		1770	3535		1681	1694	1583	1770	1645	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	2549	225	279	1515	12	237	13	325	14	8	28
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	288	0	27	0
Lane Group Flow (vph)	37	2769	0	279	1527	0	126	124	37	14	9	0
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			
Actuated Green, G (s)	5.5	57.6		27.1	79.2		13.6	13.6	13.6	5.7	5.7	
Effective Green, g (s)	5.5	57.6		27.1	79.2		13.6	13.6	13.6	5.7	5.7	
Actuated g/C Ratio	0.05	0.48		0.23	0.66		0.11	0.11	0.11	0.05	0.05	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	81	1678		399	2333		190	191	179	84	78	
v/s Ratio Prot	0.02	c0.79		c0.16	0.43		c0.07	0.07		c0.01	0.01	
v/s Ratio Perm									0.02			
v/c Ratio	0.46	1.65		0.70	0.65		0.66	0.65	0.21	0.17	0.12	
Uniform Delay, d1	55.8	31.2		42.7	12.2		51.0	50.9	48.3	54.9	54.7	
Progression Factor	1.11	0.72		0.93	1.69		1.00	1.00	2.25	1.00	1.00	
Incremental Delay, d2	0.4	292.8		5.0	0.6		15.5	14.7	2.4	0.9	0.7	
Delay (s)	62.2	315.4		44.5	21.3		66.4	65.4	110.8	55.8	55.4	
Level of Service	E	F		D	C		E	E	F	E	E	
Approach Delay (s)		312.0			24.9			91.3			55.5	
Approach LOS		F			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	186.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	108.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	332	196	483	14	165	20	183	438	19	26	613	326
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0
Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Cap, veh/h	520	218	538	76	744	91	227	1490	66	36	718	382
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.13	0.42	0.42	0.02	0.31	0.31
Sat Flow, veh/h	1177	478	1177	717	1627	200	1774	3542	156	1774	2292	1218
Grp Volume(v), veh/h	361	0	738	15	0	201	199	250	247	28	541	479
Grp Sat Flow(s),veh/h/ln	1177	0	1655	717	0	1827	1774	1863	1835	1774	1863	1648
Q Serve(g_s), s	31.9	0.0	51.6	2.4	0.0	7.9	13.0	10.6	10.6	1.9	33.2	33.2
Cycle Q Clear(g_c), s	39.8	0.0	51.6	54.0	0.0	7.9	13.0	10.6	10.6	1.9	33.2	33.2
Prop In Lane	1.00		0.71	1.00		0.11	1.00		0.08	1.00		0.74
Lane Grp Cap(c), veh/h	520	0	757	76	0	836	227	784	772	36	584	516
V/C Ratio(X)	0.69	0.00	0.98	0.20	0.00	0.24	0.88	0.32	0.32	0.78	0.93	0.93
Avail Cap(c_a), veh/h	520	0	757	76	0	836	255	784	772	90	584	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	31.4	57.9	0.0	19.5	50.6	22.9	22.9	57.6	39.2	39.3
Incr Delay (d2), s/veh	4.0	0.0	26.6	1.3	0.0	0.1	24.0	1.0	1.0	28.9	23.1	25.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	10.1	0.0	26.9	0.5	0.0	3.7	7.5	5.1	5.1	1.1	19.5	17.6
Lane Grp Delay (d), s/veh	35.7	0.0	58.0	59.1	0.0	19.7	74.6	23.9	23.9	86.5	62.3	64.4
Lane Grp LOS	D		E	E		B	E	C	C	F	E	E
Approach Vol, veh/h		1099			216			696			1048	
Approach Delay, s/veh		50.7			22.4			38.4			63.9	
Approach LOS		D			C			D			E	

Timer								
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		58.0			58.0		19.1	53.7		6.4	41.0	
Change Period (Y+Rc), s		4.0			4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s		54.0			54.0		17.0	48.0		6.0	37.0	
Max Q Clear Time (g_c+I1), s		53.6			56.0		15.0	12.6		3.9	35.2	
Green Ext Time (p_c), s		0.3			0.0		0.1	13.3		0.0	1.4	

Intersection Summary	
HCM 2010 Ctrl Delay	50.4
HCM 2010 LOS	D

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	145	164	233	419	513	357
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.95	0.85	0.90		1.00	1.00
Flt Protected	0.97	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3331	1441	3198		1770	3539
Flt Permitted	0.97	1.00	1.00		0.29	1.00
Satd. Flow (perm)	3331	1441	3198		549	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	158	178	253	455	558	388
RTOR Reduction (vph)	59	96	222	0	0	0
Lane Group Flow (vph)	170	11	486	0	558	388
Turn Type	NA	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	10.3	10.3	51.3		81.7	81.7
Effective Green, g (s)	10.3	10.3	51.3		81.7	81.7
Actuated g/C Ratio	0.10	0.10	0.51		0.82	0.82
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	343	148	1640		770	2891
v/s Ratio Prot	c0.05		0.15		c0.19	0.11
v/s Ratio Perm		0.01			c0.40	
v/c Ratio	0.50	0.07	0.30		0.72	0.13
Uniform Delay, d1	42.4	40.5	14.0		6.4	1.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.1	0.2	0.5		3.4	0.1
Delay (s)	43.5	40.8	14.4		9.8	2.0
Level of Service	D	D	B		A	A
Approach Delay (s)	42.6		14.4			6.6
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	46.3
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	374	8	317	23	13	8	99	202	4	6	366	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	407	9	345	25	14	9	108	220	4	7	398	166
Number of Lanes	0	1	0	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	67.7	12.7	28.2	31
HCM LOS	F	B	D	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	33%	0%	54%	64%	0%	2%	0%
Vol Thru, %	67%	0%	1%	36%	0%	98%	0%
Vol Right, %	0%	100%	45%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	301	4	699	36	8	372	153
LT Vol	202	0	8	13	0	366	0
Through Vol	0	4	317	0	8	0	153
RT Vol	99	0	374	23	0	6	0
Lane Flow Rate	327	4	760	39	9	404	166
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.718	0.009	1	0.1	0.02	0.84	0.313
Departure Headway (Hd)	7.902	7.039	7.264	9.166	8.146	7.48	6.773
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	458	509	501	391	438	485	532
Service Time	5.635	4.772	5.325	6.934	5.913	5.212	4.505
HCM Lane V/C Ratio	0.714	0.008	1.517	0.1	0.021	0.833	0.312
HCM Control Delay	28.4	9.8	67.7	13	11.1	38.5	12.6
HCM Lane LOS	D	A	F	B	B	E	B
HCM 95th-tile Q	5.6	0	13.6	0.3	0.1	8.4	1.3

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	412	1566	146	106	572	64	97	577	103	261	806	386
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	190.0	186.3	186.3	186.3
Lanes	2	3	0	1	2	0	1	2	0	1	2	1
Cap, veh/h	531	1867	174	146	984	111	130	709	126	311	1236	769
Arrive On Green	0.05	0.12	0.12	0.08	0.30	0.30	0.07	0.23	0.23	0.18	0.33	0.33
Sat Flow, veh/h	3442	5036	469	1774	3291	370	1774	3080	549	1774	3725	1583
Grp Volume(v), veh/h	448	1258	603	115	352	340	105	379	360	284	876	420
Grp Sat Flow(s),veh/h/ln	1721	1863	1780	1774	1863	1798	1774	1863	1766	1774	1863	1583
Q Serve(g_s), s	14.6	37.7	37.8	7.2	18.4	18.5	6.6	22.2	22.3	17.8	23.2	21.0
Cycle Q Clear(g_c), s	14.6	37.7	37.8	7.2	18.4	18.5	6.6	22.2	22.3	17.8	23.2	21.0
Prop In Lane	1.00		0.26	1.00		0.21	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	531	1381	660	146	557	537	130	429	406	311	1236	769
V/C Ratio(X)	0.84	0.91	0.91	0.79	0.63	0.63	0.81	0.88	0.89	0.91	0.71	0.55
Avail Cap(c_a), veh/h	670	1385	662	251	593	573	157	429	406	314	1236	769
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	47.7	47.8	50.9	34.2	34.2	51.6	42.0	42.1	45.8	33.0	20.3
Incr Delay (d2), s/veh	0.8	1.0	2.1	8.9	2.0	2.1	22.0	22.4	23.6	29.7	3.5	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	6.9	19.4	18.8	3.7	9.0	8.8	3.8	13.2	12.7	10.7	11.5	8.7
Lane Grp Delay (d), s/veh	53.1	48.7	49.9	59.8	36.2	36.3	73.6	64.4	65.7	75.4	36.4	23.1
Lane Grp LOS	D	D	D	E	D	D	E	E	E	E	D	C
Approach Vol, veh/h		2309			807			844			1580	
Approach Delay, s/veh		49.9			39.6			66.1			39.9	
Approach LOS		D			D			E			D	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	21.4	45.9		13.3	37.8		12.3	30.0		23.8	41.5	
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Max Green Setting (Gmax), s	22.0	42.0		16.0	36.0		10.0	26.0		20.0	36.0	
Max Q Clear Time (g_c+I1), s	16.6	39.8		9.2	20.5		8.6	24.3		19.8	25.2	
Green Ext Time (p_c), s	0.8	2.1		0.1	13.2		0.0	1.5		0.0	8.0	

Intersection Summary	
HCM 2010 Ctrl Delay	48.0
HCM 2010 LOS	D

Notes

Intersection	
Intersection Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	61	105	793	7	13	903
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	114	862	8	14	982

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1385	435	0	0	870	0
Stage 1	866	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	134	569	-	-	770	-
Stage 1	372	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	132	569	-	-	770	-
Mov Capacity-2 Maneuver	260	-	-	-	-	-
Stage 1	372	-	-	-	-	-
Stage 2	552	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.5	0	0.1
HCM LOS	C		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	396	770	-
HCM Lane V/C Ratio	-	-	0.456	0.018	-
HCM Control Delay (s)	-	-	21.5	9.763	-
HCM Lane LOS			C	A	
HCM 95th %tile Q(veh)	-	-	2.313	0.056	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	812	154	113	2093	21	801	15	134	10	5	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3534		1681	1688	1583	1770	1666	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	3534		1681	1688	1583	1770	1666	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	883	167	123	2275	23	871	16	146	11	5	12
RTOR Reduction (vph)	0	0	77	0	0	0	0	0	112	0	12	0
Lane Group Flow (vph)	23	883	90	123	2298	0	444	443	34	11	5	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4						2			
Actuated Green, G (s)	4.8	64.4	64.4	13.6	73.2		21.8	21.8	21.8	4.2	4.2	
Effective Green, g (s)	4.8	64.4	64.4	13.6	73.2		21.8	21.8	21.8	4.2	4.2	
Actuated g/C Ratio	0.04	0.54	0.54	0.11	0.61		0.18	0.18	0.18	0.04	0.04	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	70	1899	849	200	2155		305	306	287	61	58	
v/s Ratio Prot	0.01	0.25		c0.07	c0.65		c0.26	0.26		c0.01	0.00	
v/s Ratio Perm			0.06						0.02			
v/c Ratio	0.33	0.46	0.11	0.61	1.07		1.46	1.45	0.12	0.18	0.09	
Uniform Delay, d1	56.0	17.2	13.7	50.7	23.4		49.1	49.1	41.1	56.2	56.1	
Progression Factor	1.18	0.66	1.27	0.87	1.37		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.4	0.2	0.0	0.5	30.9		222.5	219.0	0.8	1.4	0.7	
Delay (s)	68.7	11.4	17.4	44.6	63.0		271.6	268.1	41.9	57.7	56.8	
Level of Service	E	B	B	D	E		F	F	D	E	E	
Approach Delay (s)		13.6			62.1			237.6			57.1	
Approach LOS		B			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	90.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	101.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	33	1916	176	186	1029	11	184	12	218	13	7	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3534		1681	1695	1583	1770	1647	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	3534		1681	1695	1583	1770	1647	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	2083	191	202	1118	12	200	13	237	14	8	27
RTOR Reduction (vph)	0	0	48	0	0	0	0	0	212	0	26	0
Lane Group Flow (vph)	36	2083	143	202	1130	0	106	107	25	14	9	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4						2			
Actuated Green, G (s)	5.5	67.2	67.2	19.5	81.2		12.7	12.7	12.7	4.6	4.6	
Effective Green, g (s)	5.5	67.2	67.2	19.5	81.2		12.7	12.7	12.7	4.6	4.6	
Actuated g/C Ratio	0.05	0.56	0.56	0.16	0.68		0.11	0.11	0.11	0.04	0.04	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	81	1981	886	287	2391		177	179	167	67	63	
v/s Ratio Prot	0.02	c0.59		c0.11	0.32		0.06	c0.06		c0.01	0.01	
v/s Ratio Perm			0.09						0.02			
v/c Ratio	0.44	1.05	0.16	0.70	0.47		0.60	0.60	0.15	0.21	0.14	
Uniform Delay, d1	55.8	26.4	12.8	47.5	9.2		51.2	51.2	48.7	55.9	55.8	
Progression Factor	1.13	0.67	0.52	0.93	1.99		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	27.8	0.0	6.9	0.1		14.1	13.9	1.9	1.6	1.0	
Delay (s)	64.1	45.6	6.6	51.2	18.5		65.3	65.1	50.6	57.5	56.8	
Level of Service	E	D	A	D	B		E	E	D	E	E	
Approach Delay (s)		42.6			23.4			57.5			57.0	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	1130	190	197	2540	22	846	15	196	10	5	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3535		1681	1688	1583	1770	1666	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	3535		1681	1688	1583	1770	1666	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	1228	207	214	2761	24	920	16	213	11	5	12
RTOR Reduction (vph)	0	0	91	0	0	0	0	0	156	0	12	0
Lane Group Flow (vph)	24	1228	116	214	2785	0	469	467	57	11	5	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4						2			
Actuated Green, G (s)	4.9	58.2	58.2	20.9	74.2		20.7	20.7	20.7	4.2	4.2	
Effective Green, g (s)	4.9	58.2	58.2	20.9	74.2		20.7	20.7	20.7	4.2	4.2	
Actuated g/C Ratio	0.04	0.49	0.49	0.17	0.62		0.17	0.17	0.17	0.04	0.04	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	72	1716	767	308	2185		289	291	273	61	58	
v/s Ratio Prot	0.01	0.35		c0.12	c0.79		c0.28	0.28		c0.01	0.00	
v/s Ratio Perm			0.07						0.04			
v/c Ratio	0.33	0.72	0.15	0.69	1.27		1.62	1.60	0.21	0.18	0.09	
Uniform Delay, d1	56.0	24.4	17.2	46.6	22.9		49.6	49.6	42.6	56.2	56.1	
Progression Factor	1.10	0.83	1.12	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.0	1.1	0.1	6.6	127.2		295.7	287.7	1.7	1.4	0.7	
Delay (s)	63.8	21.4	19.3	53.2	150.1		345.3	337.3	44.4	57.7	56.8	
Level of Service	E	C	B	D	F		F	F	D	E	E	
Approach Delay (s)		21.8			143.2			286.3			57.1	
Approach LOS		C			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	140.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	114.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	2345	207	257	1394	11	218	12	299	13	7	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1583	1770	3535		1681	1694	1583	1770	1645	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1583	1770	3535		1681	1694	1583	1770	1645	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	2549	225	279	1515	12	237	13	325	14	8	28
RTOR Reduction (vph)	0	0	54	0	0	0	0	0	288	0	27	0
Lane Group Flow (vph)	37	2549	171	279	1527	0	126	124	37	14	9	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4						2			
Actuated Green, G (s)	5.5	57.6	57.6	27.1	79.2		13.6	13.6	13.6	5.7	5.7	
Effective Green, g (s)	5.5	57.6	57.6	27.1	79.2		13.6	13.6	13.6	5.7	5.7	
Actuated g/C Ratio	0.05	0.48	0.48	0.23	0.66		0.11	0.11	0.11	0.05	0.05	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	81	1698	759	399	2333		190	191	179	84	78	
v/s Ratio Prot	0.02	c0.72		c0.16	0.43		c0.07	0.07		c0.01	0.01	
v/s Ratio Perm			0.11						0.02			
v/c Ratio	0.46	1.50	0.23	0.70	0.65		0.66	0.65	0.21	0.17	0.12	
Uniform Delay, d1	55.8	31.2	18.2	42.7	12.2		51.0	50.9	48.3	54.9	54.7	
Progression Factor	1.11	0.73	0.53	0.93	1.69		1.00	1.00	2.25	1.00	1.00	
Incremental Delay, d2	0.4	225.8	0.0	5.0	0.6		15.5	14.7	2.4	0.9	0.7	
Delay (s)	62.2	248.5	9.6	44.5	21.3		66.4	65.4	110.8	55.8	55.4	
Level of Service	E	F	A	D	C		E	E	F	E	E	
Approach Delay (s)		226.9			24.9			91.3			55.5	
Approach LOS		F			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	140.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Appendix C

City of Baldwin Park
ICU Intersection Level of Service Summary & Worksheets

TABLE C1
EXISTING PLUS PROJECT CONDITIONS (YEAR 2013)
INTERSECTION PEAK HOUR LEVELS OF SERVICE AND IMPACTS

No	Intersection	Peak Hour	Existing Condition		Existing Plus Project			
			ICU	LOS	ICU	LOS	Change in ICU	Impact
1.	Maine Avenue &	AM	0.798	C	0.799	C	0.001	NO
	Arrow Highway [1]	PM	0.941	E	0.944	E	0.003	NO
2.	Azusa Canyon Road &	AM	1.000	E	1.003	F	0.003	NO
	Arrow Highway [1]	PM	0.836	D	0.867	D	0.031	NO
3.	Azusa Canyon Road &	AM	0.380	A	0.391	A	0.011	NO
	Olive Street [1]	PM	0.522	A	0.541	A	0.019	NO

Notes

[1] = Intersection shared with Irwindale & Baldwin Park

[a] = unsignalized intersection

ICU = Intersection Capacity Utilization

LOS = Level of service based on ICU

TABLE C2
FUTURE PLUS PROJECT CONDITIONS (YEAR 2016)
INTERSECTION PEAK HOUR LEVELS OF SERVICE AND IMPACTS

No	Intersection	Peak Hour	Future		Future Plus Project			
			ICU	LOS	ICU	LOS	Change in ICU	Impact
1.	Maine Avenue &	AM	0.891	D	0.910	C	0.019	NO
	Arrow Highway [1]	PM	1.110	F	1.112	F	0.002	NO
2.	**Azusa Canyon Road &**	AM	1.159	F	1.161	F	0.002	NO
	Arrow Highway [1]	**PM**	**1.043**	**F**	**1.074**	**F**	**0.031**	**YES**
3.	Azusa Canyon Road &	AM	0.714	C	0.731	C	0.017	NO
	Olive Street [1]	PM	0.821	D	0.840	D	0.019	NO

Notes

[1] = Intersection shared with Irwindale & Baldwin Park

[a] = unsignalized intersection

ICU = Intersection Capacity Utilization

LOS = Level of service based on ICU

EXISTING CONDITIONS - YEAR 2013

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

1. ARROW HIGHWAY & MAINE AVENUE

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	0	0.000	N/S 1:	0.040
Southbound	Through	0.00	0	0	0.000 *	N/S 2:	0.234 *
	Left	0.00	0	0	0.000	E/W 1:	0.382
	Right	0.00	0	0	0.000	E/W 2:	0.564 *
Westbound	Through	3.00	4,800	2,706	0.564 *		
	Left	1.00	1,600	61	0.038	V/C Ratio:	0.798
	Right	1.00	1,600	94	0.040	Loss Time:	0.100
Northbound	Through	0.00	0	0	0.000	ITS:	-0.100
	Left	2.00	2,560	599	0.234 *		
	Right	0.00	0	152	0.000	ICU:	0.798
Eastbound	Through	2.00	3,200	948	0.344		
	Left	0.00	0	0	0.000 *	LOS:	C

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	0	0.000	N/S 1:	0.036
Southbound	Through	0.00	0	0	0.000 *	N/S 2:	0.113 *
	Left	0.00	0	0	0.000	E/W 1:	0.828 *
	Right	0.00	0	0	0.000	E/W 2:	0.233
Westbound	Through	3.00	4,800	1,120	0.233		
	Left	1.00	1,600	71	0.044 *	V/C Ratio:	0.941
	Right	1.00	1,600	93	0.036	Loss Time:	0.100
Northbound	Through	0.00	0	0	0.000	ITS:	-0.100
	Left	2.00	2,560	289	0.113 *		
	Right	0.00	0	400	0.000	ICU:	0.941
Eastbound	Through	2.00	3,200	2,109	0.784 *		
	Left	0.00	0	0	0.000	LOS:	E

* Critical Movement

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

2. ARROW HIGHWAY & AZUSA CANYON ROAD

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	11	0.000	N/S 1:	0.259
Southbound	Through	1.00	1,600	5	0.010 *	N/S 2:	0.326 *
	Left	1.00	1,600	10	0.006	E/W 1:	0.329
	Right	0.00	0	21	0.000	E/W 2:	0.674 *
Westbound	Through	2.00	3,200	2,093	0.661 *		
	Left	1.00	1,600	73	0.046	V/C Ratio:	1.000
	Right	1.00	1,600	129	0.058	Loss Time:	0.100
Northbound	Through	0.04	59	15	0.253	ITS:	-0.100
	Left	1.96	2,513	794	0.316 *		
	Right	0.00	0	94	0.000	ICU:	1.000
Eastbound	Through	2.00	3,200	812	0.283		
	Left	1.00	1,600	21	0.013 *	LOS:	E

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	25	0.000	N/S 1:	0.061
Southbound	Through	1.00	1,600	7	0.020 *	N/S 2:	0.072 *
	Left	1.00	1,600	13	0.008	E/W 1:	0.764 *
	Right	0.00	0	11	0.000	E/W 2:	0.346
Westbound	Through	2.00	3,200	1,029	0.325		
	Left	1.00	1,600	181	0.113 *	V/C Ratio:	0.836
	Right	1.00	1,600	176	0.053	Loss Time:	0.100
Northbound	Through	0.18	289	12	0.042	ITS:	-0.100
	Left	1.82	2,329	121	0.052 *		
	Right	0.00	0	168	0.000	ICU:	0.836
Eastbound	Through	2.00	3,200	1,916	0.651 *		
	Left	1.00	1,600	33	0.021	LOS:	D

* Critical Movement

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

3. AZUSA CANYON ROAD & OLIVE STREET

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	15	0.000	N/S 1:	0.262 *
Southbound	Through	2.00	3,200	123	0.043	N/S 2:	0.256
	Left	1.00	1,600	2	0.001 *	E/W 1:	0.118 *
	Right	0.00	0	0	0.000	E/W 2:	0.030
Westbound	Through	1.00	1,600	0	0.000		
	Left	1.00	1,600	2	0.001 *	V/C Ratio:	0.380
	Right	0.00	0	10	0.000	Loss Time:	0.100
Northbound	Through	2.00	3,200	825	0.261 *	ITS:	-0.100
	Left	1.00	1,600	341	0.213		
	Right	0.00	0	187	0.000	ICU:	0.380
Eastbound	Through	1.00	1,600	0	0.117 *		
	Left	1.00	1,600	48	0.030	LOS:	A

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	59	0.000	N/S 1:	0.066
Southbound	Through	2.00	3,200	360	0.131 *	N/S 2:	0.235 *
	Left	1.00	1,600	0	0.000	E/W 1:	0.287 *
	Right	0.00	0	0	0.000	E/W 2:	0.048
Westbound	Through	1.00	1,600	0	0.000		
	Left	1.00	1,600	1	0.001 *	V/C Ratio:	0.522
	Right	0.00	0	2	0.000	Loss Time:	0.100
Northbound	Through	2.00	3,200	210	0.066	ITS:	-0.100
	Left	1.00	1,600	166	0.104 *		
	Right	0.00	0	456	0.000	ICU:	0.522
Eastbound	Through	1.00	1,600	1	0.286 *		
	Left	1.00	1,600	76	0.048	LOS:	A

* Critical Movement

EXISTING+PROJECT CONDITIONS - YEAR 2013

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

1. ARROW HIGHWAY & MAINE AVENUE

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	0	0.000	N/S 1:	0.007
Southbound	Through	0.00	0	0	0.000 *	N/S 2:	0.252 *
	Left	0.00	0	0	0.000	E/W 1:	0.639 *
	Right	0.00	0	0	0.000	E/W 2:	0.628
Westbound	Through	3.00	4,800	3,013	0.628		
	Left	1.00	1,600	241	0.151 *	V/C Ratio:	0.891
	Right	1.00	1,600	131	0.007	Loss Time:	0.100
Northbound	Through	0.00	0	0	0.000	ITS:	-0.100
	Left	2.00	2,560	646	0.252 *		
	Right	0.00	0	294	0.000	ICU:	0.891
Eastbound	Through	2.00	3,200	1,269	0.488 *		
	Left	0.00	0	0	0.000	LOS:	D

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	0	0.000	N/S 1:	0.052
Southbound	Through	0.00	0	0	0.000 *	N/S 2:	0.127 *
	Left	0.00	0	0	0.000	E/W 1:	0.983 *
	Right	0.00	0	0	0.000	E/W 2:	0.313
Westbound	Through	3.00	4,800	1,502	0.313		
	Left	1.00	1,600	89	0.056 *	V/C Ratio:	1.110
	Right	1.00	1,600	128	0.052	Loss Time:	0.100
Northbound	Through	0.00	0	0	0.000	ITS:	-0.100
	Left	2.00	2,560	325	0.127 *		
	Right	0.00	0	427	0.000	ICU:	1.110
Eastbound	Through	2.00	3,200	2,538	0.927 *		
	Left	0.00	0	0	0.000	LOS:	F

* Critical Movement

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

2. ARROW HIGHWAY & AZUSA CANYON ROAD

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	11	0.000	N/S 1:	0.273
Southbound	Through	1.00	1,600	5	0.010 *	N/S 2:	0.344 *
	Left	1.00	1,600	10	0.006	E/W 1:	0.492
	Right	0.00	0	22	0.000	E/W 2:	0.815 *
Westbound	Through	2.00	3,200	2,540	0.801 *		
	Left	1.00	1,600	157	0.098	V/C Ratio:	1.159
	Right	1.00	1,600	191	0.070	Loss Time:	0.100
Northbound	Through	0.04	56	15	0.267	ITS:	-0.100
	Left	1.96	2,515	839	0.334 *		
	Right	0.00	0	130	0.000	ICU:	1.159
Eastbound	Through	2.00	3,200	1,130	0.394		
	Left	1.00	1,600	22	0.014 *	LOS:	F

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	26	0.000	N/S 1:	0.090 *
Southbound	Through	1.00	1,600	7	0.021	N/S 2:	0.086
	Left	1.00	1,600	13	0.008 *	E/W 1:	0.953 *
	Right	0.00	0	11	0.000	E/W 2:	0.460
Westbound	Through	2.00	3,200	1,394	0.439		
	Left	1.00	1,600	252	0.158 *	V/C Ratio:	1.043
	Right	1.00	1,600	257	0.082 *	Loss Time:	0.100
Northbound	Through	0.14	230	12	0.052	ITS:	-0.100
	Left	1.86	2,376	155	0.065		
	Right	0.00	0	199	0.000	ICU:	1.043
Eastbound	Through	2.00	3,200	2,345	0.795 *		
	Left	1.00	1,600	34	0.021	LOS:	F

* Critical Movement

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

3. AZUSA CANYON ROAD & OLIVE STREET

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	1,600	319	0.199 *	N/S 1:	0.331
Southbound	Through	2.00	1,600	249	0.156	N/S 2:	0.427 *
	Left	1.00	1,600	16	0.010	E/W 1:	0.213
	Right	0.00	0	19	0.000	E/W 2:	0.287 *
Westbound	Through	1.00	1,600	169	0.118 *		
	Left	1.00	1,600	15	0.009	V/C Ratio:	0.714
	Right	0.00	0	17	0.000	Loss Time:	0.100
Northbound	Through	2.00	3,200	1,009	0.321	ITS:	-0.100
	Left	1.00	1,600	364	0.228 *		
	Right	0.00	0	204	0.000	ICU:	0.714
Eastbound	Through	1.00	1,600	123	0.204		
	Left	1.00	1,600	271	0.169 *	LOS:	C

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	301	0.000	N/S 1:	0.158
Southbound	Through	2.00	3,200	576	0.274 *	N/S 2:	0.388 *
	Left	1.00	1,600	26	0.016	E/W 1:	0.433 *
	Right	0.00	0	20	0.000	E/W 2:	0.322
Westbound	Through	1.00	1,600	165	0.116		
	Left	1.00	1,600	14	0.009 *	V/C Ratio:	0.821
	Right	0.00	0	19	0.000	Loss Time:	0.100
Northbound	Through	2.00	3,200	434	0.142	ITS:	-0.100
	Left	1.00	1,600	183	0.114 *		
	Right	0.00	0	483	0.000	ICU:	0.821
Eastbound	Through	1.00	1,600	196	0.424 *		
	Left	1.00	1,600	329	0.206	LOS:	D

* Critical Movement

FUTURE CONDITIONS - YEAR 2016

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

1. ARROW HIGHWAY & MAINE AVENUE

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	0	0.000	N/S 1:	0.007
Southbound	Through	0.00	0	0	0.000 *	N/S 2:	0.252 *
	Left	0.00	0	0	0.000	E/W 1:	0.639 *
	Right	0.00	0	0	0.000	E/W 2:	0.628
Westbound	Through	3.00	4,800	3,013	0.628		
	Left	1.00	1,600	241	0.151 *	V/C Ratio:	0.891
	Right	1.00	1,600	131	0.007	Loss Time:	0.100
Northbound	Through	0.00	0	0	0.000	ITS:	-0.100
	Left	2.00	2,560	646	0.252 *		
	Right	0.00	0	294	0.000	ICU:	0.891
Eastbound	Through	2.00	3,200	1,269	0.488 *		
	Left	0.00	0	0	0.000	LOS:	D

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	0	0.000	N/S 1:	0.052
Southbound	Through	0.00	0	0	0.000 *	N/S 2:	0.127 *
	Left	0.00	0	0	0.000	E/W 1:	0.983 *
	Right	0.00	0	0	0.000	E/W 2:	0.313
Westbound	Through	3.00	4,800	1,502	0.313		
	Left	1.00	1,600	89	0.056 *	V/C Ratio:	1.110
	Right	1.00	1,600	128	0.052	Loss Time:	0.100
Northbound	Through	0.00	0	0	0.000	ITS:	-0.100
	Left	2.00	2,560	325	0.127 *		
	Right	0.00	0	427	0.000	ICU:	1.110
Eastbound	Through	2.00	3,200	2,538	0.927 *		
	Left	0.00	0	0	0.000	LOS:	F

* Critical Movement

FUTURE CONDITIONS - YEAR 2016

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

2. ARROW HIGHWAY & AZUSA CANYON ROAD

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	11	0.000	N/S 1:	0.273
Southbound	Through	1.00	1,600	5	0.010 *	N/S 2:	0.344 *
	Left	1.00	1,600	10	0.006	E/W 1:	0.492
	Right	0.00	0	22	0.000	E/W 2:	0.815 *
Westbound	Through	2.00	3,200	2,540	0.801 *		
	Left	1.00	1,600	157	0.098	V/C Ratio:	1.159
	Right	1.00	1,600	191	0.070	Loss Time:	0.100
Northbound	Through	0.04	56	15	0.267	ITS:	-0.100
	Left	1.96	2,515	839	0.334 *		
	Right	0.00	0	130	0.000	ICU:	1.159
Eastbound	Through	2.00	3,200	1,130	0.394		
	Left	1.00	1,600	22	0.014 *	LOS:	F

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	26	0.000	N/S 1:	0.090 *
Southbound	Through	1.00	1,600	7	0.021	N/S 2:	0.086
	Left	1.00	1,600	13	0.008 *	E/W 1:	0.953 *
	Right	0.00	0	11	0.000	E/W 2:	0.460
Westbound	Through	2.00	3,200	1,394	0.439		
	Left	1.00	1,600	252	0.158 *	V/C Ratio:	1.043
	Right	1.00	1,600	257	0.082 *	Loss Time:	0.100
Northbound	Through	0.14	230	12	0.052	ITS:	-0.100
	Left	1.86	2,376	155	0.065		
	Right	0.00	0	199	0.000	ICU:	1.043
Eastbound	Through	2.00	3,200	2,345	0.795 *		
	Left	1.00	1,600	34	0.021	LOS:	F

* Critical Movement

FUTURE CONDITIONS - YEAR 2016

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

3. AZUSA CANYON ROAD & OLIVE STREET

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	1,600	319	0.199 *	N/S 1:	0.331
Southbound	Through	2.00	1,600	249	0.156	N/S 2:	0.427 *
	Left	1.00	1,600	16	0.010	E/W 1:	0.213
	Right	0.00	0	19	0.000	E/W 2:	0.287 *
Westbound	Through	1.00	1,600	169	0.118 *		
	Left	1.00	1,600	15	0.009	V/C Ratio:	0.714
	Right	0.00	0	17	0.000	Loss Time:	0.100
Northbound	Through	2.00	3,200	1,009	0.321	ITS:	-0.100
	Left	1.00	1,600	364	0.228 *		
	Right	0.00	0	204	0.000	ICU:	0.714
Eastbound	Through	1.00	1,600	123	0.204		
	Left	1.00	1,600	271	0.169 *	LOS:	C

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	301	0.000	N/S 1:	0.158
Southbound	Through	2.00	3,200	576	0.274 *	N/S 2:	0.388 *
	Left	1.00	1,600	26	0.016	E/W 1:	0.433 *
	Right	0.00	0	20	0.000	E/W 2:	0.322
Westbound	Through	1.00	1,600	165	0.116		
	Left	1.00	1,600	14	0.009 *	V/C Ratio:	0.821
	Right	0.00	0	19	0.000	Loss Time:	0.100
Northbound	Through	2.00	3,200	434	0.142	ITS:	-0.100
	Left	1.00	1,600	183	0.114 *		
	Right	0.00	0	483	0.000	ICU:	0.821
Eastbound	Through	1.00	1,600	196	0.424 *		
	Left	1.00	1,600	329	0.206	LOS:	D

* Critical Movement

FUTURE+PROJECT CONDITIONS - YEAR 2016

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

1. ARROW HIGHWAY & MAINE AVENUE

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	0	0.000	N/S 1:	0.007
Southbound	Through	0.00	0	0	0.000 *	N/S 2:	0.252 *
	Left	0.00	0	0	0.000	E/W 1:	0.658 *
	Right	0.00	0	0	0.000	E/W 2:	0.629
Westbound	Through	3.00	4,800	3,020	0.629		
	Left	1.00	1,600	241	0.151 *	V/C Ratio:	0.910
	Right	1.00	1,600	131	0.007	Loss Time:	0.100
Northbound	Through	0.00	0	0	0.000	ITS:	-0.100
	Left	2.00	2,560	646	0.252 *		
	Right	0.00	0	294	0.000	ICU:	0.910
Eastbound	Through	2.00	3,200	1,329	0.507 *		
	Left	0.00	0	0	0.000	LOS:	E

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	0	0.000	N/S 1:	0.052
Southbound	Through	0.00	0	0	0.000 *	N/S 2:	0.127 *
	Left	0.00	0	0	0.000	E/W 1:	0.985 *
	Right	0.00	0	0	0.000	E/W 2:	0.326
Westbound	Through	3.00	4,800	1,565	0.326		
	Left	1.00	1,600	89	0.056 *	V/C Ratio:	1.112
	Right	1.00	1,600	128	0.052	Loss Time:	0.100
Northbound	Through	0.00	0	0	0.000	ITS:	-0.100
	Left	2.00	2,560	325	0.127 *		
	Right	0.00	0	427	0.000	ICU:	1.112
Eastbound	Through	2.00	3,200	2,546	0.929 *		
	Left	0.00	0	0	0.000	LOS:	F

* Critical Movement

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

2. ARROW HIGHWAY & AZUSA CANYON ROAD

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	11	0.000	N/S 1:	0.275
Southbound	Through	1.00	1,600	5	0.010 *	N/S 2:	0.346 *
	Left	1.00	1,600	10	0.006	E/W 1:	0.536
	Right	0.00	0	22	0.000	E/W 2:	0.815 *
Westbound	Through	2.00	3,200	2,540	0.801 *		
	Left	1.00	1,600	197	0.123	V/C Ratio:	1.161
	Right	1.00	1,600	196	0.061	Loss Time:	0.100
Northbound	Through	0.03	56	15	0.269	ITS:	-0.100
	Left	1.97	2,515	846	0.336 *		
	Right	0.00	0	190	0.000	ICU:	1.161
Eastbound	Through	2.00	3,200	1,130	0.413		
	Left	1.00	1,600	22	0.014 *	LOS:	F

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	26	0.000	N/S 1:	0.115 *
Southbound	Through	1.00	1,600	7	0.021	N/S 2:	0.111
	Left	1.00	1,600	13	0.008 *	E/W 1:	0.959 *
	Right	0.00	0	11	0.000	E/W 2:	0.460
Westbound	Through	2.00	3,200	1,394	0.439		
	Left	1.00	1,600	257	0.161 *	V/C Ratio:	1.074
	Right	1.00	1,600	299	0.107 *	Loss Time:	0.100
Northbound	Through	0.10	167	12	0.072	ITS:	-0.100
	Left	1.90	2,426	218	0.090		
	Right	0.00	0	207	0.000	ICU:	1.074
Eastbound	Through	2.00	3,200	2,345	0.798 *		
	Left	1.00	1,600	34	0.021	LOS:	F

* Critical Movement

Azusa Canyon Industrial

Intersection Capacity Utilization Analysis

3. AZUSA CANYON ROAD & OLIVE STREET

Through Lane Capacity:	1600 vph	North/South Split Phase:	N
Left-Turn Lane Capacity:	1600 vph	E/W Split Phase:	N
Double-Left Penalty:	20 %	Loss Time % per Cycle:	10%
Right-Turn on Red:	50 %	ITS Percentage:	10%
Overlapping Right Turn:			

WEEKDAY A.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	1,600	322	0.201 *	N/S 1:	0.342
Southbound	Through	2.00	1,600	253	0.158	N/S 2:	0.429 *
	Left	1.00	1,600	16	0.010	E/W 1:	0.213
	Right	0.00	0	19	0.000	E/W 2:	0.302 *
Westbound	Through	1.00	1,600	169	0.118 *		
	Left	1.00	1,600	15	0.009	V/C Ratio:	0.731
	Right	0.00	0	17	0.000	Loss Time:	0.100
Northbound	Through	2.00	3,200	1,044	0.332	ITS:	-0.100
	Left	1.00	1,600	364	0.228 *		
	Right	0.00	0	204	0.000	ICU:	0.731
Eastbound	Through	1.00	1,600	123	0.204		
	Left	1.00	1,600	295	0.184 *	LOS:	C

WEEKDAY P.M. PEAK HOUR

Approach	Movement	Lanes	Capacity	Volume	V/C	ICU Analysis	
	Right	0.00	0	326	0.000	N/S 1:	0.159
Southbound	Through	2.00	3,200	613	0.293 *	N/S 2:	0.407 *
	Left	1.00	1,600	26	0.016	E/W 1:	0.433 *
	Right	0.00	0	20	0.000	E/W 2:	0.324
Westbound	Through	1.00	1,600	165	0.116		
	Left	1.00	1,600	14	0.009 *	V/C Ratio:	0.840
	Right	0.00	0	19	0.000	Loss Time:	0.100
Northbound	Through	2.00	3,200	438	0.143	ITS:	-0.100
	Left	1.00	1,600	183	0.114 *		
	Right	0.00	0	483	0.000	ICU:	0.840
Eastbound	Through	1.00	1,600	196	0.424 *		
	Left	1.00	1,600	332	0.208	LOS:	D

* Critical Movement

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Appendix G

Third-Party Review Transportation Study for Azusa Canyon Industrial Parks

(Sasaki Transportation Services, August 2014)

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SASAKI TRANSPORTATION SERVICES, INC.

MEMORANDUM

DATE: **August 15, 2014**
TO: **Peter Lewandowski**
FROM: **Steve Sasaki**
SUBJECT: **Comments Relative to the Project at 4832-4910 Azusa Canyon Rd. – City of Irwindale**

As requested, we have reviewed the traffic mitigation measures based on analyses contained in the "Transportation Study for the Azusa Canyon Industrial Park" ("Azusa Canyon TS") prepared by Gibson Transportation Consulting, Inc. ("Gibson") dated September 2013. This study is anticipated to be included in the environmental documentation for development of this 4832-4910 Azusa Canyon Road site ("Project"), and the Gibson recommended traffic improvements are expected to be an important part of the approval process.

This memorandum serves to provide guidance related to potential conditions of project approval, to help assure the mitigation measures identified in the Azusa Canyon TS, are implemented. The City of Irwindale "Policy Guidelines for Traffic Impact Reports" ("TS Guidelines") were also referenced as a part of our review.

In addition, the proposed development site plan was reviewed relative to internal circulation. The following are our comments:

COMMENTS:

1. The Gibson study identifies a significant project impact at the intersection of Azusa Canyon Road & Arrow Highway ("Azusa Cyn/Arrow") for both Existing + Project, and Future + Project conditions. The other study intersections were found to have less than significant impacts.

2. The City of Irwindale TS Guidelines indicate significant project traffic impacts shall be mitigated through a number of potential improvements, and "Project Fair Share" (page 16 of 21) appears to be the primary focus in determining the eventual project traffic mitigation(s).

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3. One approach to Project traffic, conditions of approval could be to make a distinction between, significant project impact(s) occurring for Existing + Project conditions, or Future + Project conditions.

   - The "Fair Share" mitigations have significant benefits as it allows projects to have more certainty with regard to costs, improvement needs, and project timing. The City of Irwindale TS Guidelines appear to specifically direct use of fair share payments, for mitigation of project traffic/transportation impacts.

   - Fair Share, however, also provides less certainty with regard to the timing/implementation of needed improvements. Based on the City's "Fair Share" formula additional outside funding sources are needed to construct identified mitigation measures.

   - One possible approach (for this Project and/or other projects) would be to make a distinction between project significant impacts under Exist + Project versus Future + Project conditions. For Existing + Project impacts it may be desirable to make a project more responsible for implementation of an improvement measure (if reasonable), and allow more of a fair share role if the impact occurs under Future + Project conditions.

   - In the case of the Azusa Cyn/Arrow intersection, the recommended mitigation in the Gibson report is identified as a restriping. Since this appears to be an improvement that could be implemented in a reasonable time frame and the impact was identified for Existing + Project conditions (as well as Future + Project) it may be beneficial from an environmental perspective, to make implementation of the improvement a conditions of the Project.

   - However, if implementation of the improvement is identified as a mitigation it must also be recognized (we believe) there is shared jurisdiction at the Azusa Cyn/Arrow intersection. There would need to be a caveat that fair share could be paid and serve as mitigation, should implementation of the improvement become infeasible due to circumstances beyond the control of the Project.

4. The site plan for a potential development at the project location was prepared by GAA Architects, dated (revised) 4/16/14:

   - The truck turns shown on the site plan appear to for a WB-40 semi-trailer truck or smaller. For the current site plan layout it appears a project condition would be required, to prohibit trucks larger than a WB-40 from accessing the site. If any larger

trucks are anticipated to access the site, it appears site plan modification(s) and further review would be required.

- Upon identifying the specific user of the "spec" building it appears there should be further review by the City Engineer to determine if the northerly and/or southerly driveways will continue to be justified.

- Some of the current trash enclosure locations appear to require a trash truck to make significant backing movements. From a traffic perspective, it would be desirable to (re)locate the trash enclosures to areas in the site which allow adequate access, as well as minimizing backing movements.

These comments reflect our review of the potential project, traffic mitigation measures. If there are added questions you or the City may have, please let me know. Thank you.

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