CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY

(November 29, 2010)

The Department of Toxic Substances Control (DTSC) has completed the following document for this project in accordance with the California Environmental Quality Act (CEQA) [Pub. Resources Code, div. 13, § 21000 et seq] and accompanying Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq].

PROJECT TITLE:		**CALSTARS CODING:**
Veolia ES Technical Solutions - Hazardous Waste Facility Permit		PCA: 25040 Site: 530011
PROJECT ADDRESS:	**CITY:**	**COUNTY:**
1704 West First Street	Azusa	Los Angeles County
PROJECT SPONSOR:	**CONTACT:**	**PHONE:**
Veolia ES Technical Solutions, LLC	Javed Hussain Veolia ES Technical Solutions, LLC	(626) 945-6003

APPROVAL ACTION UNDER CONSIDERATION BY DTSC:

☐ Initial Permit Issuance ☒ Permit Issuance ☐ Permit Modification ☐ Closure Plan
☐ Removal Action Workplan ☐ Remedial Action Plan ☐ Interim Removal ☐ Regulations
☐ Other (specify):

STATUTORY AUTHORITY:

☒ California H&SC, Chap. 6.5 ☐ California H&SC, Chap. 6.8 ☐ Other (specify):

DTSC PROGRAM/ ADDRESS:	**CONTACT:**	**PHONE:**
Department of Toxic Substances Control 9211 Oakdale Avenue Chatsworth, California 91311	Stephen Baxter	(818) 717-6695

PROJECT DESCRIPTION:

The issuance of a Hazardous Waste Facility Permit (Permit) for the Veolia Environmental Services Technical Solutions (Veolia) Azusa Facility (Facility) by the Department of Toxic Substances Control (DTSC), as authorized by the California Health and Safety Code, Chapter 6.5, and the Resources, Conservation and Recovery Act (RCRA). Veolia currently operates under a previously issued permit. The new Veolia Permit will authorize the continued treatment, storage, and transfer of off-site generated hazardous waste.

The issuance of the new Permit will authorize an increase in the Facility's overall storage capacity; from the current 768,550 gallons (in containers and tanks) to 1,054,565 gallons; an increase of 286,015 gallons, or 37%. This increase will occur by a combination of new activity in existing structures, and construction of new storage areas. Storage capacity is the maximum volume of hazardous waste stored in tanks and containers that are allowed, and does not indicate the amount of waste that would be constantly present.

In addition, the new Permit will allow the construction of one treatment unit; a Fluidized Bed Bio-Reactor, which will use microbial biological growth (bacteria, fungi, etc.) to "polish" the Facility's wastewater stream prior to discharge to a

sanitary sewer system. Discharge to the sanitary sewer system is regulated by a permit and regulations issued by the Los Angeles County Sanitation District.

The Veolia Facility is a commercial oil and solvent recycling (treatment) facility, located in the City of Azusa, California. The Facility receives hazardous and non-hazardous waste from off-site sources for the purpose of processing, storage, treatment, recycling, and/or transfer. Regulated and unregulated waste is received from commercial, industrial, and household sources from throughout California, nearby states, and Mexico. Activities conducted at the Facility include solvent reclamation, fuels blending, waste distillation, used oil recycling, waste consolidation, repackaging, lab-packing and de-packing, universal waste consolidation, and trans-shipment to other facilities. Reusable solvent products are reclaimed by means of settling, physical separation, distillation/thin film evaporation, and dewatering. Recycled solvents are sold or exchanged for reuse; non-recyclable wastes and wastes generated by recycling activities are manifested off-site for use as supplemental fuels, for destructive incineration, or for disposal by other means. Some wastes are collected in their original containers and reshipped to other off-site facilities. The Facility receives and ships wastes off-site by tanker truck, truck van, railcar, and in containers such as drums and roll-off bins.

The Facility also accepts universal waste batteries, electronic devices, lamps, cathode ray tubes and cathode ray tube glass for accumulation and management prior to shipment off-site to an authorized universal waste handler or destination facility. The universal wastes are not treated at the Facility prior to shipment off-site. Additionally, the Facility accepts universal waste aerosol cans for treatment as hazardous waste in a permitted unit.

The Facility may accept most types of hazardous waste, designated as RCRA (federal and state listed) and non-RCRA (state-only listed) wastes. Types of wastes include corrosive wastes, halogenated wastes, non-halogenated solvent wastes, aromatic and aliphatic solvents, aqueous wastes, solid and semi-solid waste solvent residues, waste-containing oils, organic solids, aqueous organic waste, aqueous inorganic wastes, and mixtures. Typical off-site waste sources include, but are not limited to, oxygenated solvents, used oils, chlorinated and fluorinated hydrocarbons, paints, industrial solvents, industrial wastes including alcohols, phenols, and various hydrocarbon mixtures, acid and base solutions. Typical waste streams may originate from automotive manufacturing, electronics, metal cleaning, packaging, machine oils, aqueous waste streams. The Facility may also accept household hazardous waste.

UNITS:

The Permit will allow Veolia to continue operating eighteen hazardous waste management units, designated as the following:

UNIT AA1	Truck Dock (Loading/Unloading Area)
UNIT AA2	Storage and Processing Unit 1 (Slab)
UNIT AA4	Storage and Processing Unit 2 (Frac Bay)
UNIT AA5	Storage Tank Farm 1 (TS) (large cone-bottom)
UNIT AA6	Storage Tank Farm 2 (TS) (small cone-bottom)
UNIT AA7	Storage Tank Farm 3 (TS) (500 Series)
UNIT AA8	Storage Tank Farm 4
UNIT AA9	Receiving Tank Farm 1 (TR)
UNIT AA10	Receiving Tank Farm 2 (TR)
UNIT AA11	Storage Tank Farm 5 (TV)
UNIT AA12	Fractionation Distillation Unit 1
UNIT AA13	Thin Film Distillation Unit 1
UNIT AA14	Glass Column Distillation Unit
UNIT AA15	Railcar Loading/Unloading Area
UNIT AA16	Cryogenic Unit
UNIT AA17	Universal Waste Handling Unit
UNIT AA18	Aerosol Recycling Unit
UNIT AA19	Sewer Equalization Tanks

The Permit will allow Veolia to construct the following three new units. Unit AC2 will be a newly constructed addition to the existing storage unit designated as Unit AA2. Units AC22 and AC23 will be new independently constructed units.

UNIT AC2	Storage and Processing Unit 1 (proposed modification of AA2)
UNIT AC22	Fluidized Bed Bio-Reactor (proposed)
UNIT AC23	Roll-Off Bin Storage and Processing Unit 1 (proposed)

The Permit will allow slight modifications to two existing containment structures, which will allow those areas to be used as additional storage. Currently, these existing containment areas provide secondary containment for treatment systems using above-ground tanks. The Permit will allow the space between the tank systems to be used for additional storage of containers. The additional storage areas will be associated with the following units:

UNIT AB20	Production, Processing, and Storage Unit 1 - South (proposed)
UNIT AB21	Production, Processing, and Storage Unit 2 - North (proposed)

STORAGE CAPACITY:

The proposed Permit will allow the Facility to continue storing hazardous waste in containers and tanks. The previous Permit authorizes the Facility to store up to 768,550 gallons (256,210 gallons in containers and 512,340 gallons in tanks.)

The proposed Permit will allow new construction and/or new activities that will increase the storage capacity with an additional 286,015 gallons (266,015 gallons in containers and 20,000 gallons in tanks).

Thus, under the new Permit, Veolia will be authorized to store up to 1,054,565 gallons (522,225 gallons in containers and 532,340 gallons in tanks). This is an increase of 37% in storage capacity.

NEW CONSTRUCTION:

UNIT AC2: The Permit will allow Veolia to expand the existing container storage area designated as Unit AA2 Storage and Processing Unit 1. Once the expansion is constructed and approved, Unit AA2 will be re-named Unit AC2. Unit AA2 is currently used to store containers of hazardous waste. Currently, Unit AA2 has a concrete base measuring 208 feet by 94 feet, surrounded by a containment berm. The Permit allows the south end of Unit AA2 to be extended 70 feet, resulting in a larger unit measuring 278 feet by 94 feet. The expanded unit will be designated as Unit AC2.

UNIT AC22: is a new Fluidized Bed Bio-Reactor that will be used to treat waste water before it is discharged to the sewers under a permit issued by the Los Angeles County Sanitation District. This unit will be installed near existing units and within a shared containment structure. Unit AC22 will have a footprint of approximately 15 feet by 34 feet and will consist of: Fluidized Bed Reactor (FBR), Process and Storage Tank T-504, Oxygen Generation System, Oxygen Receiver, Oxygen Vessel, Nutrient Tank, pH Control Tank, Strainers and Pumps.

UNIT AC23: is a new storage unit specifically designed for roll-off bins. The unit will be constructed on an unused portion of the Veolia property. Unit AC23 will be 95 feet by 50 feet and capable of storing twelve 50-cubic-yard roll-off bins.

ENVIRONMENTAL IMPACT ANALYSIS

1. Aesthetics

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions:

The Facility is currently located in an industrial portion of Azusa. The Facility store, treats, recycles and transfers hazardous waste. These activities have been performed at this site since 1954. The proposed project (the Permit) authorizes current operations and additional storage and treatment units. This project is not expected to degrade or improve the aesthetics of the site or area, therefore no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Have a substantial adverse effect on a scenic vista.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Substantially degrade the existing visual character or quality of the site and its surroundings.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Create a new source of substantial light of glare that would adversely affect day or nighttime views in the area.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *Final EIR, OSCO Proposed Phase 2 of Master Plan for Upgrading and Expansion of Solvent Recycling Facility in the City of Azusa, California, July 1990*
- *USGS Urban Areas Aerial Photograph dated 3/29/2004.*

2. Agricultural Resources

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions:

The Facility is inside a land use zone for "HI - HEAVY INDUSTRIAL". The areas west, north, and northeast of the Facility are zoned "M - MANUFACTURING". There is an area approximately ½ miles southwest of the Facility, that lies within the Santa Fe Flood Control Basin and is zoned "AG - AGRICULTURAL"

Road access to and from the Facility does not cross any agricultural area before entering the freeway system (primarily Interstate 210 to the north of the Facility), therefore no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

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.

   Impact Analysis:

   Conclusion:
   ☐ Potentially Significant Impact
   ☐ Potentially Significant Unless Mitigated
   ☐ Less Than Significant Impact
   ☒ No Impact

b. Conflict with existing zoning or agriculture use, or Williamson Act contract.

   Impact Analysis:

   Conclusion:
   ☐ Potentially Significant Impact
   ☐ Potentially Significant Unless Mitigated
   ☐ Less Than Significant Impact
   ☒ No Impact

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

   Impact Analysis:

   Conclusion:
   ☐ Potentially Significant Impact
   ☐ Potentially Significant Unless Mitigated
   ☐ Less Than Significant Impact
   ☒ No Impact

References Used:

- *Final EIR, OSCO Proposed Phase 2 of Master Plan for Upgrading and Expansion of Solvent Recycling Facility in the City of Azusa, California, July 1990*
- *USGS Urban Areas Aerial Photograph dated 3/29/2004.*

3. Air Quality

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

The South Coast Air Quality Management District (SCAQMD) is directly responsible for reducing air emissions from stationary (area and point) sources in most of Southern California. The jurisdiction of the SCAQMD includes the City of Azusa and the Veolia Facility. The SCAQMD has issued a permit for the Facility under SCAQMD Permit Number 119501. The SCAQMD has prepared a series of Air Quality Management Plans (AQMPs), the most recent of which was adopted by the Governing Board of the SCAQMD on June 1, 2007. The 2007 AQMP demonstrates that applicable ambient air quality standards can be achieved within the timeframe required under federal law when existing and proposed projects comply with the applicable SCAQMD rules and regulations for new or modified sources. Following are the SCAQMD's thresholds of significance.

SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds [a]		
Pollutant	**Construction [b]**	**Operation [c]**
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants [d]		
NO2 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state)	
PM10 24-hour average annual average	10.4 µg/m^3 (construction) [e] & 2.5 µg/ m^3 (operation) 1.0 µg/ m^3	
PM2.5 24-hour average	10.4 µg/m^3 (construction) [e] & 2.5 µg/ m^3 (operation)	
Sulfate 24-hour average	1 µg/ m^3	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)	

a. Source: SCAQMD CEQA Handbook (SCAQMD, 1993).

b. Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).
c. For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.
d. Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.
e. Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million µg/m3 = microgram per cubic meter ≥ greater than or equal to

For purposes of analyzing the proposed Veolia Permit, pollutant emissions calculations evaluated carbon monoxide (CO), nitrogen oxides (NOx), reactive organic gases (ROG), particulate matter less than 10 and 2.5 microns (PM_{10}, $PM_{2.5}$), and lead and compared them to the SCAQMD established significance thresholds and localized significance thresholds (LST). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. The LSTs utilized for comparison purposes are based on a 5 acre site with a receptor distance of 25 meters. As the actual site acreage of the Facility is 7.5 acres this is considered a conservative assumption. The overall sum of emissions due to the Facility's operation is shown in Table 1 – Baseline and Net Increase in Facility Operational Emissions. This table does not include pollutant construction related emissions as these emissions are regulated by a separate significance threshold (refer to Table 1C). Results show that the baseline and overall net increase of emissions are below or well within the margin of error in comparison to the SCAQMD's significance thresholds and LSTs.

The pollutant that is in the closest proximity to a threshold is $PM_{2.5}$. However a significant portion of these PM emissions account for truck traveling to and from the site. Because much of this traffic occurs away from the site (calculations assume upwards of 50 miles), these totals should not be directly compared to the LSTs as their purpose is generally for a conservative comparison of on-site emissions that would relate to the 2.5 microgram per cubic meter ambient air quality threshold. For example, if the assumed mileage for PM calculations was decreased to just 10 miles to better account for truck travel that is nearby the Facility, then PM emissions would show to be well below a level that would be considered significant (i.e. total baseline PM_{10} and $PM_{2.5}$ would calculate to 1.0 and 0.98 lbs/day, respectively).

The Facility baseline emissions are shown in Table 1A – Totalized Baseline Facility Pollutant Emissions and Table 1B – Totalized Baseline Facility GHG Emissions. Baseline emissions consider the site truck traffic, emissions related to the combustion of natural gas in the Facility's furnace, volatile organic compound (VOC) emissions related to the site storage tanks and solvent loading and unloading following the vapor recovery system control device, and indirect GHG emissions related to the Facility's consumption of electricity.

The direct pollutant and GHG emissions from mobile combustion were calculated using the on-road emissions factors available from the SCAQMD (scenario year 2011), and were based on the maximum daily truck traffic to the site taking into account approximate mileage for local vendors normally used by the Facility. It is estimated that on any given day the traffic maximum is 20 trucks per day. For GHG emissions, calculations assumed that the truck traffic would occur 52 weeks per year, Monday through Friday. Pollutant emissions did not make this assumption as their significance thresholds are daily while GHG emission significance thresholds are annual. Both sets of calculations assumed only local traffic (i.e. maximum of 50 miles per one way trip). Calculations are shown in Table 2A and 2B.

Pollutant emissions related to the combustion of natural gas in the Facility's on-site furnace were calculated utilizing the emission factors provided in AP-42, Table 1.4-1 and 1.4-2, assuming the use of low NOx burners and flue gas recirculation control devices. As recommended in the SCAQMD's guidance, GHG emissions related to this activity were calculated using the emissions factors from the CCAR General Reporting Protocol Version 3.1, January 2009. The natural gas usage was based on Veolia's 2009 Southern California Gas Company billing. Calculations and emission quantities are shown in Tables 4A and 3B.

The recovery system VOCs emissions were calculated based on the total recovered solvent waste condensate. According to Veolia (the Permittee), approximately, 1,000 gallons of mixed VOCs with an approximate specific gravity of 1.02 are collected annually in the Facility's liquid nitrogen condense vapor control system. Calculations were completed making the conservative assumption that the vapor recovery system is operating at the control efficiency required by its Permit to Operate, No. G7368, Condition 8, which is 98.9%. Calculations and emission quantities are shown in Table 6A.

The indirect emissions calculations from Facility electricity usage only considered GHG emissions as required by the CCAR General Reporting Protocol Version 3.1, January 2009. The GHG emissions were calculated based on the Facility's 2009 Southern California Edison billing. The Facility's energy usage and related GHG emissions are shown in Table 4B.

Analysis as to whether or not project activities would:

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

Impact Analysis:

The SCAQMD has prepared a series of Air Quality Management Plans (AQMPs), the most recent of which was adopted by the Governing Board of the SCAQMD on June 1, 2007. The 2007 AQMP demonstrates that applicable ambient air quality standards can be achieved within the timeframe required under federal law when existing and proposed projects comply with the applicable SCAQMD rules and regulations for new or modified sources. As discussed in subsection b. below, pollutant emissions calculations for carbon monoxide (CO), nitrogen oxides (NOx), reactive organic gases (ROG), particulate matter less than 10 and 2.5 microns (PM_{10}, $PM_{2.5}$), and lead, demonstrate that the baseline and overall net increase of emissions of the proposed Project are below or well within the margin of error in comparison to the SCAQMD's significance thresholds and LSTs. Compliance with the SCAQMD thresholds and LSTs would be consistent with the SCAQMD's air quality plan goals to achieve air quality standards within the timeframe required under federal law.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

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

Impact Analysis:

Existing emissions of the Facility are below or well within the margin of error in comparison to the SCAQMD's significance thresholds and LSTs. The net increase in pollutant emissions related to the Project were considered separately for the emissions related to construction and those related to overall Facility operation because the SCAQMD has different significance thresholds for each. Table 1C shows the totalized Facility construction emissions compared to the construction specific thresholds while Table 2C shows the totalized Facility net increase in operational emissions compared to the operational specific thresholds. Both tables show that the net increase related to the Project are below the SCAQMD significance thresholds and the LSTs.

Pollutant emission calculations related to the Project construction activities considered emissions from on and off-road vehicles utilized during construction, and fugitive PM emissions resulting from excavating activities and loading debris into trucks and/or roll-off bins. Vehicle related mobile combustion pollutant emissions were calculated using the on and off-road emissions factors available from the SCAQMD. Emissions from off-road vehicles assumed that on any given day there would be no more than ten cement trucks, one excavator, one manlift, one crane, and one forklift on-site with construction occurring from 6:00 am to 6:00 pm for a maximum 12 hour day. Emissions from on-road vehicles assumed local travel with a maximum increase in daily site traffic of 16 delivery trucks and 2 passenger vehicles to account for the increase in contractor travel. The emissions factors utilized and the total emissions from on and off-road vehicles are shown in Tables 3C through 6C.

The construction emissions related to the Project will also result in fugitive PM emissions related to excavating and debris loading activities. These calculations were completed utilizing AP-42, Table 13.2.3-1, Recommended Emission Factors for Construction Activities. The recommended factors included the dozer overburden factor and equation in Table 11.9-1 for site preparation/bulldozing, the equations listed in Section 13.2.4 for loading debris into trucks, and Table 13.2.4-1 for material silt and moisture content. For the purposes of these calculations debris/soil mixture was assumed to have the silt and moisture content of clay/dirt mix, which has silt content of 9.2% and a moisture content of 14%. The slightly higher moisture content is presumed reasonable as engineering controls such as surface wetting will be performed during these activities. The maximum debris loading per day is based on the maximum debris and soil removal effort (AC2 drum pad extension), which is 286 cubic yards (cy) of soil and 150 cy of debris, occurring over a 3 day period for a maximum of 145 cy of soil/debris per day. Calculations assume a soil/debris density of 1.2 tons per cubic yard and a compact soil/debris to loose soil/debris conversion factor of 1.25. Calculations are shown in Table 7C which the specific equations utilized listed below.

The operational emissions related to the Project are minimal. Table 8C shows the expected increase of emissions related to the increase in truck traffic to the site. The calculations again utilized the SCAQMD's on-road emissions factors assuming a maximum increase in truck traffic of 5 trucks per day, local traffic. Increase of VOC emissions related to additional solvent storage (vented to the existing vapor control device) were not calculated as the increase was expect to be well below the accepted margin of error in the baseline VOC calculations.

The net increase in GHG emissions due to construction and operation of expanded or new units was calculated previously—prior to the analysis of total Project GHG emissions. Documentation detailing these calculations is provided in the September 20, 2010 report that Veolia submitted to DTSC (and which was prepared by Veolia's consultant, Shaw Environmental, Inc.), which is attached herein for reference. This net increase in GHG emissions is now included in the overall sum for the Facility. The table numbers have been modified from 1 to 1D, 2 to 2D, etc. for the purposes of streamlining the two reports. Refer to this report and the attached Tables 1D to 6D for further information regarding the net increase in GHG emissions.

As shown, the totalized net increase in GHG emissions (Table 1D) has been amended to include emissions now found in Table 7D – Aerobic Digestion Emissions. Carbon dioxide emissions from the treatment of wastewater were overlooked in the original September 20, 2010 response to DTSC and are therefore included here as an addition to the previously provided emissions profile. The proposed fluidized bed reactor system plans to utilize aerobic digestion in the treatment of wastewater. This process results in the conversion of organic compounds to carbon dioxide. Calculations made the conservative assumption of 100 percent conversion of the maximum design capacity of the fluidized bed reactor system, 48 pounds of total organic compounds as hexane per day. Total carbon dioxide emissions resulting from this process was estimated to be 24.35 metric tons per year, for a combined expected net increase in GHG emissions of 280 metric tons of carbon dioxide equivalent per year. Direct mobile emissions continue to be the major contributor to the overall change in GHG emissions from the proposed solvent recycling Facility expansion project.

Existing and proposed project design and control features would ensure compliance with existing and proposed SCAQMD air quality standards and avoid contributing substantially to an existing or projected air quality violation.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

c. Result in 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).

Impact Analysis:

Based on the findings presented in the analysis of air impacts in 3.a (above), proposed activities are not expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SCAQMD is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

d. Expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis:

There are currently no sensitive receptors identified in the area that would be impacted from air emissions related to the proposed Project. In addition, existing and proposed project design and control features would ensure compliance with existing and proposed SCAQMD air quality standards and avoid contributing substantially to an existing or projected air quality violation.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Create objectionable odors affecting a substantial number of people.

Impact Analysis:

Current and proposed Facility operations are subject to compliance with SCAQMD Rule 402 that will ensure that the project will not create objectionable odors affecting a substantial number of people.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, f.).

Impact Analysis:

According to the California Department of Conservation, the project is not located in an area containing naturally occurring asbestos.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *Final EIR, OSCO July 1990*
- *SCAQMD air quality information at website: http://www.aqmd.gov/smog/historicaldata.htm*
- *Azusa General Plan, Chapter 5 (Natural Environment): Air Quality*
- *A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, dated August 2000, by California Department of Conservation, Division of Mines and Geology*
- *Response to DTSC September 2, 2010 CEQA Comments, HWF Permit Application and Supporting Information Veolia ES Technical Service Azusa Facility (CAD008302903), Shaw Environmental, Inc., September 20, 2008*
- *Response to DTSC October 7, 2010 CEQA Comments, HWF Permit Application and Supporting Information Veolia ES Technical Service Azusa Facility (CAD008302903), Shaw Environmental, Inc. November 2, 2010*
- *SCAQMD Final 2007* Air Quality Management Plan

4. Biological Resources

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions:

The Facility is located inside a heavy industrial zone. Major freeways are located 0.5 miles to the north (east-west Interstate 210), and 4.0 miles to the west (north-south Interstate 605). The area surrounding the Facility is highly industrial, manufacturing and/or commercial, except for the Santa Fe Dam Recreation Area located approximately 1 mile west of the Facility.

All waste, wastewater, and precipitation runoff is controlled within the Facility. Permanent containment structures have been constructed to prevent spills and contaminated runoff from leaving the Facility. Wastewater is treated and may be discharged to a sanitary sewer system under a permit issued by the Los Angeles County Sanitation District.

A number of threatened, rare, and/or endangered species are identified as being located within the general area of the Facility. However, the Facility and surrounding area is highly urbanized and does not have any sensitive habitat to impact. The nearest potential habitat area is in the Santa Fe Dam Recreational Area, which is located approximately 1 mile west of the Facility.

Analysis as to whether or not project activities would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Analysis:

The construction activities proposed in the Permit application would take place completely within the Facility boundary. The Facility is completely industrialized and no natural habitat exists within the Facility boundary. No occurrences of endangered or protected species have been identified within the Facility boundary.

The existing Facility does not impact any natural habitat, sensitive or otherwise. Industrial practices and regulations require the processing of waste to be contained within the Facility. Natural and man-made barriers prevent any impact from the Facility to reach the nearest natural setting; the Santa Fe Dam Recreational Area. Truck traffic does not go through natural habitat, and primarily uses Interstate 605, approximately 0.5 miles north of the Facility.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Analysis:

The site does not contain riparian habitat or other sensitive natural communities as defined by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The nearest riparian corridor is the Santa Fe Flood Control Basin, located approximately ½ mile west of the site. The Santa Fe Flood Control Basin contains alluvial scrub habitat; however, various barriers (mostly man-made) provide for a clear separation of the site from the natural alluvial scrub habitat. Therefore, the proposed project will not have a direct or indirect impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

The United States Army Corps of Engineers (USACE) regulates the dredge and fill of Waters of the U.S. through Section 404 of the Clean Water Act (CWA). The site is developed and does not impact federally protected waters or

wetlands. Therefore, no impacts would occur on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means as a result of this project.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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.

Impact Analysis:

As noted above, the Facility is located in an area zoned Heavy Industrial with no sensitive flora or fauna in or around the site. Additionally as noted throughout this analysis, although some construction is anticipated, work will be confined to above ground and within the Facility site boundary, therefore there will be no interference with movement of any native resident or migratory fish or wildlife species.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

For reasons noted above, this subsection is not applicable to the proposed project.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact Analysis:

The proposed project, a permit renewal including some expansion and construction of certain units, will be implemented consistent with the City of Azusa's policy as it relates to maintaining current data and information on biological resources including the types of habitats, individual species and their locations. To facilitate the collection of accurate data, a Rarefind search was conducted to identify potentially impacted species as defined by the California Department of Fish & Game and the U.S. Fish and Wildlife Service sensitive and endangered species lists. The report detailing the results of this search is incorporated by reference and is attached to this Initial Study analysis. None of the listed species are located in and immediately around the Facility site.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *RCRA Part B Permit Application, Veolia Environmental Services, dated February 2009.*
- *Figure B-3, Land Use Plan, City of Azusa, located within the RCRA Part B Permit Application (February 2009).*
- *Final Environmental Impact Report, OSCO Proposed Phase 2 of Master Plan for Upgrading and Expansion of Solvent Recycling Facility in the City of Azusa, California, dated July 1990, SCH No. 89051709, prepared by the City of Azusa, California*
- *Azusa General Plan, Chapter 5 (Natural Environment): Open Space and Biological Resource Preservation, April 2004.*
- *Jane Strong, California Native Plant Society, San Gabriel Mountains Chapter.*
- *The Natural History of the Santa Fe Dam Recreation Area website: http://cnps-sgm.org/santafedam/index.html*
- *Azusa General Plan, Chapter 5 (Natural Environment): Open Space and Biological Resource Preservation.*
- *California Wildlife Habitat Relations System, California Department of Fish and Game*
- *Natural Diversity Database, California Department of Fish and Game, August 30, 2009.*

5. Cultural Resources

Project Activities Likely to Create an Impact:

- Construction and/or establishment of 4 new units

Description of Baseline Environmental Conditions:

The Facility is located in an area zoned for industrial activities. The entire Facility property and surrounding property have already been developed.

According to the City of Azusa, the project site is not located in an area known to contain prehistoric, historic, or paleontological resources. However, the City General Plan states that if such resources are encountered that avoidance of the resources is encouraged if they are determined to be significant as defined in CEQA Guidelines Section 15064.5. If avoidance is not feasible, implement a mitigation plan to excavate, analyze, and report on the discoveries. Further, in the event that any prehistoric, historic, or paleontological resources are discovered during construction-related earth-moving activities, all work within 50 feet of the resources shall be halted and the developer shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any finds are determined to be significant by the qualified archaeologist, then representatives from the City of Azusa and the qualified archaeologist and/or paleontologist shall meet to determine the appropriate course of action. Should human remains be discovered during the implementation of a proposed project, the local coroner must be immediately contacted. Both the Native American Heritage Commission (pursuant to NAGPRA) and any identified descendants should be notified, and recommendations received, if the remains are determined to probe of Native American origin (CEQA Guidelines Section 15064.5, Health and Safety Code Section 7070.5, Public Resources Code Sections 5097.94 and 5097.98).

Analysis as to whether or not project activities would:

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

Impact Analysis:

As noted above, the site is not located in an area known to contain historical resources. However, in the event such resources are encountered, the measures described above as contained in the City General Plan will be implemented.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.

Impact Analysis:

As noted above, the site is not located in an area known to contain archeological resources. However, in the event such resources are encountered, the measures described above as contained in the City General Plan will be implemented.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact Analysis:

As noted above, the site is not located in an area known to contain paleontological resources. However, in the event such resources are encountered, the measures described above as contained in the City General Plan will be implemented.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

The fact that the site is located in an area zoned for industrial activities and both the property and surrounding property have already been developed, it is unlikely that human remains including those interred outside of formal ceremonies will be encountered. However, in the event such remains are encountered, the measures described above as contained in the City General Plan will be implemented.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *Susan Cole, Senior Planner, City of Azusa, Planning Division, Personal Communication on September 20, 2010*
- *Azusa General Plan, Chapter 3: The Built Environment*

6. Geology and Soils

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

The Facility is located within the Transverse Ranges geomorphic and structural providence. The Transverse Ranges consist of a series of east-west trending mountains from Point Conception to the west and as far as Arizona to the east. The mountains consist of pre-Cambrian crystalline rocks, Mesozoic plutonic and metamorphic rocks, with a discontinuous veneer of Tertiary and Quaternary sediments. The mountains are generally broken by similarly trending east-west faults. A frontal fault system follows the south edge along the ranges. Often the mountains are thrust to the south along this fault system which has been active in approximately its current configuration since lat Tertiary or early Quaternary time.

The Facility lies on the alluvial fan derived from the deposition of material transported from the interior of the San Gabriel Mountains by the San Gabriel River. It is a portion of the alluvial apron along the front of the mountain ranges.

As with all of Southern California, the Facility is subject to the effects of nearby, local earthquakes as well as large earthquakes.

The Facility lies on the alluvial fan of the San Gabriel River. The current channel of the San Gabriel River is controlled by the Santa Fe Dam and levees, and the alluvium at the site is not subject to reworking providing flood control measures do not fail. The unconsolidated material consists of boulders and cobbles up to 6 feet in size in a matrix of gray sand and gravel.

The exact depth of the bedrock directly under the site is approximately 1,000 feet below surface grade. The groundwater table is variable on the order of 100 to 200 feet below surface grade.

The fault nearest to the Facility is the Duarte Fault which lies about 1.5 miles north of the Facility. The Sierra Madre frontal fault zone lies about 2 miles north of the Facility.

Analysis as to whether or not project activities would:

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

- ❖ Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42).
- ❖ Strong seismic ground shaking.
- ❖ Seismic-related ground failure, including liquefaction.
- ❖ Landslides.

Impact Analysis:

The city of Azusa is not located in an Alquist-Priolo Earthquake Fault Zone. A study of earthquake zones for Los Angeles County indicates that the Facility is not located near a known Alquist-Priolo Earthquake Fault. The Facility's Permit Application states that the Facility is not within 3,000 feet of an active earthquake fault which has displacement during the Holocene era, defined as the last approximately 11,000 years [California Code of Regulations, title 22, section 66270.14(b)(11)(A)].

Major earthquakes were recorded for the region in 1812, 1857, 1933, 1971, and 1987. The major earthquake in 1812 caused damage at Mission San Gabriel located 12 miles west of the site. The 1933 major earthquake was a magnitude 6.3 and it was centered near Long Beach on the Newport-Inglewood fault. The fault nearest to the site is the Duarte Fault, which lies 1.5 miles north of the site. Other faults near the site include:

a. Raymond Hill – 4 miles northwest
b. Whittier – 10 miles south
c. Cucamonga – 10 miles east
d. San Jacinto – 20 miles northeast
e. San Andreas – 22 miles northeast

The Facility structures are required to be built to withstand seismic events without catastrophic failure. All units handling hazardous waste (treatment, storage, and transfer) are required to have secondary containment to contain spills and precipitation runoff. These containment structures would also contain spillage as the result of a seismic event. The proposed additional storage and units will be consistent with current operations and will not present any increased risk of upset due to seismic events. All new units constructed as part of this Permit will be built to withstand seismic events and will have the requisite secondary containment to contain spills and precipitation runoff.

DTSC reviewed the 2010 Fault Activity Map (FAM) of California, published by the California Department of Conservation, California Geological Survey. The 2010 FAM indicates that the Raymond Hill Fault and the Whittier Fault are Holocene faults (displacement within 700,000 years). The FAM also shows a Quaternary fault (age undifferentiated) called the Walnut Creek Fault running NE-SW, and located approximately 6 miles southeast of the Facility. The 2010 FAM does not show any Historic Faults (displacement within 200 year) near the Facility. (The 2010 Fault Activity Map can be viewed at http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html)

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

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

Impact Analysis:

The proposed project includes the construction of three units on areas already paved. Although the pavement will be removed and some underlying soil may be graded, the construction will not result in the substantial loss of topsoil. Pavement, concrete slab and/or a structure will replace any exposed soil and, therefore, will prevent any soil erosion.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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.

Impact Analysis:

The site is located within the Transverse Ranges, which consists of pre-Cambrian crystalline rocks, Mesozoic plutonic and metamorphic rocks, with a discontinuous veneer of tertiary and quaternary sediments. The site is located on the alluvial fan derived from the deposition of material transported from the interior of the San Gabriel Mountains by the San Gabriel River, outwash, and debris flows. The soils under the site are coarse sand and gravels with boulders interbedded with silty sand and gravel. No reports were found indicating the site is located on expansive soils. The site is underlain by gravelly sands and boulders, which are not characteristic of the properties of expansive soils. Additionally, review of the State of California Seismic Hazard Zones indicates that the site is not within an area of soil liquefaction or an area prone to landslide. Therefore, the site is unlikely to 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 landslides, lateral spreading, subsidence, liquefaction or collapse.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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.

Impact Analysis:

No reports were found indicating the site is located on expansive soils. The site is underlain by gravelly sands and boulders, which are not characteristic of the properties of expansive soils. Additionally, review of the State of California Seismic Hazard Zones indicates that the site is not within an area of soil liquefaction or an area prone to landslide.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

Municipal wastewater from the site is discharged to a sanitary sewer. Storm water from the site that has the potential for contacting wastes is contained on site and sent to a water treatment/recycling Facility. Storm water that does not have the potential to contact stored wastes is discharged to the local storm water system under a General Industrial Stormwater Discharge Permit from the State Water Resource Control Board. Construction of a septic tank is not anticipated for this project.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Be located in an area containing naturally occurring asbestos (see also Air Quality, f.).

Impact Analysis:

According to the California Department of Conservation, the project is not located in an area containing naturally occurring asbestos.
Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *RCRA Part B Permit Application, Veolia Environmental Services, dated February 2009.*
- *Final Environmental Impact Report, OSCO Proposed Phase 2 of Master Plan for Upgrading and Expansion of Solvent Recycling Facility in the City of Azusa, California, dated July 1990, SCH No. 89051709, prepared by the City of Azusa, California*
- *A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, dated August 2000, by California Department of Conservation, Division of Mines and Geology.*
- *California Department of Conservation website at www.conservation.ca.gov/cgs/rghm/ap/.*
- *2010 Fault Activity Map (FAM) of California, published by California Department of Conservation, California Geological Survey. [The 2010 Fault Activity Map can be viewed at http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html]*

7. Greenhouse Gas Emissions

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

The City of Azusa General Plan was examined to determine if the City has an adopted Greenhouse Gas (GHG) Reduction Plan. In order to be used for analytical purposes under the requirements of CEQA and the State CEQA Guidelines for GHG emission impacts, a GHG reduction plan must, at a minimum, comply with Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006 (Nunez, 2006) The Azusa General Plan does not contain a GHG Reduction Plan.

Next, and in the absence of an adopted GHG Reduction Plan, DTSC next followed the South Coast Air Quality Management District's (SCAQMD) tiered GHG significance threshold approach for stationary sources for the purpose of determining whether or not GHG emissions from the proposed Project are significant. Under this approach, project emissions that should be analyzed include direct, indirect, and, to the extent information is available, life cycle emissions during construction and operation. According to the SCAQMD, construction emissions should be amortized over the life of the project, defined as 30 years, added to the operational emissions, and compared to the applicable interim GHG significance threshold tier. The following describes the basic structure of the SCAQMD tiered approach:

- Tier 1 – consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA. If the project qualifies for an exemption, no further action is required. If the project does not qualify for an exemption, then the analysis should move to the next tier.

- Tier 2 – consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines sections 15064(h)(3), 15125(d), or 15152(a). The GHG reduction plan must, at a minimum, comply with AB 32 GHG reduction goals; include emissions estimates agreed upon by either CARB or the AQMD, have been analyzed under CEQA, and have a certified Final CEQA document. Further, the GHG reduction plan must include a GHG emissions inventory tracking mechanism; process to monitor progress in achieving GHG emission reduction targets, and a commitment to remedy the excess emissions if GHG reduction goals are not met (enforcement).

  If the proposed project is consistent with the qualifying local GHG reduction plan, its impacts are not significant for GHG emissions. If the project is not consistent with a local GHG reduction plan, there is no approved plan, or the GHG reduction plan does not include all of the components described above, the project should move to Tier 3.

- Tier 3 **–** establishes a screening significance threshold level to determine significance using a 90 percent emission capture rate approach.

  The 90 percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the following methodology. Using SCAQMD's Annual Emission Reporting (AER) Program, staff compiled reported annual natural gas consumption for 1,297 permitted facilities for 2006 through 2007 and rank-ordered the facilities to estimate the 90th percentile of the cumulative natural gas usage for all permitted facilities. Approximately 10 percent of facilities evaluated comprise more than 90 percent of the total natural gas consumption, which corresponds to 10,000 metric tons of CO2 equivalent emissions per year (MTCO2eq/yr) (the majority of combustions emissions are comprised of CO2). This value represents a boiler with a rating of approximately 27 million British thermal units per hour (Btu/ hour) of heat input, operating at an 80 percent capacity factor. It should be noted that this analysis did not include other possible GHG pollutants such as methane, N2O; a life-cycle analysis; mobile sources; or indirect electricity consumption.

Based on a review of the above, DTSC determined that the Tier 3 option should be used for determining whether or not GHG emissions from the proposed Project are significant.

Analysis as to whether or not project activities would:

a. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact Analysis:

Current Facility operations generate approximately 4,007 MT CO2e/yr of GHG emissions. Proposed Facility expansions beyond current operations will generate approximately 280 MT CO2e/yr of additional GHG emissions. The combined total 4,287 MT CO2e/yr of GHG emissions falls below the 10,000 MT CO2e/yr threshold of significance for GHG emission established by the SCAQMD in Tier 3 discussed above. Therefore, the proposed project is not expected to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment as defined by the SCAQMD. Also see analysis contained in subsection *3.* AIR QUALITY above.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Impact Analysis:

The applicable plan is the SCAQMD Final 2007 Air Quality Management Plan (AQMP) that is designed to meet both state and federal Clean Air Act planning requirements for all areas under AQMD jurisdiction, including the South Coast Air Basin (Los Angeles County, Orange County, San Bernardino County and Riverside County) and the Riverside County portion of the Salton Sea Air Basin (including the Coachella Valley). This AQMP focuses on ozone and PM2.5. The AQMP also incorporates significant new scientific data, emission inventories, ambient measurements, control strategies, and air quality modeling. The Final 2007 AQMP was jointly prepared with the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG). The Final 2007 AQMP was adopted by the SCAQMD Governing Board on June 1, 2007.

The applicable policy is the SCAQMD's GHG policy, which is to reduce GHG emissions to stabilize climate change. As part of this policy, the SCAQMD established performance standards and target GHG reduction objectives that will ultimately contribute to reducing GHG emissions. Further, the SCAQMD policy is to also fully implement the Governor's Executive Order S-3-05 to reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. Achieving the Governor's Executive Order objective would allow the SCAQMD to contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate change.

This Project is consistent with the SCAQMD's policy and the Governor's Executive Order because the Project has been designed to ensure that operational, construction, and electricity-related GHG emissions are below the SCAQMD's GHG thresholds.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

References Used:

- *Gateway to the American Dream: Azusa General Plan, Community Development Department, April 2004*
- *California Climate Action Registry General Reporting Protocol, version 3.1 dated January 2009 (GRP), which provides general principles for GHG inventories*
- *SCAQMD - CEQA Air Quality Handbook, 1993, which established on and off-road vehicle emissions factors.*

- *Response to DTSC September 2, 2010 CEQA Comments, HWF Permit Application and Supporting Information Veolia ES Technical Service Azusa Facility (CAD008302903), Shaw Environmental, Inc., September 20, 2008 letter*
- *Response to DTSC October 7, 2010 CEQA Comments, HWF Permit Application and Supporting Information Veolia ES Technical Service Azusa Facility (CAD008302903), Shaw Environmental, Inc. November 2, 2010*
- *SCAQMD Final 2007 Air Quality Management Plan*
- Governor's Executive Order S-3-05: *http://gov.ca.gov/executive-order/1861/*
- Technical Advisory: CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review,, June 2008, *Office of Planning & Research: http://opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf*

8. Hazards and Hazardous Materials

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

The Facility is a hazardous waste recycling operation. Hazardous materials are received by the Facility in containers, tanker trucks and tanker rail cars. The Facility processes the material by blending, chemical fixation and distillation. Recycled product is shipped out to various customers. Some of the waste is transferred to other facilities for further treatment or disposal. Currently, the Facility is permitted to store a maximum of 768,550 gallons of hazardous waste, stored in containers (mobile) and tanks (fixed).

The Facility is currently operating under an existing hazardous waste Facility Permit in an area zoned for heavy industry. There are no residential areas in the area around this industrial zone. Transportation uses well established routes through industrial, manufacture or commercial areas.

If approved, this Permit Project would allow additional storage of hazardous waste and the construction of one new treatment unit. The Treatment Unit is designed to further polish the wastewater stream prior to discharge to a sewer system under a permit issued by the Los Angeles County Sanitation District. The additional storage capacity of hazardous waste would increase from 768,550 gallons to 1,054,565 gallons; an increase of 286,015 gallons, or 37%. Storage capacity is the maximum volume of waste allowed to be stored at the Facility at any one time, and does not indicate the amount of waste that would be constantly present.

Analysis as to whether or not project activities would:

a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

Impact Analysis:

The Facility currently operates under an existing Permit for the treatment, storage, recycling and transfer of hazardous waste. The Facility is located in an industrial area. The impact to the public from existing activities is minimal.

The Project would allow construction of a new wastewater treatment unit to be used to polish some of the wastewater before it is discharged to an industrial sewer system under a Sanitation Permit. This new unit though is not expected to create impacts to the public or the environment.

The Project would allow an increase in the storage capacity for hazardous waste in containers through construction of a new storage area for roll-off bins, expanding an existing container storage area, and allowing storage of containers in areas currently not authorized for storage. The construction activity is relatively minor and would be contained within the Facility boundary.

Safety procedures for handling and storing the containers of hazardous waste would continue as before and would

not change. The Permittee must follow the Waste Analysis Plan, which ensures proper knowledge of the waste to be handled. Containers that are stored and/or opened for handling must be placed in an authorized storage area with adequate secondary containment to contain any spillage. Potentially incompatible wastes are required to be segregated within the area. Transportation of the waste in and out of the Facility must follow manifesting requirements and use certified vehicles. Continued operation at the Facility is expected to not cause a significant increase in environmental impact, nor a significant cumulative impact.

The wastewater treatment units will be used to further treat the wastewater prior to discharge to a sanitary sewer under a permit issued by the Los Angeles County Sanitation District.

The Facility must comply with the Contingency Plan requirements set forth by the City of Azusa, which is updated annually, and is current as of the date of the approval of this proposed Permit renewal. The plans include notification to local fire, policy and other emergency responder agencies, evacuation plans for the surrounding communities consistent with changes to zoning amendments, and related street/commercial and residential development changes approved and otherwise put in place by the local governing bodies. The plans also include operational procedures undertaken by the Facility to ensure that all work performed by the Facility pursuant to the proposed Permit are conducted in a manner that will ensure safe Facility practices.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact Analysis:

Please see response to subsection (a) above.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

The nearest schools are located approximately 1.4 miles from the Facility Please also see response to subsection (a) above.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

The Facility is not on a list of hazardous materials sites pursuant to Government Code Section 65962.5.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Impact Analysis:

For the Project (the proposed Permit), the Facility is required to submit a Contingency Plan which, requires the Permittee to show how the Facility will respond to an emergency, including emergency response, emergency evacuation, and emergency notification. The Contingency Plan is the previously adopted emergency response plan and emergency evacuation plan.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used

- *RCRA Part B Permit Application, Veolia Environmental Services, dated February 2009.*
- *http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm*

9. Hydrology and Water Quality

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

All authorized treatment and storage areas require secondary containment to contain unintentional spillage and to contain any precipitation that falls within the area. This precipitation becomes part of the wastewater generated by the Facility. If approved, the Permit Project will allow additional storage areas and additional precipitation may be collected.

The Facility will produce wastewater after treating some off-site waste streams. Approval and implementation of the Permit is not expected to significantly increase the amount of treated wastewater. The discharge rate and concentrations must comply with the LACSD permit.

If approved, the Permit Project will allow the construction of a wastewater treatment unit designed to further treat any wastewater produced by the Facility prior to discharge to the sewer under Permit.

The Facility site and operations are within the Los Angeles Regional Water Quality Control Board jurisdiction (LARWQCB). The LARWQCB oversees the Facility's California General Industrial Stormwater Discharge Permit WQO 97-03DWQ under its Notice of Intent to Comply # 419501535 and the Facility's LA County Sanitation Industrial Waste Water Discharge Permit #15242 to the local Publicly Owned Treatment Works (POTW).

Analysis as to whether or not project activities would:

a. Violate any water quality standards or waste discharge requirements.

Impact Analysis:

As noted above in the Environmental Setting, the Facility has a California General Industrial Stormwater Discharge Permit, and a Los Angeles County Sanitation Industrial Waste Water discharge Permit. Both Permits regulate Facility operations. The standards established by these permits are incorporated into the proposed Permit renewal.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient 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).

Impact Analysis:

The San Gabriel Canyon Basin aquifer underlies the site. The project neither extracts nor injects groundwater. Therefore, the project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficiency in aquifer volume or a lowering of the local groundwater table.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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.

Impact Analysis:

The site is located adjacent to the northeast corner of the Santa Fe Flood Control Basin for the San Gabriel River. The Facility operations and storm water management are conducted in accordance with the Storm Water Pollution Prevention Plan for industrial storm water discharges. The entire site is bermed to prevent release of contaminated water or storm water offsite. The storm water is typically released to the City of Azusa's storm water sewer system. The storm water discharge outlet is valved to allow hold-up of storm water if there is reason to believe it has contacted contaminated areas or if it shows signs of sheen.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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.

Impact Analysis:

This project is not anticipated to alter the existing drainage pattern, or substantially increase the rate of runoff of the site or area, including through the alteration of the course of a stream or river. Please also see response to

subsection (c).

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ 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.

Impact Analysis:

Please see responses to subsections (a), (b), (c) and (d).

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Otherwise substantially degrade water quality.

Impact Analysis:

Please see response to subsection (b) above.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

g. Place within a 100-flood hazard area structures which would impede or redirect flood flows.

Impact Analysis:

The Facility is located within 0.25 miles northeast of the Santa Fe Dam Recreation Area. The dam retains and controls runoff within a flood control basin, thereby protecting the surrounding areas from flooding. The maximum recorded amount of water storage occurred in 1969, when the dam was 40% full. The Federal Emergency Management Agency (FEMA) classifies the area surround the Santa Fe Dam as Zone D, which is defined as an “area of undetermined, but possible flood hazard.

A letter from the Los Angeles County Flood Control District dated December 20, 1982, documents that the Veolia site is "reasonably free of flood hazard from major channels and streams, but may be subject to local flood hazard".

Flood Insurance Rate Maps have been developed for the geographic area that includes the Veolia Facility. (Reference: Los Angeles County, map 06037C1700F, Panel 1700 of 2350, September 26, 2008). The map shows that Veolia is not within an area designated a 100-year floodplain. The Facility is within an area identified as “Zone X” and outside the area designated as 0.2% annual chance of flood.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

h. 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.

Impact Analysis:

Please see response to subsection (c) above.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

i. Inundation by seiche, tsunami or mudflow.

Impact Analysis:

The site is located on an alluvial fan with topographic elevations falling away from the site toward the San Gabriel River basin. The Santa Fe Basin pool surface, at range of elevations between 423 and 473-ft AMSL, is normally much lower than the site. The topographic elevations at the site range from about 525 ft AMSL to 516 ft AMSL. During maximum flood pool elevation, 513 ft AMSL, water escaping the Santa Fe Basin would be expected to flow down topographic gradient into the San Gabriel River, away from the site. The site is 30 miles from the ocean and 5 miles from the San Gabriel Mountains and does not appear to be in the path of either tsunami or mudflows.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *RCRA Part B Permit Application, Veolia Environmental Services, dated February 2009*
- *Final EIR, OSCO, July 1990*
- *USACE, 1985, Upstream Reservoir Inundation and Immediate Spillway Map Plate 1, Attachment 6.*
- *Azusa General Plan, Chapter 3 (The Built Environment): Infrastructure*

10. Land Use and Planning

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions:

The Facility is located in the City of Azusa with a border on the City of Irwindale at Peckham Road on the western boundary of the Facility. The area is zoned industrial and surrounded in an area zoned industrial and commercial, consistent with the City of Azusa General Plan.

The proposed project allows the construction of a new storage unit, the construction of a new wastewater treatment unit, the expansion of an existing storage unit, and the modification of existing areas to be used as storage units. All construction of new units will take place on the Facility grounds and will be consistent with the established industrial and commercial zoning characteristics of the project site area, therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

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

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *Final EIR, OSCO,* July 1990

11. Mineral Resources

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions:

This section is not applicable to the proposed Permit Renewal and related activities, no mineral resources have been found on the Facility site, therefore no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

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.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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.

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

12. Noise

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

Applicable noise standards from the City of Azusa General Plan establishes noise limits for manufacturing areas as between 65 – 75 dBA. The Veolia Facility is located in a manufacturing area.

Analysis as to whether or not project activities would:

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

Impact Analysis:

Project activities proposed as part of the subject Permit, including existing operational functions and the proposed construction, will be conducted in compliance with the noise standards set forth the by the City of Azusa and are not expected to exceed the established noise levels. Ambient noise levels were addressed in the *4th Quarter 2004 Industrial Hygiene Monitoring Report* dated January 28, 2005. Noise readings were taken throughout the Facility. Noise was taken near the source of noise. Based on the information provided, noise level from the source (of the noise) to the Facility's property lines provide sufficient buffer (and natural attenuation) to comply with the 75 dBA noise limits at the property lines. OSHA noise requirements are also met with noise exposures within the action level of 85 dBA.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.

Impact Analysis:

Please see response in subsection (a) above.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

As noted above in the Land Use section, the area in and around the proposed project site is zoned Industrial/Industrial Commercial. As noted in subsection (a) of this section, general noise levels in the vicinity of the Facility fall within 65-75dB.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

Implementation of the proposed project will include the construction of a new storage area, the construction of a wastewater treatment unit, the expansion of an existing storage unit and the modification of two areas to be used as new storage areas. These projects are not expected to result in a substantial permanent increase in ambient noise levels

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *Final EIR, OSCO, July 1990*
- *City of Azusa General Plan, Chapter 5 (Natural Environment), Table N-1: Land Use Compatibility for Community Noise Environments*

13. Population and Housing

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions:

This section is not applicable to the proposed Permit and related activities. Therefore, no further analysis is deemed necessary.

Analysis as to whether or not project activities would:

a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

14. Public Services

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

- ❖ Fire protection: Los Angeles County Fire Station 48 is located 1.6 miles south of the site.
- ❖ Police protection: The Facility has full-time surveillance on a 24-7 basis. The Azusa Police Department is responsible for hazardous materials incidents and traffic control in the vicinity of the site.
- ❖ Schools: The school nearest to the Facility is Mountain View Elementary School, located at 201 Vernon Avenue. It is approximately 1.5 miles east of the Facility.
- ❖ Parks: The Santa Fe Dam Recreational Park is located less than a mile west of the site.
- ❖ Other public facilities: A civic center is located about a mile southeast of the site.

Analysis as to whether or not project activities would:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Impact Analysis:

- ❖ Fire/ Police Protection: the proposed project will not require additional fire or police protection services beyond those currently existing and, therefore, will not impact existing fire or police ratios, response times or other performance objectives. As a further precaution, additional on-site fire-fighting equipment is proposed as part of the project.
- ❖ Schools/Parks/Other Public Facilities: the proposed project will not result in an increase in the existing employee workforce that otherwise may have necessitated the construction of additional schools, parks, or other public

facilities.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *Final EIR, OSCO*, July 1990, Figure 3.8-2
- *Azusa General Plan*, Chapter 4 (Economy and Community): Public Services

15. Recreation

Project Activities Likely to Create an Impact: None

Description of Baseline Environmental Conditions:

The Santa Fe Dam Recreational Area is located across North Irwindale Avenue from the Facility. The 6+-lane thoroughfare provides a significant physical barrier from the Facility.

Analysis as to whether or not project activities would:

a. 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.

Impact Analysis:

Proposed expansion activities will not result in an increase in the existing employee workforce. Consequently, there would not be an 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.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

b. Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact Analysis:

Proposed expansion activities will not include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *RCRA Part B Permit Application, Veolia Environmental Services, dated February 2009*

16. Transportation and Traffic

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

Veolia's operations utilize First Street for access and egress. The estimated maximum number of waste and solvent transport vehicles that presently access the Facility is approximately 40 vehicles per day. Veolia requires that trucks schedule arrival times with the Facility to space out delivers and pickups, which also has the effect of minimizing traffic congestion. Approximately 3 to 4 trucks enter the Facility every hour over the course of an 8-hour period.

The Level of Service for North Irwindale Avenue between First Street and Gladstone Street is identified as Level D. Level D borders on a range in which small increases in flow may cause substantial increases in delay and decreases in travel time. However, no changes in traffic flows are anticipated because truck and vehicular trips will remain at or close to the present level.

Veolia's operations utilize First Avenue. There are about 38 trucks that use the facility over a week period. The estimated maximum number of waste and solvent vehicles that presently access the Facility is approximately 40 vehicles per day.

Analysis as to whether or not project activities would:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

Impact Analysis:

Veolia is located in an industrial area with streets designed for industrial (large truck) traffic. There are no residential areas nearby the Facility and, therefore, no residential traffic impacts are anticipated. The 210 and 605 Freeways are close by and are used by truck traffic.

Veolia's operations utilize First Street for access and egress. The total traffic load on First Street is expected to continue at the present level and will be within the trip generation limits of the Facility's Permits. The design capacity of First Street is 16,000 average daily traffic (ADT) volume.

The estimated maximum number of waste and solvent vehicles that presently access the Facility is approximately 40 vehicles per day.

Veolia requires that the trucks schedule arrival times with the Facility. The most likely scenario would be for 3 to 4 trucks to enter the Facility every hour over the course of an 8-hour period. This is a relatively small proportion of traffic for this industrial area.

If approved, the Project will increase the maximum storage capacity of the Facility from 768,550 gallons to 1,054,565 gallons in containers (mobile) and tanks (fixed). This increase represents the maximum volume of hazardous waste to be stored in the Facility at any one time. This increase in maximum storage capacity is not expected to significantly increase the daily traffic flow.

If approved, the Project would allow construction of additional units. A summary of the construction is provided in Section 3.a, above, and includes an estimation of construction vehicles to be utilized during the construction period. The increase in traffic due to construction is temporary and not expected to significantly impact the traffic flow of volume for the reasons cited in this section and in Section 3.a.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

Impact Analysis:

As noted in the Environmental Setting, the Level of Service for North Irwindale Avenue between First Street and Gladstone Street is identified as Level D. Level D borders on a range in which small increases in flow may cause substantial increases in delay and decreases in travel time.

If approved, the Project will increase the maximum storage capacity of the Facility. This increase in maximum storage capacity is not expected to significantly increase the daily traffic flow because there will be only small increase in the number of vehicles.

If approved, the Project would allow construction of additional units. A summary of the construction is provided in Section 3.a, above, and includes an estimation of construction vehicles. The increase in traffic due to construction is temporary and not expected to significantly impact the traffic flow of volume. It is possible, however, for a temporary traffic congestion to occur if construction trucks arrive with operation trucks. Veolia will modify its operations schedule during construction to minimize traffic congestion.

The total traffic load on First Street is expected to continue at the present level and will be within the trip generation limits of the Facility's permits.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

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

Impact Analysis:

The intersection of First Street and North Irwindale Avenue is near the site. No highway ramps, sharp curves or other immediately dangerous traffic conditions are at or in the vicinity of the site. Intersection improvements have been made and dedicated turning lanes have improved traffic congestion.

The project will not alter the outside traffic approach to or from facility. The project will not significantly alter the traffic pattern within the facility.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

d. Result in inadequate emergency access.

Impact Analysis:

According to Veolia's Contingency Plan, there are six facility gate exits for emergency evacuation. Three of these gates would be used as access for emergency equipment. These gates are designed to allow large truck traffic to enter and exit the Facility.

- Driveway gate located just west of the office building opening onto First Street (main gate)
- Driveway gate opening onto First Street, near northwest portion of maintenance building;
- Driveway gate located at the southwest end of the hazardous waste drum storage area; this gate opens onto Peckham Road, is usually closed during operating hours, but may be used in the future for hazardous waste operations.

The Facility has adequate emergency access that would not be changed if the Project is approved.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Result in inadequate parking capacity.

Impact Analysis:

Parking spaces for employees are provided within the Facility's property. These spaces (over 60) are sufficient to allow for employee and visitor parking, trucks waiting for unloading wastes, and trucks being unloaded. The project will not decrease the amount of parking available for employees.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Impact Analysis:

The project would not impact policies, plans, or programs supporting alternative transportation.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *Final EIR, OSCO*, July 1990
- *Azusa General Plan*, Chapter 3 (The Built Environment): Mobility
- *Permit Application, Section G, Veolia Contingency Plan*, revised February 15, 2009

17. Utilities and Service Systems

Project Activities Likely to Create an Impact:

- Receive
- Store
- Treat
- Recycle
- Transfer
- Construction and/or establishment of 5 new units

Description of Baseline Environmental Conditions:

The Facility currently operates under a POTW Discharge Permit from the Los Angeles County Sanitation District.

Analysis as to whether or not project activities would:

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

Impact Analysis:

The Regional Water Quality Control Board has not imposed discharge requirements. However, the Facility operators have a wastewater discharge permit issued by the Los Angeles County Sanitation District who has indicated that the proposed project must be consistent with the discharge limits of the permit.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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.

Impact Analysis:

If approved, the Permit would allow the construction of a new wastewater treatment unit. This unit would be used to "polish" the wastewater generated by the Facility. The wastewater would be discharged into the sewer system as allowed by the Los Angeles County Sanitation District Permit.

All of the hazardous waste treatment and storage areas at the Facility must have secondary containment to contain spills and also to contain any precipitation that falls within the secondary containment. Additional containment areas would create some additional capture of precipitation that would require discharge to the sanitary sewer systems. However, the wastewater discharge requirements under the existing Sanitation District Permit would remain the same. The secondary containment would be able to hold the precipitation until discharge requirements could be met.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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.

Impact Analysis:

The proposed expansion allowed by the proposed Permit will not result in construction of new storm water drainage facilities or an increase in the Facility footprint. The Facility does not discharge storm or other water from its containment areas into the storm drain system. The entire Facility is bermed and has a single discharge point that is valved to allow hold up of storm water release to the city storm sewers pending testing.

Water from containment areas is collected in secondary containment structures, tested to determine if it is hazardous, and either treated on site for release to the POTW in accordance with permit discharge limits, or disposed of offsite as hazardous waste.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact

☒ No Impact

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

Impact Analysis:

The Permittee has estimated that the additional activities would result in an increase of water usage from 418 gallons per month to approximately 500 gallons per month.

The Azusa Light and Water Department will be able to support the increase of water usage from 418 gallons per month to approximately 500 gallons per month.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

Impact Analysis:

If approved, the Permit will allow the construction of an additional treatment unit (Unit AC-22) that will further treat wastewater currently generated by the Facility. This unit may generate additional wastewater discharge by treating wastewater that otherwise would have been sent off-site.

The Permit will also allow the treatment of wastewater from off-site generators. The increase in wastewater discharge is not anticipated to be significant.

The Permit will also allow construction of additional secondary containment areas that would capture more precipitation, which would eventually be discharged into the sewer system after testing. The discharge of this containment water is controlled.

The Facility's wastewater discharge into the sewer system is regulated by a permit issued by the Los Angeles County Sanitation District. Any increase in discharge would need to meet the discharge requirements under the LACSD Permit.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.

Impact Analysis:

The main operation at the Facility is to recycle hazardous waste and materials. The Facility utilizes the Azusa Land Reclamation Landfill which has sufficient permitted capacity for disposal of current hazardous waste generated by the Facility. If approved, the Project is not expected to increase the amount of waste to be disposed in a landfill.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

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

Impact Analysis:

The Project involves the issuance of a hazardous waste facility Permit that will allow the Facility to continue operating in compliance with federal and state statutes and regulations concerning hazardous waste.

None of the activities allowed by this Project are anticipated to conflict with federal, state and/or local statutes and regulations related to solid waste. The Hazardous Waste Facility Permit specifically states that the Facility must comply with all environmental statutes and regulations.

Conclusion:
☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

References Used:

- *Final EIR, OSCO*, July 1990
- *Azusa General Plan*, Chapter 3 (The Built Environment): Infrastructure

Mandatory Findings of Significance

Based on evidence provided in this Initial Study, DTSC makes the following findings:

a. The project ☐ has ☒ does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b. The project ☐ has ☒ does not have impacts that are individually limited but cumulatively considerable. "Cumulatively considerable" means 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.

c. The project ☐ has ☒ does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Determination of Appropriate Environmental Document:

Based on evidence provided in this Initial Study, DTSC makes the following determination:

☒ The proposed project COULD NOT HAVE a significant effect on the environment. A **Negative Declaration** will be prepared.

☐ The proposed project COULD HAVE a significant effect on the environment. However, 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.

☐ The proposed project MAY HAVE a significant effect on the environment. An **Environmental Impact Report** is required.

☐ 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.

☐ The proposed project COULD HAVE a significant effect on the environment. However, all potentially significant effects (a) have been analyzed adequately in an earlier Environmental Impact Report or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier Environmental Impact Report or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, nothing further is required.

Certification:

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

//Original signed by//		November 29, 2010
Preparer's Signature		Date
Stephen Baxter	Senior Hazardous Substances Engineer	(818) 717-6695
Preparer's Name	Preparer's Title	Phone #
//Original signed by//		November 29, 2010
Branch or Unit Chief Signature		Date
Stephen Baxter	Senior Hazardous Substances Engineer	(818) 717-6695
Branch or Unit Chief Name	Branch or Unit Chief Title	Phone #

ATTACHEMENT A

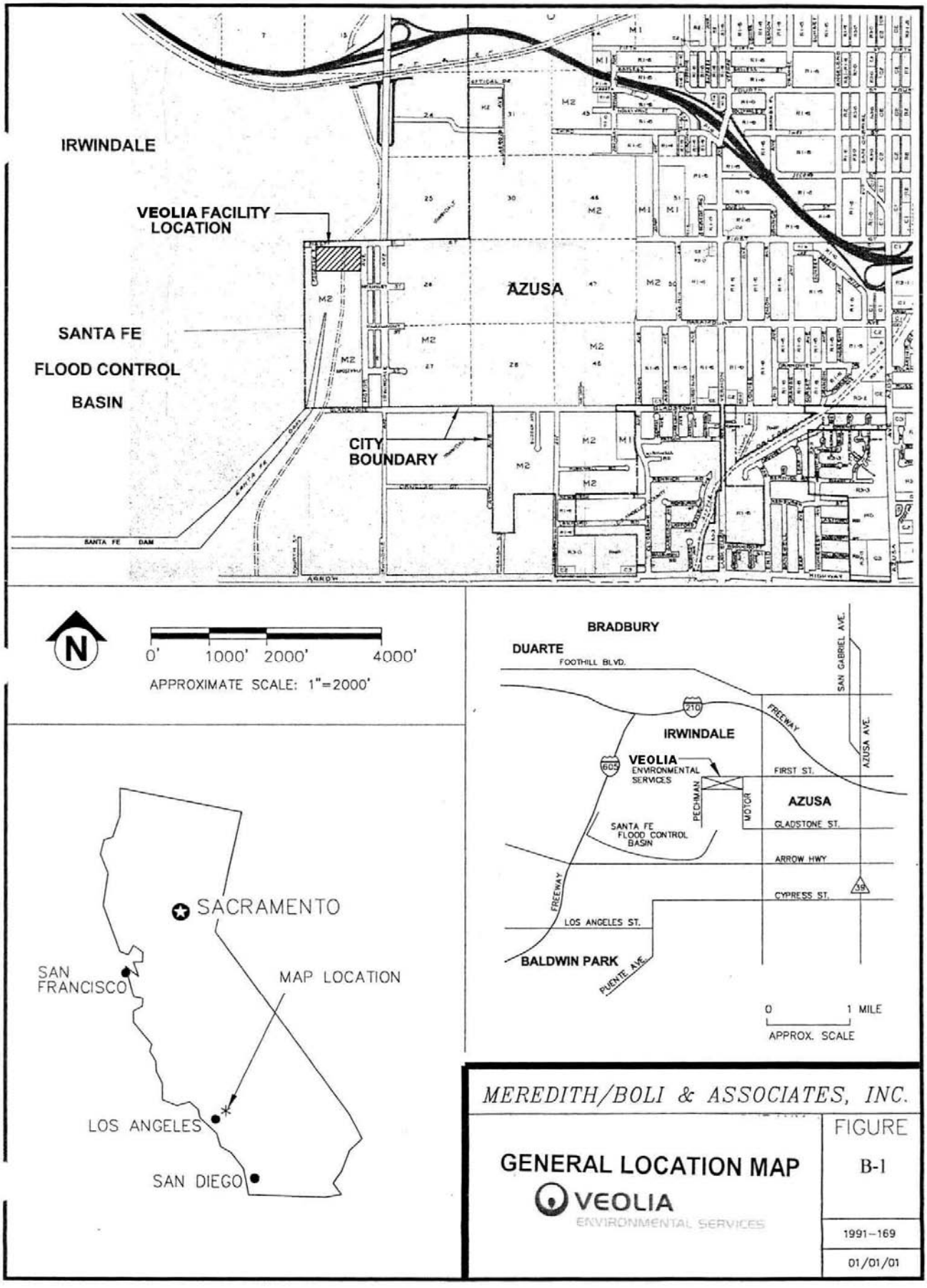
REFERENCES

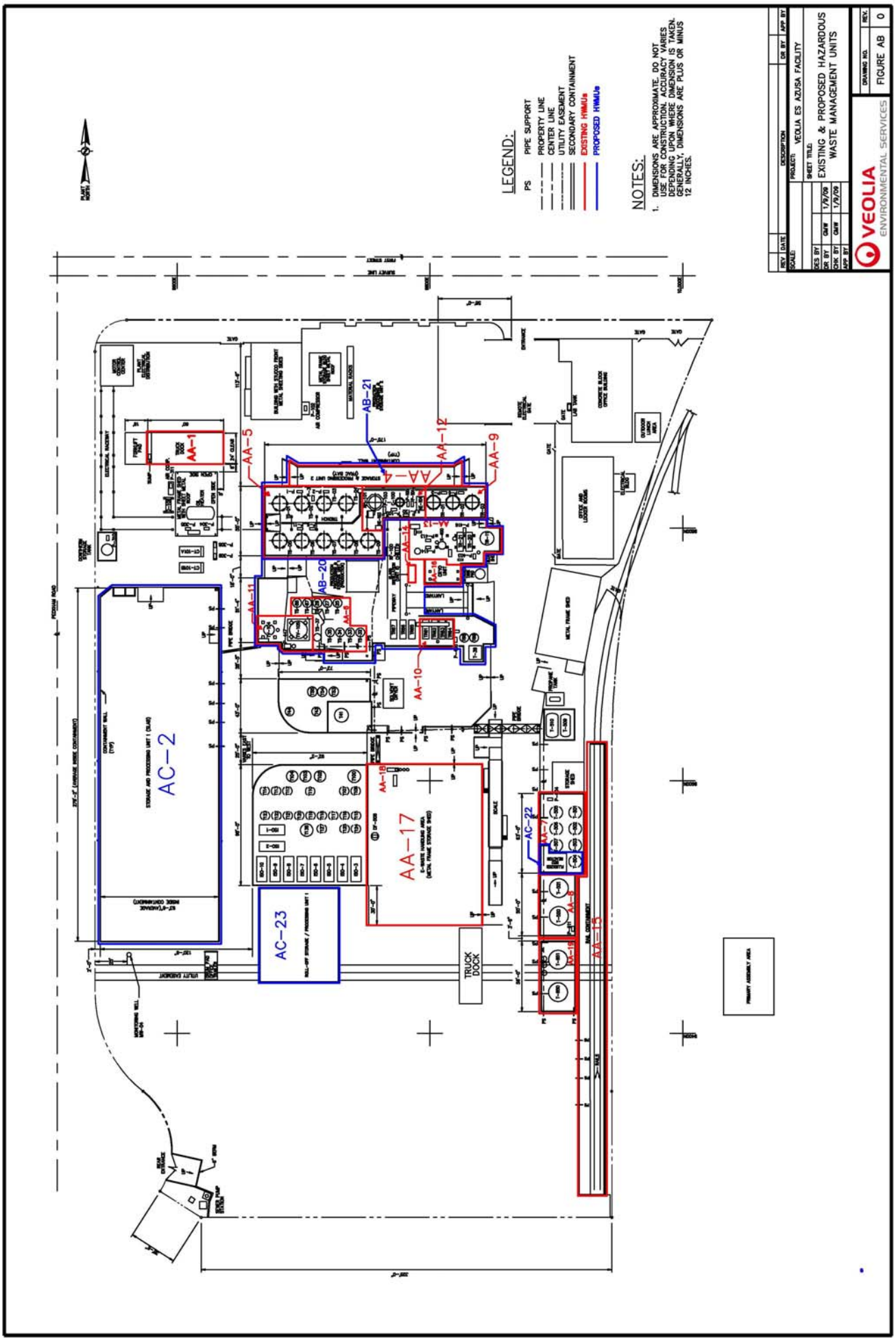
- RCRA Part B Permit Application, Veolia Environmental Services, dated February 2009.
- RCRA Part B Permit Application, Veolia Environmental Services, *Section G, Veolia Contingency Plan*, revised February 15, 2009
- Final Environmental Impact Report, OSCO Proposed Phase 2 of Master Plan for Upgrading and Expansion of Solvent Recycling Facility in the City of Azusa, California, dated July 1990, SCH No. 89051709, prepared by the City of Azusa, California
- USGS Urban Areas Aerial Photograph dated 3/29/2004.
- SCAQMD air quality information at website: http://www.aqmd.gov/smog/historicaldata.htm
- City of Azusa General Plan, Chapter 3: The Built Environment
- City of Azusa General Plan, Chapter 3 (The Built Environment): Infrastructure
- City of Azusa General Plan, Chapter 3 (The Built Environment): Mobility
- City of Azusa General Plan, Chapter 4 (Economy and Community): Public Services
- City of Azusa General Plan, Chapter 5 (Natural Environment): Air Quality
- City of Azusa General Plan, Chapter 5 (Natural Environment): Open Space and Biological Resource Preservation, April 2004.
- City of Azusa General Plan, Chapter 5 (Natural Environment), Table N-1: Land Use Compatibility for Community Noise Environments
- A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, dated August 2000, by California Department of Conservation, Division of Mines and Geology.
- Figure B-3, Land Use Plan, City of Azusa, located within the RCRA Part B Permit Application (February 2009).
- Jane Strong, California Native Plant Society, San Gabriel Mountains Chapter.
- The Natural History of the Santa Fe Dam Recreation Area website: http://cnps-sgm.org/santafedam/index.html
- California Wildlife Habitat Relations System, California Department of Fish and Game
- *Natural Diversity Database*, California Department of Fish and Game, August 30, 2009.
- Susan Cole, Senior Planner, City of Azusa, Planning Division, Personal Communication on September 20, 2010
- A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, dated August 2000, by California Department of Conservation, Division of Mines and Geology.
- California Department of Conservation website at www.conservation.ca.gov/cgs/rghm/ap/.
- 2010 Fault Activity Map (FAM) of California, published by California Department of Conservation, California Geological Survey. [The 2010 Fault Activity Map can be viewed at http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html]
- Cortese List: *http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm*
- USACE, 1985, Upstream Reservoir Inundation and Immediate Spillway Map Plate 1, Attachment 6.

FIGURES

FIGURE B-1: GENERAL LOCATION MAP OF VEOLIA FACILITY

FIGURE AB: UNIT LOCATION MAP OF VEOLIA FACILITY


IRWINDALE
VEOLIA FACILITY LOCATION
AZUSA
SANTA FE
FLOOD CONTROL
BASIN
CITY
BOUNDARY
SANTA FE DAM
ARROW
HIGHWAY
N
0'
1000'
2000'
4000'
APPROXIMATE SCALE: 1"=2000'
BRADBURY
DUARTE
FOOTHILL BLVD.
SAN GABRIEL AVE.
210
FREEWAY
IRWINDALE
VEOLIA
ENVIRONMENTAL
SERVICES
605
FIRST ST.
AZUSA AVE.
PECHMAN
MOTOR
AZUSA
SANTA FE
FLOOD CONTROL
BASIN
GLADSTONE ST.
ARROW HWY
FREEWAY
CYPRESS ST.
39
LOS ANGELES ST.
BALDWIN PARK
PUENTE AVE.
0
1 MILE
APPROX. SCALE
SACRAMENTO
SAN
FRANCISCO
MAP LOCATION
LOS ANGELES
SAN DIEGO
MEREDITH/BOLI & ASSOCIATES, INC.
GENERAL LOCATION MAP
VEOLIA
ENVIRONMENTAL SERVICES
FIGURE
B-1
1991-169
01/01/01


LEGEND:
PS PIPE SUPPORT
PROPERTY LINE
CENTER LINE
UTILITY EASEMENT
SECONDARY CONTAINMENT
EXISTING HWMUs
PROPOSED HWMUs
NOTES:
1. DIMENSIONS ARE APPROXIMATE. DO NOT USE FOR CONSTRUCTION. ACCURACY VARIES DEPENDING UPON WHERE DIMENSION IS TAKEN. GENERALLY, DIMENSIONS ARE PLUS OR MINUS 12 INCHES.
AC-2
AA-17
AC-23
AA-1
AA-5
AA-12
AA-9
AA-4
AB-21
AA-14
AA-11
AB-20
AA-10
AA-15
AC-22
AA-7
AA-8
AA-18
TRUCK DOCK
VEOLIA
ENVIRONMENTAL SERVICES
VEOLIA ES AZUSA FACILITY
EXISTING & PROPOSED HAZARDOUS WASTE MANAGEMENT UNITS
FIGURE AB 0

TABLES

AIR IMPACT CALCULATION TABLES:

Response to DTSC October 7, 2010 CEQA Comments
HWF PERMIT APPLICATION and SUPPORTING INFORMATION
VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 1A - Totalized Baseline Facility Pollutant Emissions

Pollutant	Totalized Emissions (lbs/day)	SCAQMD Significance Threshold (lbs/day)	SCAQMD Localized Significance Threshold (lbs/day)*
CO	43.86	550	1,861
NOx	41.68	55	161
ROG	5.75	55	-
SOx	0.13	150	-
PM10	2.26	150	4
PM2.5	2.05	55	2
Lead	0.0001	3	-

Notes:
*Localized thresholds based on 5 acre site (actual site size 7.5 acres) and 25 foot receptor distance
CO - Carbon Monoxide
hr - hour
lb - pound
NOx - Nitrogen Oxides
PM_{10} - Particulate Matter less than 10 microns
$PM_{2.5}$ - Particulate Matter less than 2.5 microns
ROG - Reactive Organic Gases
SCAQMD - South Coast Air Quality Management District
scf - standard cubic feet
SOx - Sulfur Oxides
VOC - Volatile Organic Compounds

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 2A - Estimated Direct Mobile Combustion Emissions

Pollutant	Emission Factor (lbs/mile)	Emissions (lbs/day)
CO	0.01693	33.86
NOx	0.01893	37.87
ROG	0.00242	4.84
SOx	0.00003	0.05
PM10	0.00070	1.40
PM2.5	0.00060	1.19

Table 3A - Site Truck Traffic and Travel Distance

On-Road Vehicles	Quantity (trucks/day)	Average Roundtrip Distance (miles/truck)
Transport Trucks	20	100

Notes:
Emissions factors from SCAQMD http://www.aqmd.gov/ceqa/hdbk.html, Scenario Year 2011
Expected truck traffic is 20 vehicles per day, Monday through Friday
NOx (lbs/day) = NOx (lbs/mile) * Quantity (trucks/day) * Roundtrip Distance (miles/truck)

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 4A - Estimated Emissions due to Facility Natural Gas Combustion - Heater/Furnace

Pollutant	Emission Factors ($lbs/10^6$ scf)	Emission Factors (lb/MMBtu)	Emissions (lbs/yr)	Emissions (lbs/day)
NOx	32	3.14E-02	1,390	3.81
CO	84	8.24E-02	3,649	10.00
Lead	0.0005	4.90E-07	0.02	0.0001
PM total	7.2	7.06E-03	313	0.86
SO_2	0.6	5.88E-04	26	0.07
VOC	5.5	5.39E-03	239	0.65

Table 5A - Natural Gas Usage

Fuel	Gas Usage 2009 (Therms)	Heating Value (Btu/scf)
Natural Gas	443,033	1020

Notes:
Emission Factors and Gas Heating Value from AP-42, Table 1.4-1 and 1.4-2
Heater/Furnace Control Device: Low NOx Burners and Flue Gas Recirculation
Natural Gas Usage based on 2009 Southern California Gas Company Billing
NOx (lb/MMBtu) = NOx ($lbs/10^6$ scf) * Natural Gas Heating Value (Btu/scf)
NOx (lbs/day) = NOx (lbs/MMBtu) * Gas Usage 2009 (Therms/yr) / 365 (days/yr)
Btu = Therms * (100,000 Btu / 1 Therm)
Btu = MMbtu * (1,000,000 Btu / 1 MMBtu)

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 6A - Vapor Recovery System VOC Emissions

Pollutant	Recovered Liquefied VOCs (gallons/yr)	Recovered Liquefied VOCs (lbs/yr)	VOC Emissions (lbs/yr)	VOC Emissions (lbs/day)
VOC	1,000	8,504.56	94.59	0.26

Notes:
The specific gravity of the condensed VOC waste product is 1.02 per sample analysis cmpleted by Veolia
Conversions from gallons to lbs based on the density of water at 60°F, 8.3378 lbs/gallons
Emission calculations based on a vapor recovery system control effciency of 98.9% as required by the vapor control device permit, No. G7368, Condition 8
Liquefied VOC (lbs/yr) = Liquefied VOC (gallons/yr) * 8.3378 (lbs/gallon) * 1.02
VOC Emissions (lbs/yr) = Liquefied VOC (lbs/yr) / 98.9% - Liquefied VOC (lb/yr)

Response to DTSC October 7, 2010 CEQA Comments
HWF PERMIT APPLICATION and SUPPORTING INFORMATION
VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 1B - Totalized Baseline Facility GHG Emissions

Direct Mobile Emissions (MT CO_2e/yr)	650
Direct Combustion Emissions (MT CO_2e/yr)	2,357
Indirect Emissions (MT CO_2e/yr)	1,001
Total Estimated Current GHG Emissions (MT CO_2e/yr)	**4,007**
SCAQMD Significance Threshold (MT CO_2e/yr)	10,000
Percent of SCAQMD Threshold	40.1%

Notes:
CH_4 - Methane
CO_2 - Carbon Dioxide
CO_2e - Carbon Dioxide Equivalent
GHG - Greenhouse Gas
GWP - Global Warming Potential
kWh - kilowatt hours
lb - pound
MT - metric tons
MWh - megawatt hours
N_2O - Nitrous Oxide
SCAQMD - South Coast Air Quality Management District
yr - year

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 2B - Estimated Direct Mobile Combustion GHG Emissions due to Increased Site Traffic

On-Road Vehicles	Quantity (#/day)	Roundtrip Distance (miles/truck)	CO_2 (lbs/mile)	CH_4 (lbs/mile)	CO_2 (lbs/yr)	CH_4 as CO_2 (lbs/yr)	Total CO_2e (MT/yr)
Transport Trucks	20	100	2.75	0.0001	1,430,940.28	1272.76	**649.64**

Notes:
Emissions factors from SCAQMD http://www.aqmd.gov/ceqa/hdbk.html, Scenario Year 2011
Expected Increase in truck traffic is 5 vehicles per day, Monday through Friday
CH_4 as CO_2 (lbs) = CH_4 (lbs) * CH_4 Global Warming Potential (GWP)
CH_4 GWP = 21 lbs CO_2e / 1 lb CH_4
MT = lbs * (1 MT / 2,204.6 lbs)

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 3B - Estimated Direct GHG Emissions due to Facility Natural Gas Combustion

Fuel	Gas Usage (Therms)	CO_2 (kg/MMBTU)	CH_4 (kg/MMBTU)	N_2O (kg/MMBTU)	CO_2 (lbs/yr)	CH_4 as CO_2 (lbs/yr)	N_2O as CO_2 (lbs/yr)	Total CO_2e (MT/yr)
Natural Gas	443,033	53.06	0.005	0.0001	5,182,426	10,255	3,028	**2,357**

Notes:
Emissions Factors from California Climate Action Registry General Reporting Protocol Version 3.1, January 2009
Natural Gas Usage based on 2009 Southern California Gas Company Billing
CH_4 as CO_2 (lbs) = CH_4 (lbs) * CH_4 Global Warming Potential (GWP)
CH_4 GWP = 21 lbs CO_2e / 1 lb CH_4
N_2O as CO_2 (lbs) = N_2O (lbs) * N_2O Global Warming Potential (GWP)
N_2O GWP = 310 lbs CO_2e / 1 lb N_2O
MT = lbs * (1 MT / 2,204.6 lbs)
lbs = kg * (2.2046 lbs / kg)
Btu = Therms * (100,000 Btu / 1 Therm)

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 4B - Estimated Indirect GHG Emissions due to Facility Energy Demands

Energy Use	MWh/yr	CO_2 (lbs/MWh)	CH_4 (lbs/MWh)	N_2O (lbs/MWh)	CO_2 (lbs/yr)	CH_4 as CO_2 (lbs/yr)	N_2O as CO_2 (lbs/yr)	Total CO_2e (MT/yr)
Electricity	2738.0	804.54	0.0067	0.0037	2,202,861	385	3,141	**1,001**

Notes:
Emissions Factors from California Climate Action Registry General Reporting Protocol Version 3.1, January 2009
Electricity Usage based on 2009 Southern California Edison Billing
CH_4 as CO_2 (lbs) = CH_4 (lbs) * CH_4 Global Warming Potential (GWP)
CH_4 GWP = 21 lbs CO_2e / 1 lb CH_4
N_2O as CO_2 (lbs) = N_2O (lbs) * N_2O Global Warming Potential (GWP)
N_2O GWP = 310 lbs CO_2e / 1 lb N_2O
MT = lbs * (1 MT / 2,204.6 lbs)

Response to DTSC October 7, 2010 CEQA Comments
HWF PERMIT APPLICATION and SUPPORTING INFORMATION
VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 1C - Totalized Facility Construction Emissions

Pollutant	Totalized Emissions (lbs/day)	SCAQMD Significance Threshold (lbs/day)	SCAQMD Localized Significance Threshold (lbs/day)*
CO	51.86	550	1,861
NOx	76.27	100	161
ROG	10.18	75	-
SOx	0.10	150	-
PM_{10}	13.64	150	16
$PM_{2.5}$	4.90	55	8
Lead	-	3	-

Table 2C - Totalized Facility Increase in Operational Emissions

Pollutant	Totalized Emissions (lbs/day)	SCAQMD Significance Threshold (lbs/day)	SCAQMD Localized Significance Threshold (lbs/day)*
CO	8.47	550	1,861
NOx	9.47	55	161
ROG	1.21	55	-
SOx	0.01	150	-
PM_{10}	0.35	150	4
$PM_{2.5}$	0.30	55	2
Lead	-	3	-

Notes:
*Localized thresholds based on 5 acre site (actual site size 7.5 acres) and 25 foot receptor distance
CO - Carbon Monoxide
cy - cubic yard
hr - hour
kg - kilogram
lb - pound
NOx - Nitrogen Oxides
PM_{10} - Particulate Matter less than 10 microns
$PM_{2.5}$ - Particulate Matter less than 2.5 microns
ROG - Reactive Organic Gases
SCAQMD - South Coast Air Quality Management District
SOx - Sulfur Oxides

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 3C - Emissions Factors for Off-Road Vehicles Utilized in Construction

Off-Road Vehicles	Max Quantity On-site During Any One Day	Emission Factors				
		ROG (lbs/hr)	CO (lbs/hr)	NOx (lbs/hr)	SOx (lbs/hr)	PM (lbs/hr)
Cement Trucks	10	0.0096	0.0429	0.0575	0.0001	0.0032
Excavator	1	0.1388	0.5482	1.0634	0.0013	0.0592
Manlift	1	0.0624	0.2033	0.3429	0.0004	0.0235
Crane	1	0.1507	0.5179	1.3617	0.0014	0.0599
Forklift	1	0.0635	0.2284	0.4742	0.0006	0.0257

Table 4C - Totalized Emissions from Off-Road Vehicles Utilized in Construction

Pollutant	Emissions (lbs/day)
CO	23.1
NOx	45.8
ROG	6.1
SOx	0.06
PM10	2.4
PM2.5	2.4

Table 5C - Estimated On-Road Vehicles Utilization during Construction

On-Road Vehicles	Quantity (Maximum Roundtrips During Any One Day)	Max Expected Distance (Miles/roundtrip)	Truck Classification for Emissions Calculations
Cement Trucks	10	100	Delivery
Soil Transport	5	100	Delivery
Contractor Trips	2	100	Passenger
Additional Local Shipments	1	100	Delivery

Table 6C - Totalized Emissions from On-Road Vehicles Utilized in Construction

Pollutant	Delivery Truck Emission Factor (lbs/mile)	Passenger Truck Emission Factor (lbs/mile)	Emissions (lbs/day)
CO	0.01693	0.00826	28.74
NOx	0.01893	0.00084	30.46
ROG	0.00242	0.00085	4.04
SOx	0.00003	0.00001	0.05
PM10	0.00070	0.00009	1.14
PM2.5	0.00060	0.00006	0.97

Table 7C - Fugitive PM Emissions

Pollutant	Excavating Emissions Factor (lb/hr)	Excavating Emissions (lbs/day)	Debris Loading Emissions Factor (lb/ton)	Debris Loading Emissions (lbs/day)
PM10	0.33	3.94	0.05	10.11
PM2.5	0.05	0.55	0.01	1.53

Notes:
On and Off-Road Emissions factors from SCAQMD http://www.aqmd.gov/ceqa/hdbk.html, Scenario Year 2011
Fugitive PM Emissions were calculated utilizing AP-42, Table 13.2.3-1 [Recommended Emission Factors for Construction Activities], which included:
- Site Preparation/Bulldozing - Dozer equation (overburden) in Tables 11.9-1
- Loading Debris onto Trucks - Equations for Section 13.2.4
- Material Silt and Moisture Content - Table 13.2.4-1 (assumed clay/dirt mix for the purposes of this estimate)

Construction to occur from 6am - 6pm, Monday through Friday
Assume two additional vehicles trips to the site each day contractor travel, Monday through Friday
Excavating to occur for 12 hours maximum in any given day
Maximum debris loading per day based on the maximum debris and soil removal effort (AC2 drum pad extension), 436 cy, occurring over a 3 day period
Combined debris and soil density assumed to be 1.2 tons per cy
Assumed a compact soil and debris to loose soil and debris conversion factor of 1.25 for debris loading emissions calculations
Average wind speed recorded for 2009 in Azusa, California was utilized in the Fugitive PM Emissions, 5 miles per hour (mph)

Equations:
Excavating Emissions Factor (lb/hr) = $1.0 * (S)^{1.5} / (M)^{1.4}$ * Particle Size Scaling Factor, reference AP-42, Table 11.9-1
Debris Loading Emissions Factor (lb/ton) = $k * 0.0032 * (U/5)^{1.3} / (M/2)^{1.4}$
Debris Loading Emissions (lbs/day) = Debris Loading Emissions Factor (lb/ton) * 436 cy / 3 days * 1.2 tons / cy * 1.25 cy of loose soil / cy of compact soil
S - Material Silt Content (%)
M - Material Moisture Content (%)
k - particle size multiplier
U - wind speed (mph)

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 8C - Estimated Change in Direct Mobile Combustion Emissions

Pollutant	Emission Factor (lbs/mile)	Emissions (lbs/day)
CO	0.01693	8.47
NOx	0.01893	9.47
ROG	0.00242	1.21
SOx	0.00003	0.01
PM10	0.00070	0.35
PM2.5	0.00060	0.30

Table 9C - Change in Site Truck Traffic and Travel Distance

On-Road Vehicles	Quantity (trucks/day)	Roundtrip Distance (miles/truck)
Transport Trucks	5	100

Notes:
Emissions factors from SCAQMD http://www.aqmd.gov/ceqa/hdbk.html, Scenario Year 2011
Expected Increase in truck traffic is 5 vehicles per day, Monday through Friday
NOx (lbs/day) = NOx (lbs/mile) * Quantity (trucks/day) * Roundtrip Distance (miles/truck)

Response to DTSC September 2, 2010 CEQA Comments
HWF PERMIT APPLICATION and SUPPORTING INFORMATION
VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 1D - Totalized Net Increase in Facility GHG Emissions

Construction Emissions (Total)	42
Construction Emissions amortized to 30 years (MT CO_2e/yr)	1.4
Direct Mobile Emissions (MT CO_2e/yr)	162
Indirect Emissions (MT CO_2e/yr)	92
Aerobic Digestion Emissions (MT CO_2e/yr)	24
Total Estimated GHG Emissions (MT CO_2e/yr)	**280**
SCAQMD Significance Threshold (MT CO_2e/yr)	10,000
Percent of SCAQMD Threshold	2.8%

Notes:
CH_4 - Methane
CO_2 - Carbon Dioxide
CO_2e - Carbon Dioxide Equivalent
GHG - Greenhouse Gas
GWP - Global Warming Potential
kWh - kilowatt hours
lb - pound
MT - metric tons
MW - molecular weight
MWh - megawatt hours
N_2O - Nitrous Oxide
SCAQMD - South Coast Air Quality Management District
TOC - Total Organic Compounds
yr - year

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 2D - Estimated GHG Emissions from Off-Road Vehicles Utilized in Construction

Off-Road Vehicles	Quantity	CO_2 (lb/hr)	CH_4 (lb/hr)	Max Period On-site During Construction	Total Hours	CO_2 (lbs)	CH_4 as CO_2 (lbs)	Total CO_2e (MT)
Cement Trucks	35	7.2	0.0009	1 day	420	3,044	7.66	1.38
Excavator	1	120	0.0125	3 weeks	180	21,525	47.34	9.78
Manlift	1	35	0.0056	1 week	60	2,083	0.02	0.94
Crane	1	129	0.0136	1 day	12	1,544	0.01	0.70
Forklift	1	54	0.0057	3 weeks	180	9,791	0.05	4.44
							Total	**17.3**

Table 3D - Estimated GHG Emissions from On-Road Vehicles Utilized in Construction

On-Road Vehicles	Quantity (Total Roundtrips)	Max Expected Distance (Miles/roundtrip)	CO_2 (lbs/mile)	CH_4 (lbs/mile)	CO_2 (lbs)	CH_4 as CO_2 (lbs)	Total CO_2e (MT)
Cement Trucks	35	100	2.7518	0.0001	9,631	8.57	4.37
Soil Transport	10	100	2.7518	0.0001	2,752	2.45	1.25
Contractor Trips	220	100	1.1024	0.0001	24,252	35.47	11.02
Fluidized Bed Reactor Shipment	1	5000	2.7518	0.0001	13,759	12.24	6.25
Additional Local Shipments	15	100	2.7518	0.0001	4,128	3.67	1.87
						Total	**24.76**

Notes:
On and Off-Road Emissions factors from SCAQMD http://www.aqmd.gov/ceqa/hdbk.html, Scenario Year 2011
Construction to occur from 6am - 6pm, Monday through Friday
Assume two additional vehicles trips to the site each day for 22 weeks due to contractor travel, Monday through Friday
Fluidized Bed Reactor Shipment - Findlay, Ohio to Azusa, California
CH_4 as CO_2 (lbs) = CH_4 (lbs) * CH_4 Global Warming Potential (GWP)
CH_4 GWP = 21 lbs CO_2e / 1 lb CH_4
MT = lbs * (1 MT / 2,204.6 lbs)

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 4D - Estimated Direct Mobile Combustion GHG Emissions due to Increased Site Traffic

On-Road Vehicles	Quantity (#/day)	Roundtrip Distance (miles/truck)	CO_2 (lbs/mile)	CH_4 (lbs/mile)	CO_2 (lbs/yr)	CH_4 as CO_2 (lbs/yr)	Total CO_2e (MT/yr)
Transport Trucks	5	100	2.75	0.0001	357,735.07	318.19	**162.41**

Notes:
Emissions factors from SCAQMD http://www.aqmd.gov/ceqa/hdbk.html, Scenario Year 2011
Expected Increase in truck traffic is 5 vehicles per day, Monday through Friday
CH_4 as CO_2 (lbs) = CH_4 (lbs) * CH_4 Global Warming Potential (GWP)
CH_4 GWP = 21 lbs CO_2e / 1 lb CH_4
MT = lbs * (1 MT / 2,204.6 lbs)

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 5D - Estimated Indirect GHG Emissions due to Increased Facility Energy Demands

Energy Use	MWh/yr	CO_2 (lbs/MWh)	CH_4 (lbs/MWh)	N_2O (lbs/MWh)	CO_2 (lbs/yr)	CH_4 as CO_2 (lbs/yr)	N_2O as CO_2 (lbs/yr)	Total CO_2e (MT/yr)
Electricity	251.0	804.54	0.0067	0.0037	201,959	35	288	**92**

Notes:
Emissions Factors from California Climate Action Registry General Reporting Protocol Version 3.1, January 2009
CH_4 as CO_2 (lbs) = CH_4 (lbs) * CH_4 Global Warming Potential (GWP)
CH_4 GWP = 21 lbs CO_2e / 1 lb CH_4
N_2O as CO_2 (lbs) = N_2O (lbs) * N_2O Global Warming Potential (GWP)
N_2O GWP = 310 lbs CO_2e / 1 lb N_2O
MT = lbs * (1 MT / 2,204.6 lbs)

Table 6D - Project Energy Usage

	Energy Use (kWh)	Operation (Hours/Day)	Energy Use (kWh/yr)
Drum Pad Extension Lighting	1.6	12	7,008
Roll-Off Bin Area Lighting	3.2	12	14,016
Fluidized Bed Reactor System*	-	-	230,000

*This estimate is based on a feed flow to the system of 20 gallons per minute influent and continuous operation 365 days per year.
Shaw Environmental, Inc. Proposal for Fluidized Bed Reactor System, August 11, 2008

VEOLIA ES TECHNICAL SERVICE AZUSA FACILITY (CAD008302903)

Table 7D - Aerobic Digestion Emissions

TOC (as C_6H_{14}) in Treated Wastewater Stream* (lbs/day)	CO_2 Emissions (lbs/day)	CO_2 Emissions (lbs/yr)	CO_2 Emissions (MT/yr)
48	147.07	53,682.19	24.35

Notes:

One mole of Hexane (C_6H_{14}) yields six moles of CO_2 assuming 100% conversion

MW of C_6H_{14} = 86.18 lbs/lb-mol

MW of CO_2 = 44.01 lbs/lb-mol

CO_2 Emissions (lbs/day) = TOC as C_6H_{14} (lbs/day) * 86.16 lbs C_6H_{14}/lb-mol C_6H_{14} * 6 mol CO_2/1 mol C_6H_{14} * 44.01 lbs CO_2/lb-mol CO_2

MT = lbs * (1 MT / 2,204.6 lbs)

*This estimate is based on a maximum TOC concentration design capacity and continuous operation 365 days per year.

Shaw Environmental, Inc. Proposal for Fluidized Bed Reactor System, August 11, 2008