CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY

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: Ground Water Interim Remedial Measures		CALSTARS CODING: 22120/510107-48
PROJECT ADDRESS: 1363 S. Bonnie Beach Place	CITY: Commerce	COUNTY: Los Angeles
PROJECT SPONSOR: Univar USA, Inc.	CONTACT: George Sylvester, P.G.	PHONE: Colorado (303) 838-7260

APPROVAL ACTION UNDER CONSIDERATION BY DTSC:

☐ Initial Permit Issuance ☐ Permit Renewal ☐ 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: 8800 Cal Center Drive, Sacramento, California 95826	CONTACT: Ryan Batty	PHONE: (916) 255-6699

PROJECT DESCRIPTION:

The Department of Toxic Substances Control ("DTSC") is considering approval of an interim measures work plan for groundwater at the former Univar USA, Inc. facility located at 1363 S. Bonnie Beach Place, Commerce, California (hereinafter referred to as "Univar", "Facility" or "site"). The proposed groundwater interim measure modifies and expands upon an existing soil vapor interim measure at the site. The plan titled "Ground Water Interim Remedial Measures Work Plan" and dated October 19, 2009 ("Work Plan"), was prepared by Rubicon Engineering Corporation ("Rubicon") on behalf of Univar. The Work Plan is incorporated into this Initial Study by reference [16c].

A California Environmental Quality Act ("CEQA") Initial Study and Negative Declaration were previously prepared in 1998 for the soil vapor interim measure at the site. Significant portions of the prior CEQA Initial Study are repeated. In all cases where language from the prior CEQA Initial Study is repeated, DTSC staff has verified that the information is still accurate and relevant to the proposed project. The prior CEQA Initial Study and Negative Declaration are incorporated into this Initial Study by reference [5].

Background:
The Univar Facility (formerly Van Waters & Rogers) began operations in circa 1950 and formally ceased operations in 2002. The Facility was involved in the bulk shipment, packaging, and distribution of industrial chemicals and the treatment and storage of hazardous waste. The site was located on two (2) parcels and covered an area of approximately 8.11 acres. The larger parcel to the north ("North Parcel") is located at 1363 S. Bonnie Beach Place and consisted of an underground storage (UST) tank farm, an aboveground storage tank (AST) tank farm and a large 217,000 square foot warehouse. A rail spur for bulk delivery of chemicals via rail car ran along the west side of the North Parcel. The North Parcel is currently owned by Nieman Properties, LLC, and is leased to Matrix International Textiles; the warehouse is used for the storage and distribution of textiles and fabrics. Univar retains the environmental liability for the cleanup of the North Parcel.

The smaller parcel to the south ("South Parcel") is located at 4256 Noakes Street and consisted of a storage & packaging area and a recycling area. The South Parcel is owned by Univar and houses the treatment system that comprises the soil vapor interim measure; the proposed groundwater treatment system will also be housed on the South Parcel.

The chlorinated solvent recycling activities conducted on the South Parcel were authorized by an Interim Status document issued pursuant to the Resource Conservation and Recovery Act ("RCRA"). Environmental investigations at the site have disclosed extensive soil, soil vapor and groundwater contamination. The primary contaminants of concern at the site include chlorinated solvents, namely Tetrachloroethene ("PCE") and Trichloroethene ("TCE").

Univar is currently completing RCRA Corrective Action at the site pursuant to a Corrective Action Consent Agreement ("Consent Agreement") [Docket HWCA: 94/95-072] dated 1995. Univar has completed numerous phases of RCRA Facility Investigation ("RFI") in a bid to fully characterize releases of hazardous waste and hazardous constituents at the site. In 1998, Univar began operating a soil vapor interim measure to begin cleanup the chlorinated solvents in the sub-surface. Recently, Univar has also completed screening of indoor air in neighboring residential homes to evaluate the vapor intrusion pathway.

Site Investigation History (Groundwater):
The groundwater resources below the site have been characterized as follows (quoted depth to groundwater is approximate):

- Perched groundwater present at depths ranging from 40 to 80 feet below ground surface (ft bgs). The perched groundwater is discontinuous and is not seen across the entire site.
- Shallow groundwater is present at depths in the range 100 to 155 ft bgs.
- Intermediate groundwater is present at depths in the range 170 to 200 ft bgs.
- Deep groundwater is present at depths in the range 220 to 260 ft bgs.

A total of 33 groundwater wells have been installed both on and off the site. Considering first the on-site wells, 17 are screened across the shallow groundwater (as defined above), and one (1) is screened across the deep groundwater. Of the 18 off-site wells, 13 are screened across the shallow groundwater, and five (5) are screened across the intermediate groundwater. Groundwater wells are monitored quarterly; groundwater elevations are recorded and samples are collected for laboratory analysis. Shallow groundwater flows in the southwest direction. For additional information on well location, construction and monitoring results refer to Attachments B, E and F.

Pursuant to the Basin Plan prepared by the Los Angeles Regional Water Quality Control Board ("RWQCB") existing beneficial uses of groundwater for the Central Basin include municipal (drinking water) supply. Presently, the concentrations of several groundwater contaminants exceed California Maximum Contaminant Levels ("CA MCLs") and preclude maximum beneficial use of groundwater resources without pre-treatment [1].

Project Activities:
For the purpose of implementing the planned groundwater interim measure, five (5) areas have been defined both on and off the site. The areas are depicted on the figure found as Attachment E and are described briefly as follows:

Area 1: North Parcel - 1363 S. Bonnie Beach Place (on-site).
Area 2: South Parcel – 4256 Noakes Street (on-site).
Area 3: Dart Transportation Corporation Parking Lot – 4200 Noakes Street (off-site).
Area 4: Union Pacific Railroad Company ("UPRC") – East Yard (off-site).
Area 5: Washington Boulevard (off-site).

As a practical matter, the remediation of Areas 1, 2 and 3 will occur using similar technologies with common treatment equipment located on Area 2. Areas 4 and 5 will be managed as separate sites with unique remedial approaches. The scope of this Initial Study **only includes** activities at Areas 1, 2 and 3. A separate CEQA evaluation will be prepared for Areas 4 and 5 once planned bench-scale testing of in-situ treatment technologies has been completed.

Areas 1, 2 and 3 – On-site and Immediate Vicinity:
The proposed groundwater interim measure for this area grouping is groundwater pump-and-treat to achieve hydraulic control of the site with groundwater treatment via air-stripping. Treated groundwater will be discharged to the sanitary sewer and the effluent air stream will be treated in a thermal oxidation unit. Soil vapor will also be extracted from the sub-surface immediately above the water table and treated in the thermal oxidation unit. In

addition, and if bench-scale tests prove successful, Univar may supplement the interim measure using an in-situ treatment technology such as in-situ chemical oxidation ("ISCO"). If an in-situ treatment technology is proposed for Area 1, 2 or 3 in the future then this will also be the subject of a **separate** CEQA evaluation.

Groundwater extraction will occur using a combination of both new and existing well infrastructure. Existing wells at the site with the "DPE" prefix were constructed to act as Dual Phase Extraction ("DPE") wells i.e. concurrent extraction of both soil vapor and groundwater. These well have been extracting only soil vapor since they were installed. Under the proposed plan, the wells will be used to extract groundwater in addition to soil vapor. Five (5) new extraction wells will also be installed, two (2) new wells on Area 1 and three (3) new wells on Area 3. The new wells will be constructed to act as DPE wells and will be used to extract soil vapor and groundwater. Existing groundwater monitoring well MW-5 which is not a DPE well will also be used to extract groundwater. Finally, Univar will use the opportunity of field work to link additional soil vapor monitoring wells into the soil vapor extraction system. Specifically, soil vapor wells VW-5, 8, 9 & 11 and VS-5 will be linked into the system. In summary, groundwater will be extracted from a total of 14 wells and soil vapor will be extracted from 18 wells.

The Work Plan calls for the new wells to be linked back to the treatment equipment on Area 2 via a network of underground conveyance piping. In order to install this piping, Univar will require authorization from the City of Commerce to complete trenching operations in the public right of way. Access will also be required to the private property that comprises Area 3. Lastly, Univar must seek access from UPRC to install conveyance piping below a rail spur at two separate locations. A figure depicting the planned piping routes can be found as Attachment F. The analysis in this Initial Study is conditioned on gaining access and authorization to install said piping.

Based on groundwater modeling using the code MODAEM, Rubicon has determined that a total flow of 28 gallons per minute ("gpm"), 2 gpm from each of the 14 groundwater extraction wells, will be required to achieve hydraulic control of the site. Put simply, hydraulic control will prevent the off-site migration of contaminated groundwater from the site. Extracted groundwater will be conveyed to an air-stripping unit to be located on the South Parcel (Area 2). The soil vapor stream generated from 13 DPE wells and five (5) soil vapor monitoring wells will also be conveyed to the South Parcel for treatment.

Extracted groundwater will be treated in a high efficiency air-stripping unit. The groundwater stream will flow over a series of six (6) vertically stacked trays in the air-stripper designed to generate a large surface area. A blower will generate a countercurrent air stream that will strip the volatile contaminants from the groundwater phase into the air phase. The exiting air from the air-stripper will be combined with the soil vapor stream prior to treatment. The now treated groundwater will be discharged to the sanitary sewer where it will undergo secondary treatment. It should be noted that the air-stripper will likely not be effective in removing 1,4-Dioxane, a Semi-volatile Organic Compound ("SVOC"), from groundwater due to its lower volatility relative to PCE and TCE which are Volatile Organic Compounds ("VOCs"). Based on the results of pilot trials documented in the Phase IV RFI Report, Rubicon believes that the combined treated groundwater flow will be below a presumptive 1,000 ug/L total limit on SVOC discharges to the sanitary sewer and that targeted treatment of 1,4-Dioxane will not be necessary. The discharge of treated groundwater to the sanitary sewer will require a permit from the Los Angeles County Sanitation District ("LACSD").

The combined vapor phase stream from the air-stripper and the soil vapor extraction wells will be treated in a thermal oxidation unit (hereinafter referred to as "thermal oxidation unit", "thermal unit" or "Soil Vapor Extraction and Treatment unit [SVET]"). The thermal oxidation unit will use high temperature (1,400°F) to oxidize (combust) the vapor stream. The effluent stream from the thermal unit will be further treated in an acid scrubber unit to remove hydrogen chloride gas (as hydrochloric acid, HCl) and hydrogen fluoride gas (as hydrofluoric acid, HF) via neutralization with sodium hydroxide (NaOH). The by product of this reaction is Na+ and Cl- & F- ions in aqueous solution which is chemically equivalent to table salt in fluorinated water (brine). The purge stream from the brine tank will be discharged to the sanitary sewer. The effluent stream from the neutralization unit will contain carbon dioxide (CO_2), water vapor (H_2O), nitrogen (N_2), and low levels of carbon monoxide (CO) nitrogen oxides (NO_x) and untreated VOCs. The discharge of treated vapors to the atmosphere will require a permit from the South Coast Air Quality Management District ("AQMD"). Both AQMD and DTSC will closely review system monitoring results to ensure compliance with permit conditions. The existing Catalytic Oxidation system that currently treats the vapor stream from the soil vapor interim measure will be decommissioned.

Approval to implement the work plan for the proposed project is contingent upon Univar obtaining permits from the LACSD for discharge of treated groundwater to the sanitary sewer, and from the AQMD for the operation of the SVET. The Initial Study analysis and findings, therefore, were based upon Univar receiving approval and authorizations via all applicable permit application processes.

A process flow diagram illustrating the proposed system can be found as Attachment G.

Lastly, and as discussed previously, in the future Univar may supplement the groundwater interim measure with an in-situ treatment technology such as ISCO. If ISCO is employed then treated groundwater may be re-injected into the subsurface to promote delivery of the amendment. Re-injection of treated groundwater into the sub-surface would also act to replenish the aquifer. Any plan to re-inject treated groundwater into the subsurface would require a Waste Discharge Requirements ("WDR") permit from the RWQCB and will be the subject of a **separate** CEQA evaluation.

Area 4 – Railyard:
The proposed groundwater interim measure for this area is still under review but may consist of an in-situ treatment technology. Univar will propose an interim measure for Area 4 following the completion of bench-scale testing of in-situ technologies and also negotiations with UPRC. A **separate** CEQA analysis will be prepared for the proposed remedy in Area 4.

Area 5 – Washington Boulevard:
The proposed groundwater interim measure for this area is an in-situ treatment technology such as enhanced bioremediation. The most appropriate in-situ technology or technologies will be selected following the completion of bench-scale testing. A **separate** CEQA analysis will be prepared for the proposed remedy in Area 5.

Commissioning / Monitoring:
Following successful construction of the new wells, installation of piping and procurement and installation of the air-stripper and thermal oxidation unit, Univar will commission the system and then begin long term operation and maintenance ("O&M"). Commissioning of the system will ensure that the various system components are operating as designed. Commissioning will include, but is not limited to, evaluation of the following:

- Submersible pump flow and pressure.
- DPE soil vapor extraction well radius of influence.
- Air-stripper VOC removal efficiency.
- Thermal oxidation unit destruction efficiency.
- Noise generation.

The project site is unmanned and as such the SVET will be fitted with an auto-notification system to call for attention / service as required. The auto-notification system will call or send an SMS text message when the system is down (e.g. when an interlock is triggered) indicating the nature of the fault/problem. The SVET control panel will also be connected to the internet via an Ethernet connection and responding staff can go online to gather additional information on the nature of the fault. If a serious malfunction occurs, Univar representatives will respond to the site immediately. If a routine fault occurs, Univar representative will respond to the site on the next business day.

Long term monitoring will be used to confirm that the system is operating correctly under steady-state conditions and achieving project goals e.g. hydraulic control of the site. Monitoring will also be used to verify that system discharges and emissions to the sanitary sewer and the atmosphere are within permitted limits. DTSC, in conjunction with the independent regulatory agencies, will review regular progress reports to ensure compliance.

ENVIRONMENTAL IMPACT ANALYSIS:

1. Aesthetics

The project site is located in a mixed residential, commercial and industrial area of the City of Commerce and East Los Angeles County. The project involves the installation of minimal new above grade equipment that will be visible. The equipment to be utilized for the groundwater interim measure is similar in type and size to the existing equipment at the site used for the soil vapor interim measure. The new equipment to be installed at the site is in keeping with the industrial nature of the surrounding area. As such, no mitigation measures targeted at obscuring views or improving the appearance of site structures are deemed necessary. For the forgoing reasons there is no possibility that the project could have a significant impact on aesthetics and no further study or evaluation is warranted.

References Used: [16c], [16d], DTSC staff observations

2. Agricultural Resources

The project site is located in a mixed residential, commercial and industrial area of the City of Commerce and East Los Angeles County. Commerce has been completely developed since before its incorporation in 1960. Almost 64% of the total land area in Commerce (2,676 acres) is devoted to industrial uses, and almost 20% of Commerce is covered by streets, freeways, and railroad right-of-ways. Nearby areas in unincorporated East Los Angeles are also heavily urbanized with a mix of residential and industrial uses. For the forgoing reasons there is no possibility that the project could have a significant impact on agriculture and no further study or evaluation is warranted.

References Used: [16c], DTSC staff observations

3. Air Quality

Project Activities Likely to Create an Impact:

The following activities have the potential to impact air quality:

- Operation of internal combustion engines.
- Interim measure construction activities.
- Discharge of the treated soil vapor stream to the ambient air.

Vehicle and Engine Emissions
Implementation of the project will result in increased vehicle traffic which may impact air quality. However, the increase in vehicle traffic will be low and consequently the impact will not be significant. The project proponent will encourage workers at the site to car pool and will institute a non-idle policy. Therefore, impacts to air quality resulting from increased vehicle traffic should be negligible.

Construction Activities
Construction activities at the site have the potential to result in fugitive dust emissions which may impact air quality. However, the potential for dust generation is low because the site is entirely paved and the topography is flat. Only a minor soil disturbance will occur as a result of installation of five (5) new soil vapor and groundwater extraction wells and trenching of conveyance piping. Therefore, impacts to air quality resulting from the emission of fugitive dust should be negligible.

Discharge of Treated Soil Vapor
The emissions from the treatment of contaminated soil vapor and groundwater will impact air quality. The VOCs removed from the sub-surface will be treated in a thermal oxidation unit to be permitted by the South Coast Air Quality Management District (“AQMD”). The proposed treatment system is a Soil-Therm model 2010-CLR unit which operates by high temperature thermal oxidation (combustion). Soil vapor will be treated directly and groundwater will be treated indirectly following contaminant phase transfer in an air stripper.

The SVET will have a capacity of 1,000 standard-cubic-feet-per-minute (scfm) comprised of approx 700 scfm from soil vapor extraction and 300 scfm from groundwater treatment. The anticipated VOC system loading is 810 pounds per day (lb/day) and 26 lb/day from soil vapor and groundwater respectively. The controlled emission of VOCs from the SVET is estimated at 8.1 lb/day at 99% destruction efficiency. The VOCs subject to treatment do not have objectionable odors at the expected concentrations.

The SVET system will oxidize (combust) the chlorinated and fluorinated VOCs in the vapor stream. The effluent stream from the thermal unit will be further treated by neutralization in an acid scrubber unit to remove hydrogen chloride gas (as hydrochloric acid, HCl) and hydrogen fluoride gas (as hydrofluoric acid, HF) via neutralization with sodium hydroxide (NaOH). The by product of this reaction is Na^+ and Cl^- & F^- ions in aqueous solution which is chemically equivalent to table salt in fluorinated water (brine). The brine solution will be discharged to the sanitary sewer. The effluent stream from the neutralization unit will contain carbon dioxide (CO_2), water vapor (H_2O), nitrogen (N_2), and low levels of carbon monoxide (CO), nitrogen oxides (NO_X) and untreated VOCs.

The permit application for the thermal oxidation unit is based on the premise that the Soil-Therm system is considered an example of Best Available Control Technology for Toxics (T-BACT) as defined by AQMD. As such, and pursuant to District Rule 1401, the system cannot emit Toxic Air Contaminants (TACs) at a level that results in a Maximum Increased Cancer Risk (MICR) exceeding one-in-one-hundred-thousand (1x10-5) or a hazard index exceeding unity (one). AQMD will confirm that the system is in fact T-BACT prior to issuing the permit.

Rubicon conducted a risk assessment using an air dispersion model approved by AQMD and concluded that the cancer risk resulting from the operation of the SVET system at design conditions would be acceptable. For the purposes of the risk evaluation, the nearest commercial / industrial receptor to the treatment unit discharge point is located approximately 25 meters (m) away and the nearest residential receptor is 100 m away. The calculated cancer risk to the maximally exposed commercial and residential receptor was estimated at 1.31 and 9.29 in one million respectively.

Treated soil vapor will be discharged from a 25 foot high stack. The design of the system allows products of the oxidation process to exit the stack with enough velocity so that they dissipate rapidly. Discharges will be monitored according to a program to be defined by AQMD to ensure compliance with permit conditions. The treatment unit will also contain a number of interlocks to ensure operating parameters such as temperature are within acceptable limits at all times. If any critical operating condition is not met the system will automatically shut-down.

The SVET will operate 24 hours a day and seven (7) days a week. The project site is unmanned and the SVET will be checked and serviced at least weekly. In addition, the SVET will include an automated notification system to call for service as needed.

The analysis and findings in this Initial Study were based upon assurances that Univar would obtain appropriate permits to operate the SVET. Univar will not be authorized to operate the SVET prior to receipt of a permit from AQMD. The permit application, which has been submitted to AQMD, is an attachment to this Initial Study. The permit application can be viewed at the on-line and physical information repositories that have been established for this project. In order to access the information repositories please consult the project fact sheet or contact the DTSC staff listed on the cover page of this Initial Study.

Description of Baseline Environmental Conditions: The project site is located within the South Coast Air Basin, which encompasses all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino Counties. The climate in Los Angeles County is classified as Mediterranean and is characterized by mild winters and long warm summers with mild seasonal changes. Frequently, high morning clouds associated with near-marine conditions dissipate by mid-morning, with cloudless afternoons in the spring and summer.

The average recorded January temperature in Los Angeles is 56°F and the average recorded July temperature is 72°F. The area receives an average of approximately 12 inches of precipitation per year. The majority of precipitation falls in the autumn and winter.

The prevailing wind direction is from the west. Strong onshore breezes characterize the area, especially in summer, with weak offshore winds occurring during pre-dawn hours. Santa Ana winds occur periodically in the region when a high pressure system builds over the inland desert and causes hot, dry air masses to funnel south.

The federal Clean Air Act and the California Clean Air Act authorize the regulation of air quality. National Ambient Air Quality Standards have been established for what are known as “criteria” pollutants and the state of California has established more stringent standards for these pollutants. The criteria pollutants include nitrogen dioxide, carbon monoxide, sulfur oxides, ground level ozone, particulate matter, and lead. Air basins such as the South Coast Air Basin are designated either “attainment” or “non-attainment” for these criteria pollutants, according to whether they meet or do not meet the federal and state standards. The following table summarizes regional air quality for the project area:

Table 1. Air Quality Summary for the South Coast Air Basin.

Pollutant	California Standards	National Standards
Ground-level Ozone	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Oxides	Attainment	Attainment
Sulfur Oxides	Attainment	Attainment
Particulate Matter	Nonattainment	Nonattainment
Lead	Attainment	Attainment

Air quality is measured locally at the Pico Rivera air monitoring station. Local air quality generally mirrors air quality for the Basin. Air quality in the vicinity of the project site is impacted by regional factors and could be improved.

Analysis as to whether or not project activities would:

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

Impact Analysis:
The project impacts resulting from increased vehicular traffic are considered to be minor and no targeted mitigation measures are deemed necessary. Likewise, project emissions resulting from construction of the remedy are minor due to the scope and type of activities and short duration; as such, targeted mitigation measures are not necessary. Operation of the thermal oxidation unit will result in the emission of greenhouse gases and low quantities of untreated VOCs. The impacts resulting from these emissions have been studied and are documented in the permit application. AQMD will evaluate the proposed system for compliance with applicable district rules and state and federal emissions regulations prior to issuing a permit to construct. Furthermore, Univar will conduct regular monitoring to ensure that the system is operated in compliance with the permit. For these reasons the project will not result in a significant impact.

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:
Based on the results of modeling and projections documented in the permit application, the operation of the thermal oxidation unit will not cause or contribute to an air quality violation. Univar will conduct regular monitoring to ensure that the system is operated in compliance with the permit. For these reasons the project will not result in a significant impact.

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:
The project area is non-attainment for the following criteria pollutants; ozone, carbon monoxide, sulfur dioxide. Based on the results of modeling and projections documented in the permit application, the operation of the thermal oxidation unit will not result in the emission of significant quantities of criteria pollutants. Univar will conduct regular monitoring to ensure that the system is operated in compliance with the permit. For these reasons, the project will not result in a significant impact.

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 no sensitive receptors in the immediate vicinity of the project site. The nearest commercial industrial and residential receptors are located 25 m and 100 m away from the discharge point of the treatment system respectively. The nearest areas where children may congregate are the basketball court located immediately north of the project site (located approximately 400 meters from the discharge point of the treatment system) and the Parque De Los Sueños (Park of Dreams) located at 1333 S. Bonnie Beach Place (located approx 500 meters from the discharge point). The court and park were constructed on land that was formerly part of the Univar Facility. The risk resulting from exposure to stack emissions has been quantified and is document in the permit application; the calculated risks are within levels deemed acceptable. Furthermore, the SVET will only operate for the period of time necessary to remediate releases from the site. For these reasons, the project will not result in a significant impact.

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:
The primary combustion product from the operation of the thermal oxidation unit will be CO_2 which is odorless. Other combustion products and untreated VOCs that will be emitted by the SVET will not create objectionable odors at the concentrations that are anticipated.

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:
Naturally occurring asbestos has not been encountered during the four phases of investigation conducted at the site including installation of several monitoring wells and UST excavation. Also, naturally occurring asbestos is not commonly encountered in the vicinity of the project site.

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

References Used: [5], [16c], [16d], DTSC staff observations

4. Biological Resources

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: The project site and immediate vicinity does not provide any habitat that may support biological resources. Limited landscaping is present at the site however this is of poor habitat value.

The site is almost entirely paved, except for an area adjacent to the rail spur in the western portion of the site and scattered areas outside the fenced perimeter of the site. The area adjacent to the rail spur is unpaved and covered with gravel; this area is sparsely vegetated with annual grasses and herbs that are adapted to highly disturbed, ruderal conditions. Small patches of unpaved areas and landscaping are present at the perimeter of the site and support similar disturbance adapted vegetation. Because the site is developed and almost entirely paved, habitat value for sensitive and

non-sensitive plants is low. Plant species that might occur at the site are limited to those adapted to a high level of disturbance and human presence, such as wild radish (Rhammus californicus), and various annual grasses.

The area surrounding the site within a 5-mile radius is characterized by industrial and residential development, including several freeways, railroad yards, industrial complexes, and medium density residential developments. No undeveloped (e.g., open space) areas are present within 5 miles of the site, extensive unpaved areas within a 5-mile radius of the site are limited to several cemeteries, the Montebello Municipal Golf Course (approximately 3 miles northwest of the site), and small city parks. Vegetation in the area surrounding the site is limited to landscape and ruderal plants. The area does not provide suitable habitat for sensitive plants.

A California Department of Fish and Game (CDF&G) Diversity Database "Rarefind"(CNDDB) as performed to identify any reported occurrences of sensitive plants or habitats in the vicinity of the site. No threatened or endangered plants have been reported within a 5-mile radius of the site. Because of the existing site conditions (e.g., lack of suitable habitat), the sensitive plants reported to occur outside the 5-mile radius of the site are not expected to occur on or adjacent to the site. The nearest environmentally sensitive biological resource is a walnut forest located at Arroyo Seco Park (approximately 8 miles north of the site). This community is designated by the CDF&G as a sensitive community.

Because the site is developed and almost entirely paved, habitat value for sensitive and nonsensitive animals is low. Animal species that might occur at the site are limited to those adapted to a high level of disturbance and human presence, such as Norway rat (Rattus norvegicus) and domestic (feral) cat. The surrounding neighbors have common domestic pets including dogs and cats; some neighbors also have chickens.

A CDF&G CNDDB, 2009 query was performed to identify any reported occurrences of sensitive animals or habitats in the vicinity of the site. No threatened or endangered animals have been reported within a 5-mile radius of the site. Because of the existing site conditions (i.e., lack of suitable habitat), the sensitive animals reported to occur outside the 5-mile radius of the site are not expected to occur on or adjacent to the site.

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 project site is located within a heavily developed area of the City of Commerce. The project site does not provide any habitat.

   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:

   There are no water bodies (marshes, wetlands, rivers, lakes etc.) near the project site.

   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:

There are no water bodies in the immediate vicinity of the project site. The nearest water body is the Los Angeles river, a concrete lined channel, located approximately 1.7 kilometers southwest of the site.

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:

The project site does not lie on a migratory path for any 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:

The project will not involve the loss of any feature that may be construed as providing habitat.

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 project site is not the subject of a local, regional, state or federal conservation plan.

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

References Used: [5], [16c], [16f], DTSC staff observations

5. Cultural Resources

Project Activities Likely to Create an Impact:

The following activities have the potential to impact cultural resources:

- Trenching to install underground piping

Ground Disturbance

All of the transfer piping to be installed on the Area 1 (North Parcel) and Area 3 will be below grade. Installation will involve creating a trench approximately one (1) foot wide and up to three (3) feet deep. Much of the trenching to be on Area 1 will occur in an area that has been previously disturbed during installation / removal of 50 USTs at the site. The large excavation (approximately one [1] acre to a depth of 10 ft bgs) associated with removal of the UST in 2001 did not uncover any cultural artifacts indicating that the area is not culturally rich.

If human remains, or any other cultural / archeological resources are discovered during implementation of the Work Plan then all work will be immediately halted. The appropriate authorities will be contacted to assess the nature and significance of the find prior to the work recommencing.

Description of Baseline Environmental Conditions:

The project site is fully developed. A very large excavation was completed on Area 1 in 2001 associated with the removal of 50 USTs. As such, ground conditions in the area may consist of disturbed and compacted fill materials.

The City of Commerce has 2 state designated historical places. They are the Uniroyal Tire Plant/Citadel and the Pillsbury Mill. Other places of historical interest in Commerce include the Vail Landing Field, which was Western Airlines first Airstrip in Los Angeles; the Union Pacific East Los Angeles Station; 3 cemeteries; and the site of the 1942 Sleepy Lagoon Murder. These historic resources are not located near the project site.

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:
There are no known historical resources in the vicinity of the project site. Based on existing site knowledge, it is not expected that the project will uncover any items of historical significance.

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:
There are no known archeological resources in the vicinity of the project site. Based on existing site knowledge, it is not expected that the project will uncover any items of archeological significance.

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:
There are no known paleontological resources in the vicinity of the project site. Based on existing site knowledge, it is not expected that the project will uncover any items of paleontological significance.

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:

There are no known cemeteries or burial grounds in the vicinity of the project site. Based on existing site knowledge, it is not expected that the project will uncover any human remains.

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

References Used: [5], [16c]

6. Geology and Soils

Project Activities Likely to Create an Impact:

The following activities have the potential to impact geology and soils:

- Installation of groundwater wells
- Trenching to install underground piping
- Soil vapor extraction

Well Installation
The project will involve the installation of five (5) new extraction wells; two (2) new wells on Area 1 and three (3) new wells on Area 3. The new wells will be constructed to act as DPE wells and will be used for concurrent extraction of soil vapor and groundwater. The new wells will be of similar design to several existing wells on the site. The installation of the wells will involve minimal ground disturbance based on the relatively small diameter (four [4] inches) and relatively shallow depth (up to 150 ft bgs). Investigation derived waste from well installation will be sampled for hazardous constituents and disposed of at an appropriate location.

Trenching
Planned trenching activities were discussed in the Cultural Resources section of the Initial Study. Given the relatively shallow depth of the trenches (three [3] ft bgs) the impact on geology and soils will be minimal.

Soil Vapor Extraction
Soil vapor extraction will involve inducing a vacuum in the sub-surface to draw out volatile contaminants. The anticipated vacuum radius of influence (ROI) of the shallow and deep wells is 45 feet. The vacuum influence in the sub-surface is only temporary for the period of time the SVET is operating and will have no lasting effects.

Description of Baseline Environmental Conditions:

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 project site is not located within close proximity of an earthquake fault and project activities will not rupture a fault. Earthquakes and seismic events are possible however the project does not involve significant new construction; the treatment system stack to be installed to a height of 25 ft will be properly secured. The site's soils are not prone to liquefaction. Lastly, the project site is level and is not prone to landslide. No significant adverse effects are foreseen.

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 project site is entirely paved. Some temporary removal of paving will be required to install conveyance piping however this paving will be replaced. Giving the paving the site is not subject to erosion or loss of topsoil.

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 project site is level and is thus not prone to a landslide. The site is also entirely paved which caps and limits erosion and saturation of soils during extreme weather events. With the exception of the 25 ft stack, the project does not involve any construction at elevation that could collapse or fall during a seismic event. The stack will be properly secured with guide wires.

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:
The soils that underlie the project site consist of heterogeneous layers of mostly silt and clay with some sand. These soils do not represent a constraint on development, as evidenced by existing on-site development and that found surrounding the site. No impacts relating to expansive soil are anticipated.

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:
The project will not require installation of a septic tank or a wastewater treatment system. The project will generate a treated groundwater waste stream that will be discharged to the sanitary sewer. The discharge will occur to an existing sanitary sewer main located on S. Bonnie Beach Place and operate by the Los Angeles County Sanitation District (LACSD). Univar will secure a permit from LACSD for the discharge of treated groundwater to the sanitary sewer.

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:
The project site is not located in an area where naturally occurring asbestos is present. Extensive excavations at the site have not disclosed naturally occurring asbestos.

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

References Used: [5], [16c]

7. Hazards and Hazardous Materials

Project Activities Likely to Create an Impact:

The following activities relate to hazards and hazardous materials:

- Remediation of a former hazardous waste management facility.
- Conveyance and treatment of contaminated soil vapor and groundwater.
- Utilization of hazardous materials for treatment (acid scrubber).
- Controlled discharge of untreated VOCs.

Remediation
As discussed in the introduction to this Initial Study, the project site was formerly used for hazardous materials handling and hazardous waste storage and treatment. The project site was contaminated as a result of these activities. All investigation derived waste from implementation of the work plan (e.g. soil cuttings from well installation and groundwater from well development) will be sampled and managed as hazardous waste as appropriate. Personnel protective equipment (PPE) will also be used consistent with hazardous waste operations. A health and safety plan detailing PPE needs and other items will be prepared following approval of the Interim Measures Work Plan.

Handling of Contaminated Groundwater and Soil Vapor
The operation of the SVET will involve the conveyance, treatment and discharge of soil vapor and groundwater. The capacity of the thermal oxidation unit is 1,000 scfm and the air stripper will treat groundwater at a rate of up to 30 gpm. The project site is unmanned. Given that the operations will not be continuously monitored, mitigation measures are necessary to ensure safe operation of the system. Specifically, Univar will construct a bermed area around the treatment system as temporary holding capacity for hazardous material that may be spilled or released. In addition, the SVET operating system will contain a number of interlocks to ensure operating parameters such as temperature are within acceptable limits at all times. If any critical operating condition is not met the system will automatically shut-down. Also, the SVET will include an automated notification system to call for service as needed.

Hazardous Materials
The acid scrubber on the discharge side of the thermal oxidation unit will use an aqueous sodium hydroxide (NaOH) solution to neutralize hydrogen chloride gas (as hydrochloric acid, HCl) and hydrogen fluoride gas (as hydrofluoric acid, HF) produced as a by-product of treatment of chlorinated and fluorinated compounds. The by product of this reaction is Na+ and Cl- & F- ions in aqueous solution which is chemically equivalent to table salt in fluorinated water (brine). The brine solution will be discharged to the sanitary sewer. The sodium hydroxide solution will be consumed during the reaction and discharged with the brine. The 250-gallon NaOH tank will require periodic replenishment.

Controlled Releases
The controlled discharge of VOCs and the associated risk to the public were discussed in the Air Quality section of this Initial Study.

Description of Baseline Environmental Conditions: Univar formally ceased operating at the project site in 2002 and all hazardous materials and hazardous waste in inventory was removed. A surface (above grade) closure of the former hazardous waste management units on the South Parcel (Area 2) was completed. The sub-surface (below grade) closure of the former hazardous waste management units is on hold pending the completion of corrective action. The Catalytic

Oxidation Unit used for the soil vapor interim measure will be decommissioned when the thermal oxidation unit is operable.

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 project will involve the controlled removal and treatment of contaminants from the sub-surface. As discussed more fully above, the project incorporates controls to ensure that impacts fall below a level of significance. DTSC and other regulatory agencies will periodically inspect the facility and review records to ensure that Univar is following the approved work plan & applicable permits and operate the SVET system in a safe manner. For these reasons the project will not result in a significant impact.

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:
The site is unmanned and an uncontrolled upset has the potential to involve the release of hazardous materials. In order to mitigate this risk the project includes the following requirements:

- Univar will construct a bermed area around the SVET to provide temporary holding capacity for liquids that may be released.
- The SVET will include interlocks to monitor critical operating parameters and will automatically shut down if the operation falls outside of these parameters.
- The SVET will be inspected and maintained on a frequency not less than once per week.
- The SVET control system will provide for automated notification if the system shuts down or if a problem occurs.
- Local emergency response personnel will be notified of the presence and risk of the SVET system and will be able to respond as necessary.

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:
There are no schools within a one (1) quarter mile radius of the project site; the nearest school is Eastman Elementary School located approximately 0.4 miles to the north. The projected emissions from the thermal oxidation unit have been quantified and found to be within acceptable limits. The emissions from the thermal oxidation unit will be monitored to ensure compliance with the permit. For additional information on emissions refer to the Air Quality section of the Initial Study.

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 project site is on the Cortese list. The impetus for the project (the approval of an Interim Measures Work Plan) is to further cleanup releases of hazardous waste at the site and specifically to halt further off-site migration of contaminated groundwater.

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:
The project will not affect any existing emergency response plan. Univar will coordinate with local emergency responders relating to the potential risks of the project systems. For example, the local fire department will be notified of the nature of the hazardous materials handled and treated at the facility.

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

References Used: [2], [3], [4a], [7], [9], [10b], [16c], [16d], [16e]

8. Hydrology and Water Quality

Project Activities Likely to Create an Impact:

The following activities have the potential to impact hydrogeology and water quality below the site:

- Installation of groundwater wells.
- Operation of groundwater extraction and treatment system.
- Discharge of treated groundwater to the sanitary sewer.

Groundwater Wells
The installation of soil vapor and groundwater wells was discussed in the Geology and Soils section of this Initial Study. The project will involve the installation of five (5) new groundwater water wells to be used for extraction and treatment of contaminated groundwater. Univar will secure the necessary permits prior to installing the wells. At the completion of the project the wells will be properly decommissioned.

Extraction of Groundwater
Groundwater will be extracted from 14 wells at a combined extraction rate of 28 gpm. The extraction of groundwater will create a cone of depression local to and immediately down-gradient (south west) of the project site estimated to be between three (3) and five (5) feet. The extraction and treatment of groundwater from the source area where concentrations are highest is necessary to protect water resources down-gradient of the site. The cone of depression created by the extraction will also act to “de-water” the aquifer and “day-light” additional sub-surface where soil vapor extraction can occur.

Groundwater Discharge
Treated groundwater will be discharged to the sanitary sewer where it will undergo secondary treatment. The discharge of treated groundwater will be permitted by LACSD.

As noted, the analysis and the findings in this Initial Study were based upon assurances that Univar would obtain appropriate permits from LACSD to discharge treated groundwater to the sanitary sewer. Univar will not be authorized to operate the SVET prior to receipt of a permit from LACSD.

Description of Baseline Environmental Conditions: The subsurface groundwater resource at the project site was described in the introduction to this Initial Study and is discussed more fully in section 3.0 of the Work Plan. In summary, the

operations at the site (hazardous materials management and hazardous waste storage and treatment) have resulted in contamination of the groundwater resources below the site. The most heavily impacted water bearing zone is the shallow groundwater found at a depth ranging from 100 ft bgs to 155 ft bgs. The primary contaminants of concern at the site include chlorinated solvents, namely PCE and TCE.

A table illustrating the concentration of select contaminants of concern can be found as Attachment B. A figure depicting the locations of the referenced groundwater monitoring wells can be found as Attachment E.

Analysis as to whether or not project activities would:

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

Impact Analysis:
The first recoverable groundwater below and down-gradient of the project site has been contaminated above CA MCLs which precludes maximum beneficial use of groundwater resources (municipal supply as defined in the Basin Plan) without pre-treatment. This project will begin cleanup of groundwater will the goal of restoring the beneficial uses and protecting the aquifer down-gradient of the site. Treated groundwater will be discharged to the sanitary sewer under a permit to be issued by LACSD.

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 project will result in the removal of significant quantities of groundwater (over time). The depression of the aquifer is not only a result but a desired outcome in order to facilitate removal of contaminants by soil vapor extraction. There are no known existing uses of water from the subject aquifer in the immediate vicinity of the project site.

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 project will result in only minor surface changes at the site and will not impact overland flow or drainage.

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: The proposed project will not impact any surface water or natural percolation processes. The proposed project will not alter or divert the course of any river or stream. No surface runoff will be generated that may result in flooding.

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:
The project site is entirely pave. The proposed project will not add any new paving or cause the generation of any new run-off. Contaminated groundwater that is extracted from the sub-surface will be conveyed in a closed system of pipes and tanks and treated groundwater will be discharged to the sanitary sewer and not the storm drain.

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

f. Otherwise substantially degrade water quality.

Impact Analysis:
The objective of the interim measure is to prevent further off-site migration of contaminated groundwater while the characterization of the site is completed in support of a final remedy. Therefore, the project will improve water quality. Put another way, failure to implement the project could result in further degradation of water quality.

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 project site is not located within a flood hazard area as defined by the Federal Emergency Management Agency.

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: The proposed project will not have any impact on the potential for flooding either on the site or in the immediate vicinity. Extracted groundwater will be treated on an essentially real time basis so there is no large scale storage of groundwater at the site.

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

i. Inundation by sieche, tsunami or mudflow.

Impact Analysis: The project site is not located in an area that is susceptible to sieche, tsunami or mudflow.

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

References Used: [1], [3], [4a], [7], [9], [10b], [16b], [16c]

9. Land Use and Planning

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: The project site is located in a mixed residential, commercial and industrial area in the City of Commerce and East Los Angeles County. The project site is currently designated as "Industrial" in the Commerce General Plan and is zoned as "Heavy Manufacturing" (zoning category M-2).

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:
The operations to be conducted on the project site are consistent with the site zoning which is M-2 (Heavy Industrial) and will not require a general plan amendment or zone change or variance. Further, the site is not within a designated coastal zone or subject to a specific plan.

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:
The project site does not provide any habitat as discussed in the Biological Resources section of this Initial Study.

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

References Used: [5], [10a], [10c], [15], [16c]

10. Mineral Resources

There are no known mineral resources currently being exploited in the immediate vicinity of the project site. Petroleum resources are present in the Los Angeles area but have not been encountered during the extensive sub-surface investigation conducted at the site to date. All five (5) wells to be installed at the site will be located within 100 feet of an existing well constructed to an equal or greater depth. New and existing groundwater wells will be properly decommissioned at the conclusion of site remediation activities. Also, trenching activities will occur in areas of the site that have been previously disturbed. As such, it is very unlikely that mineral resources will be discovered or disturbed as a result of the project. For the forgoing reasons there is no possibility that the project could have a significant impact on mineral resources and no further study or evaluation is warranted.

References Used: [5], [16c]

11. Noise

Project Activities Likely to Create an Impact:

The following project activities have the potential to impact noise levels:

- Construction of the interim measure infrastructure (digging trenches and installing wells & equipment).
- Operation of pumps, blowers and air-stripper and thermal unit for soil vapor treatment.
- Routine maintenance of equipment.

Construction Activities
The construction of the systems and infrastructure comprising the groundwater interim measure will result in a short term increase in noise levels. The noise will result from increased activity at the site as well as the operation of construction and drilling equipment. Construction activities will only occur during business hours (8:00 am to 5:00 pm) and are expected to be completed within two (2) months.

System Operation
The SVET will generate noise when operating. The system elements anticipated to generate the greatest noise are the blowers and to a lesser extent the pumps. Efforts have been made to minimize noise from the blowers. Each of the two blowers will be fitted with discharge silencers and will be housed in an enclosure. The anticipated noise levels are in the range 73-75 decibels (dB) at three (3) feet distance. Noise levels will attenuate with distance from the source. Noise monitoring will be conducted as part of commissioning. If noise levels measured at the boundary of the nearest residence are excessive additional mitigations can be applied e.g. double enclosing the blowers. The SVET will operate 24 hours a day, 7 days a week.

Routine Maintenance
Routine maintenance of the SVET will occur weekly and may take up to a full day. The maintenance crew will likely consist of one (1) or two (2) people.

Description of Baseline Environmental Conditions: The project site is located in a mixed residential, commercial and industrial area of the City of Commerce and East Los Angeles County. Baseline noise levels are above average due primarily to the Santa Ana Freeway (I-5) located north east of the site and the Union Pacific Railroad Company East Yard immediately south of the site.

Commerce's interior noise standard for residential areas is 55 decibels (dB) from 7 a.m. to 7 p.m.; 50 dB from 7 p.m. to 10 p.m.; and 45 dB from 10 p.m. to 7 a.m. Commerce's noise standard for industrial areas is 70 dB community noise equivalent level (CNEL). Los Angeles County's Noise Ordinance limits noise within residential area to 50 dB from 7 a.m. to 10 p.m., and 45 dB from 10 p.m. to 7 a.m. The County's noise standard for industrial areas is 70 dB. The County works on a "stairstep" approach, however, which allows for noise to exceed these limits as long as the duration of the noise is shorter (i.e., the noise level is allowed to reach 55 dB for 15 minutes, 60 dB for 5 minutes, 65 dB for 1 minute, and 70 dB maximum). The same principle applies to industrial areas where the stairstep approach reaches its maximum at 90 dB.

The residents of Commerce and the East Los Angeles area are exposed to a range of noise levels from a variety of sources common in an urban setting. The most significant source of noise in the area is a ventilation system associated with the Huhtamaki manufacturing facility located west of the project site. The other major source of noise is related to the operation of motor vehicles. A number of arterials with high traffic volumes subject residents to a significant level of noise, particularly in those areas immediately adjacent to those roadways. In addition, the large numbers of heavy trucks result in noise impacts being much greater than that which would normally be expected. Rail traffic also contributes to the ambient noise levels, especially those areas near the mainlines. A heliport located near the intersection of Slauson Avenue and Mansfield Way, also contributes to the ambient noise levels. Finally, the area lies beneath the landing pattern for aircraft landing at Los Angeles International Airport.

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:
   Care has been exercised in developing the proposed project to ensure that noise levels are minimized. For example, blower discharge silencers and sound enclosures are planned. In addition, sound monitoring will be conducted as

part of system commissioning to verify that sound levels are within acceptable limits. Noise monitoring will consist of monitoring at the property boundary to ensure compliance with commercial industrial standards and monitoring at the boundary of the nearest residence to ensure compliance with residential standards. Noise monitoring will be conducted with the system on and off to accurately determine the contribution of the system. With the mitigation measures described above, noise from the proposed project will be reduced to levels that are less than significant.

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:
An increase in ground borne vibration is expected during the installation of new wells at the site. However, levels are not expected to be significant and the duration of generation will be for a relatively short period of time (likely around one day per well) during the initial construction phase (approx two months).

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:
While some increase in ambient noise levels is expected the increase is not expected to be substantial and the increase will only occur for the life of the remediation project. Noise monitoring will be conducted as part of system commissioning to verify that noise levels are within acceptable limits.

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:
A temporary increase in ambient noise levels will occur, especially during the initial construction phase, however this increase is not considered significant. Construction activities will only be conducted during regular business hours to minimize impacts on nearby residents.

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

References Used: [5], [15], [16c], [16d], [16e], DTSC staff observations

12. Population and Housing

The project site is located in a mixed residential, commercial and industrial area of the City of Commerce and East Los Angeles County. A number of residences are located across the street from the project site on the east side of S. Bonnie Beach Place. The construction phase of the project will be short (on the order of two [2] months) and O&M needs will be similar to the existing soil vapor interim measure which are minimal (up to eight [8] hours per week). The I-5 and I-710 freeways also provide easy access to the project site. As a result, persons that gain employment from the project will not need to live nearby. As such, the project will not increase the population of the surrounding area and will not increase demand for

housing. For the forgoing reasons there is no possibility that the project could have a significant impact on population and housing and no further study or evaluation is warranted.

References Used: [5], [16c], [16d]

13. Public Services

Project Activities Likely to Create an Impact: None.

Description of Baseline Environmental Conditions: The project site is located in a mixed residential, commercial and industrial area of the City of Commerce and East Los Angeles County. Public services are provided by either the City or the County. The proposed project will result in only a minor increase in demand for public services; workers that will construct and operate the groundwater interim measure will travel to the site daily.

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:

- Fire protection
  The thermal oxidation unit represents an incremental increase in fire risk and release of hazardous materials. This increased risk in not considered significant. The risk will be managed by notifying the fire department of the nature of activities at the site so they can respond appropriately if needed. The SVET will also be fitted with a number of interlocks to shut down this system if a fault/problem occurs to limit any impacts that may occur.

- Police protection
  No impact – the South Parcel (Area 2) where the treatment system will be housed has a six (6) foot chain link fence with barbed wire and is secure.

- Schools
  No impact - the construction and operation of the groundwater interim measure will not require a work force to move to the project area therefore no increased demand for schools will result.

- Parks
  No impact. For additional information on Parks refer to the Recreation Section of this Initial Study.

- Other public facilities
  No impact.

Impact Analysis:
For the reasons described above the proposed project will have no impact on public services except for fire protection which is considered a less than significant impact.

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

References Used: [5], [16c], [16d]

14. Recreation

The project site is located in a mixed residential, commercial and industrial area of the City of Commerce and East Los Angeles County. The nearest recreational facilities are a basketball court located immediately north of the site and the Parque De Los Sueños (Park of Dreams) located at 1333 S. Bonnie Beach Place. The court and park were constructed on land that was formerly part of the Univar Facility. The project will not have any impact on use of these facilities nor will the project create additional demand for recreational facilities. As such, no mitigation measures targeted at preserving or expanding recreational facilities are deemed necessary. For the forgoing reasons there is no possibility that the project could have a significant impact on recreation and no further study or evaluation is warranted.

References Used: [16c], DTSC staff observations

15. Transportation and Traffic

Project Activities Likely to Create an Impact:

The following activities have the potential to impact transportation and traffic:

- Transportation of construction crews to and from the site.
- Transportation of materials and equipment to the site.
- Travel of maintenance and operations staff to and from the site.

Traffic Impacts from Construction
The construction phase of the Work Plan will results in increased vehicle traffic in the vicinity of the project site. The increase in traffic will be temporary and will not be excessive. It is estimated that not more than ten (10) individuals will be working on construction at the site at any given time. Also, the nature of the project will not consume a large amount of materials that will require transportation to the site. Travel to the site in support of the implementation of the Work Plan will not utilize S. Bonnie Beach Place.

Traffic Impacts from Ongoing Operations and Maintenance
The project site is unmanned and the SVET will be checked and serviced at least weekly. In addition, the SVET will include an automated notification system to call for service as needed. Thus, it is estimated that under steady state operating conditions the oversight of the system will generate one to possibly a few trips per week.

Description of Baseline Environmental Conditions: The project site is located in a mixed residential, commercial and industrial area in the City of Commerce and East Los Angeles County. The travel routes to the project site from the major nearby freeways (Interstate 5 [I-5] and Interstate 710 [I-710]) are documented in Attachment C. The warehousing operation on the North Parcel has a daily truck limit of seven (7) trips per day per the conditional use permit. Trucks accessing the North Parcel may not utilize S. Bonnie Beach Place and must enter and leave on Noakes Street.

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: Additional vehicle trips will be generated by the project especially during the construction phase however these impacts will not be significant because no reduction in the level of service will occur. Ongoing maintenance needs will generate a similar or slight increase in vehicle traffic as compared to the soil vapor interim measure.

   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: Based on a screening level evaluation the project will not decrease the level of service of any transportation corridors.

   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 project will not result in any changes to traffic flow and design. The proposed system is similar in overall design and operation to the existing soil vapor interim measure and no impacts have occurred.

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

d. Result in inadequate emergency access.

Impact Analysis: The project areas are large and open with access from both Noakes Street and S. Bonnie Beach Place - there is ample emergency access.

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

e. Result in inadequate parking capacity.

Impact Analysis: The project encompasses large open areas and there is ample space for parking far exceeding project needs.

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 will not impact alternative transportation. The project is not amenable to the use of alternative transportation because the project site is not located near public transit routes and workers are required to take specialized tools and equipment to the site.

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

References Used: [5], [10a], [10c], [15], [16c], DTSC staff observations

16. Utilities and Service Systems

Project Activities Likely to Create an Impact:

The following activities have the potential to impact utilities and service systems:

- Increased electrical demand.
- Increased demand for natural gas to operate the thermal oxidation unit.
- Increased capacity demand for the sanitary sewer.

Electricity
The air stripper and thermal oxidation unit will require electricity to operate pumps, compressors, blowers and electrical control systems. The demands of the proposed system will exceed that of the existing soil vapor interim measure but are within the limits of the local supply system.

Natural Gas
The thermal unit will consume natural gas at an average rate of 400 cubic feet per hour with a burner rating of 1,200,000 British Thermal Units (BTU).

Sewer Discharge
The SVET will discharge up to 30 gpm of treated groundwater and brine to the sanitary sewer. This discharge will be permitted by the Los Angeles County Sanitation District (LACSD).

Description of Baseline Environmental Conditions: The project site is located in a mixed residential, commercial and industrial area in the City of Commerce and East Los Angeles County. The site itself is the former location of a large industrial complex. As such, the site has access to preexisting utilities and services that were used to support the former operation.

Analysis as to whether or not project activities would:

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

Impact Analysis: Treated groundwater will be discharged to the sanitary sewer under a permit issued by LACSD. The LACSD will only permit the discharge of a waste volume that they can manage pursuant to their own treatment and discharge 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: The anticipated rate of wastewater generation is 28-30 gpm which is relatively low and able to be absorbed within the existing capacity. The discharge of wastewater will only occur while the treatment system is operating at the site which will be for a finite period.

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 project will not result in the construction of additional paved surface that may contribute storm water during rain events. Treated groundwater will be discharged to the sanitary sewer not the storm water system.

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 project will not require any significant quantity of potable water. The only system requiring water is the acid scrubber makeup tank which will require approx 1 gpm.

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: Based on preliminary discussions by Rubicon with LACSD there is sufficient collection and treatment capacity to handle the approx 28-30 gpm produced by the project.

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 project will not result in the generation of a large quality of waste that will require disposal at a landfill. Investigation derived waste such as drill cuttings and soil displaced by trenching and pipe installation will be disposed at either a hazardous waste landfill or municipal landfill based on testing.

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: No significant quantity of solid waste will be produced. Investigation derived waste will be sampled prior to disposal.

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

References Used: [5], [10a], [16c], [16d]

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 --		01/12/2010
Preparer's Signature		Date
Ryan W. Batty	Hazardous Substances Engineer	(916) 255-6699
Preparer's Name	Preparer's Title	Phone #
-- Original Signed By --		01/12/2010
Branch or Unit Chief Signature		Date
Rizgar Ghazi, P.E.	Unit Chief, Brownfield's and Environmental Restoration Program	(916) 255-6665
Branch or Unit Chief Name	Branch or Unit Chief Title	Phone #

ATTACHEMENT A

REFERENCES

[1] California Regional Water Quality Control Board - Los Angeles Region (4), June 1994, *Water Quality Control Plan Los Angeles Region (Basin Plan)*, Coastal Watersheds of Los Angeles and Ventura Counties.

[2] DTSC and Van Waters & Rogers, June 1995, *Corrective Action Consent Agreement (Docket HWCA: 94/95-072)*, Van Waters & Rogers, Inc. - Bonnie Beach Facility, Commerce, California.

[3] Harding Lawson Associates, June 1996, *Revised Current Conditions Report / Phase I RCRA Facility Investigation*, Van Waters & Rogers, Inc., – Bonnie Beach Facility, Commerce, California.

[4a] Harding Lawson Associates, July 1997, *Phase II RCRA Facility Investigation*, Van Waters & Rogers, Inc., – Bonnie Beach Facility, Commerce, California.

[4b] Harding Lawson Associates, September 1997, *Final Interim Measures Work Plan*, Van Waters & Rogers, Inc., – Bonnie Beach Facility, Commerce, California.

[5] Department of Toxic Substances Control, March 1998, *California Environmental Quality Act Initial Study and Negative Declaration*, Van Waters & Rogers, Inc., Commerce, California.

[6] Reserved 1999

[7] Geosystem Consultants, Inc., February 2000, *Phase III RCRA Facility Investigation*, Van Waters & Rogers, Inc. - Bonnie Beach Facility, Commerce, California.

[8] Reserved 2001

[9] England Geosystem, Inc., June 2002, *Phase IV RCRA Facility Investigation*, Vopak USA, Inc. – Bonnie Beach Facility, Commerce, California.

[10a] City of Commerce Department of Community Development, May 2003, *Initial Study – Nemax Textiles Project*, 1363 S. Bonnie Beach Place, Commerce, California.

[10b] England Geosystem, Inc., May 2003, *Supplement to Phase IV RFI – Distribution of Chemicals of Potential Concern in Soil Vapor, Soil, and Ground Water*, Univar USA, Inc, Commerce, CA.

[10c] City of Commerce, September 2003, *Resolution No. 03-45 Affirming Conditional Use Permit No. 369*, City of Commerce, Commerce, California.

[11] Reserved for references dated 2004.

[12] Reserved for references dated 2005.

[13] Reserved for references dated 2006.

[14] Reserved for references dated 2007.

[15] City of Commerce, January 2008, *2020 General Plan*, City of Commerce, Commerce, California.

[16a] Rubicon Engineering Corporation, May 2009, *Final Conceptual Plan for Interim Ground Water Remediation,* Univar USA, Inc – Bonnie Beach Facility, Commerce, California.

[16b] Rubicon Engineering Corporation, July 2009, *Progress Report January through June 2009, Subsurface Characterization and Interim Remediation*, Univar USA, Inc – Bonnie Beach Facility, Commerce, California.

[16c] Rubicon Engineering Corporation, October 2009, *Final Ground Water Interim Remedial Measures Work Plan*, Univar USA, Inc – Bonnie Beach Facility, Commerce, California.

[16d] Rubicon Engineering Corporation, October 2009, *Application for Permit to Construct and Operate Soil and Ground Water Remediation System*, Univar USA, Inc. – Bonnie Beach Place Facility, Commerce, California.

[16e] Verbal Communication, November 2009, Conversation with Mark Sujata of SoilTherm.

[16f] California National Diversity Database Rarefind search conducted by DTSC staff on 12/22/09.

1. http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/2008-09/documents/E-1_2009%20Press%20Release.pdf
2. http://www.ordlink.com/codes/lacounty/index.htm

ATTACHMENT B

Summary of Recent Groundwater Monitoring Well Results

Designation	Depth[1]	Zone	Location	Concentration[2] [ug/L]		
				PCE	TCE	1,4-Dioxane
MW-1	148	Shallow	Area 2	6,000	2,100	11,000
MW-2	147.5	Shallow	Area 2	7,700	6,500	7,900
MW-3	148	Shallow	Area 2	46,000	28,000	210
MW-4	148.5	Shallow	Area 1	2,500	890	1
MW-5	149.5	Shallow	Area 1	6,800	6,800	5.1
MW-6A	137	Shallow	Area 1	120,000	26,000	42
MW-6B	155.5	Shallow	Area 1	95,000	23,000	-
MW-7	146	Shallow	-	4,300	1,000	1.5
MW-8	151	Shallow	-	16	< 0.5	< 0.5
MW-9	145.5	Shallow	Area 1	7,300	910	< 0.5
MW-10	146	Shallow	-	2.9	2.9	< 0.5
MW-11	140.5	Shallow	Area 4	22,000	5,300	30
MW-12	259	Deep	-	< 0.5	< 0.5	< 0.5
MW-13	141	Shallow	Area 4	1,600	730	3,100
MW-13C	192	Intermediate	Area 4	2.4	1	-
MW-14	145	Shallow	Area 4	20,000	4,300	3.4
MW-14C	192	Intermediate	Area 4	150	65	-
MW-15	150	Shallow	Area 4	54	92	< 0.5
MW-15C	193	Intermediate	Area 4	4	4.6	-
MW-16	140	Shallow	-	24	1.3	< 0.5
MW-17	145	Shallow	Area 4	760	460	260
MW-18	150	Shallow	Area 4	1,900	1,700	3.2
MW-19	132	Shallow	Area 5	6	10	< 0.5
MW-20	139	Shallow	Area 5	25	120	4.7
MW-21	138	Shallow	Area 5	200	250	0.6
MW-22	200	Intermediate	Area 5	34	53	-
MW-23	200	Intermediate	Area 5	3.4	35	-
MW-24	195	Intermediate	Area 2	1.9	0.91	-
DPE-1	150	Shallow	Area 2	3,300	880	5,900
DPE-2	150	Shallow	Area 2	14,000	7,800	6,700
DPE-3	150	Shallow	Area 2	6,900	6,000	1,900
DPE-4	150	Shallow	Area 2	23,000	17,000	7.5
DPE-5	150	Shallow	Area 2	73,000	26,000	170
DPE-6	150.5	Shallow	Area 2	17,000	3,600	730
DPE-7	139	Shallow	Area 2	52,000	20,000	1,100
DPE-8	139	Shallow	Area 2	15,000	12,000	7.2

[1] Feet below ground surface to bottom of well casing.
[2] Concentration of select contaminants in groundwater – most recent sampling event.

ATTACHMENT C

Traffic Flow Information

Traffic accessing the site will use either the Interstate 5 (I-5) or the Interstate 710 (I-710) freeways. Consistent with the conditional use permit for the North Parcel (Area 1), truck traffic to and from the project site will be directed to use S. Herbert Avenue in favor of S. Bonnie Beach Place. The probable traffic routes are as follows:

Access to the Site

From I-5 Southbound
Exit freeway onto Boswell Place
North on S. Downey Road
West on E. Olympic Boulevard
South on S. Herbert Avenue to Noakes Street
East on Noakes Street to project site

From I-5 Northbound
Exit freeway onto Telegraph Road
West on E. Olympic Boulevard
As above.

From I-710 Eastbound
Exit freeway onto E. Olympic Boulevard (west)
As above.

From I-710 Westbound
Exit freeway onto S. Eastern Avenue
West onto S. Eastern Avenue
West on E. Olympic Boulevard
As above.

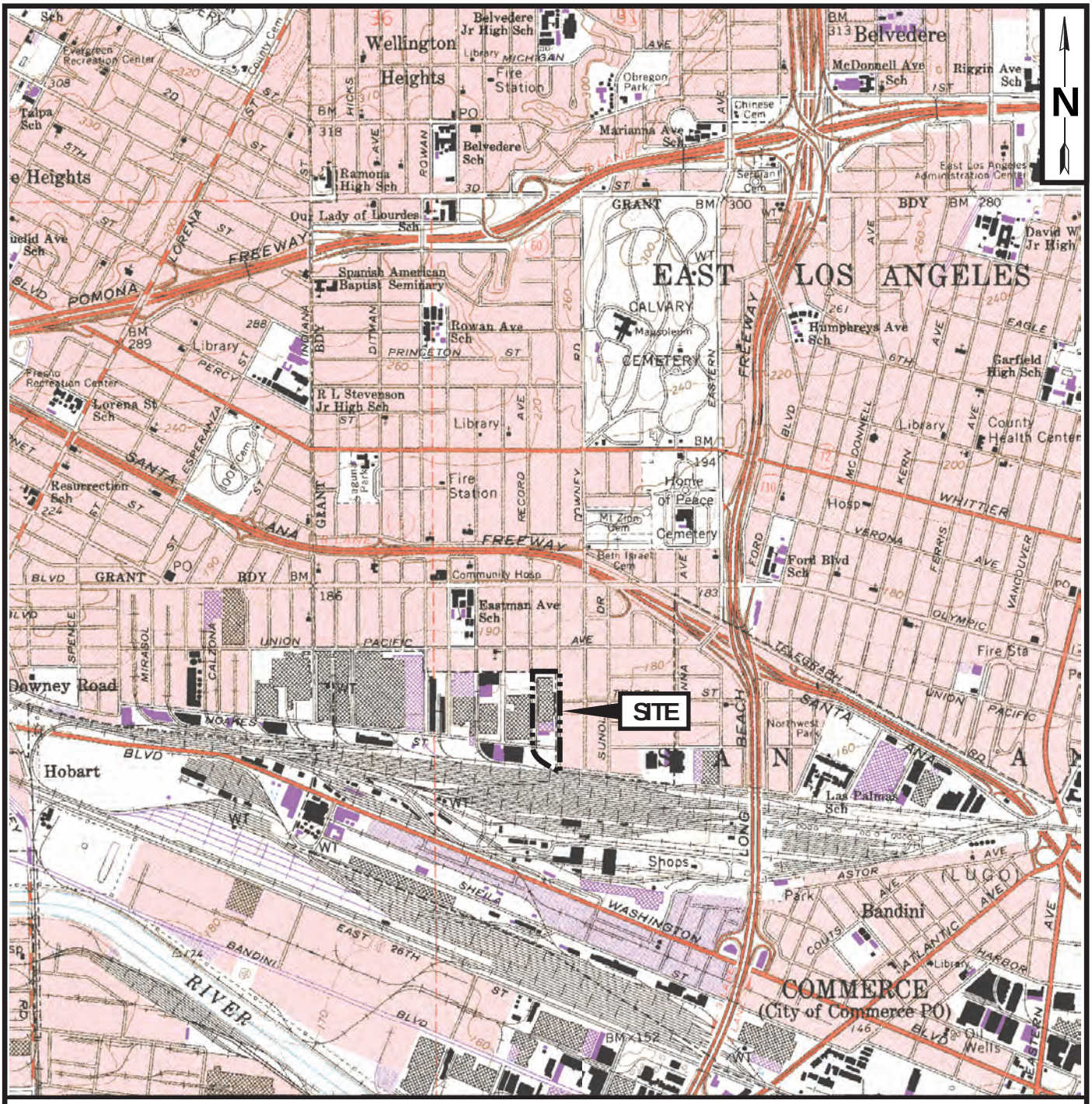
Egress from the Site

To I-710
Exit project site on Noakes Street
West on Noakes Street
North on S. Herbert Avenue
East on E. Olympic Avenue to freeway

To I-5 Southbound
Exit project site on Noakes Street
West on Noakes Street
North on S. Herbert Avenue
West on E. Olympic Avenue
North on S. Ditman Avenue to freeway

To I-5 Northbound
Exit project site on Noakes Street
West on Noakes Street
North on S. Herbert Avenue
East on E. Olympic Avenue
North on S. Downey Road to freeway

87-188\005\01/08/03



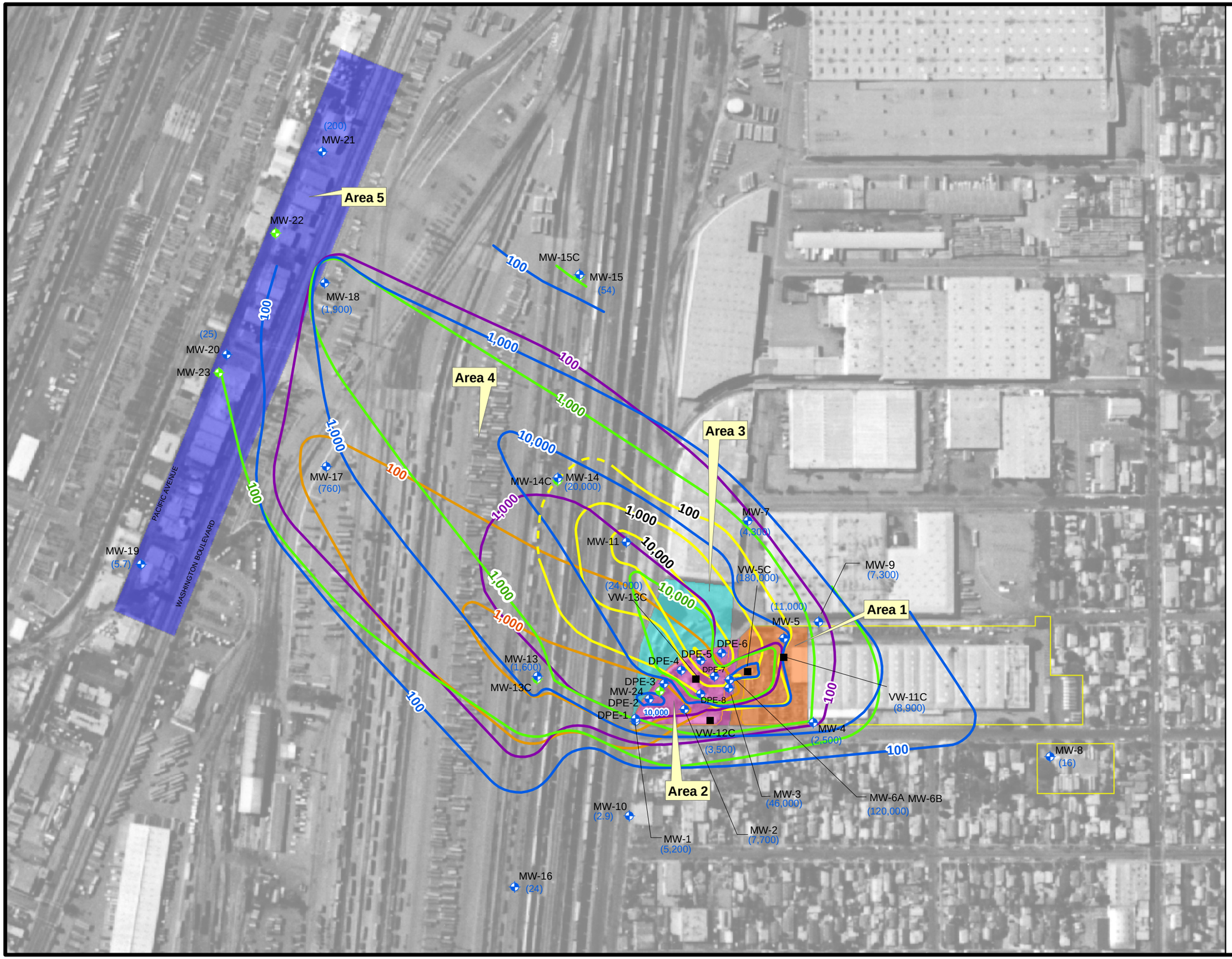
ATTACHMENT D

SITE LOCATION MAP

FORMER UNIVAR USA INC. FACILITY
1363 SOUTH BONNIE BEACH PLACE
LOS ANGELES, CALIFORNIA

REFERENCE:
U.S.G.S. 7.5 MINUTE TOPOGRAPHIC MAPS OF
LOS ANGELES AND SOUTH GATE, CALIFORNIA
DATED: 1966 AND 1964 RESPECTIVELY
PHOTOREVISED: 1981

RUBICON
Engineering Corporation



N

LEGEND

- EXPOSITION AQUIFER WELL
- GAGE AQUIFER WELL
- NEW GROUND WATER/VAPOR MONITORING WELL
- DCE ISOCONCENTRATION IN ug/l
- TCE ISOCONCENTRATION IN ug/l
- PCE ICOCONCENTRATION IN ug/l
- 1,4-DIOXANE ISOCONCENTRATION IN ug/l
- DICHLOROMETHANE ICOCONCENTRATION IN ug/l
- FORMER FACILITY BOUNDARIES
- MW-9 (850) WELL IDENTIFICATION AND PCE CONCENTRATION IN (ug/l)

PCE, TCE, AND 1,1-DCE CONTOURED USING FEBRUARY 2009 SAMPLING RESULTS. 1,4-DIOXANE AND DICHLOROMETHANE CONTOURED USING AUGUST 2009 SAMPLING RESULTS.

AREA 1: FORMER UST AREA
AREA 2: CORROSIVE AND RECYCLE AREAS
AREA 3: DART TRANSPORTATION CORPORATION PROPERTY
AREA 4: UNION PACIFIC RAILROAD PROPERTY
AREA 5: WASHINGTON BOULEVARD AND PACIFIC AVENUE

1:3,600

300 0 300 Feet

ATTACHMENT E

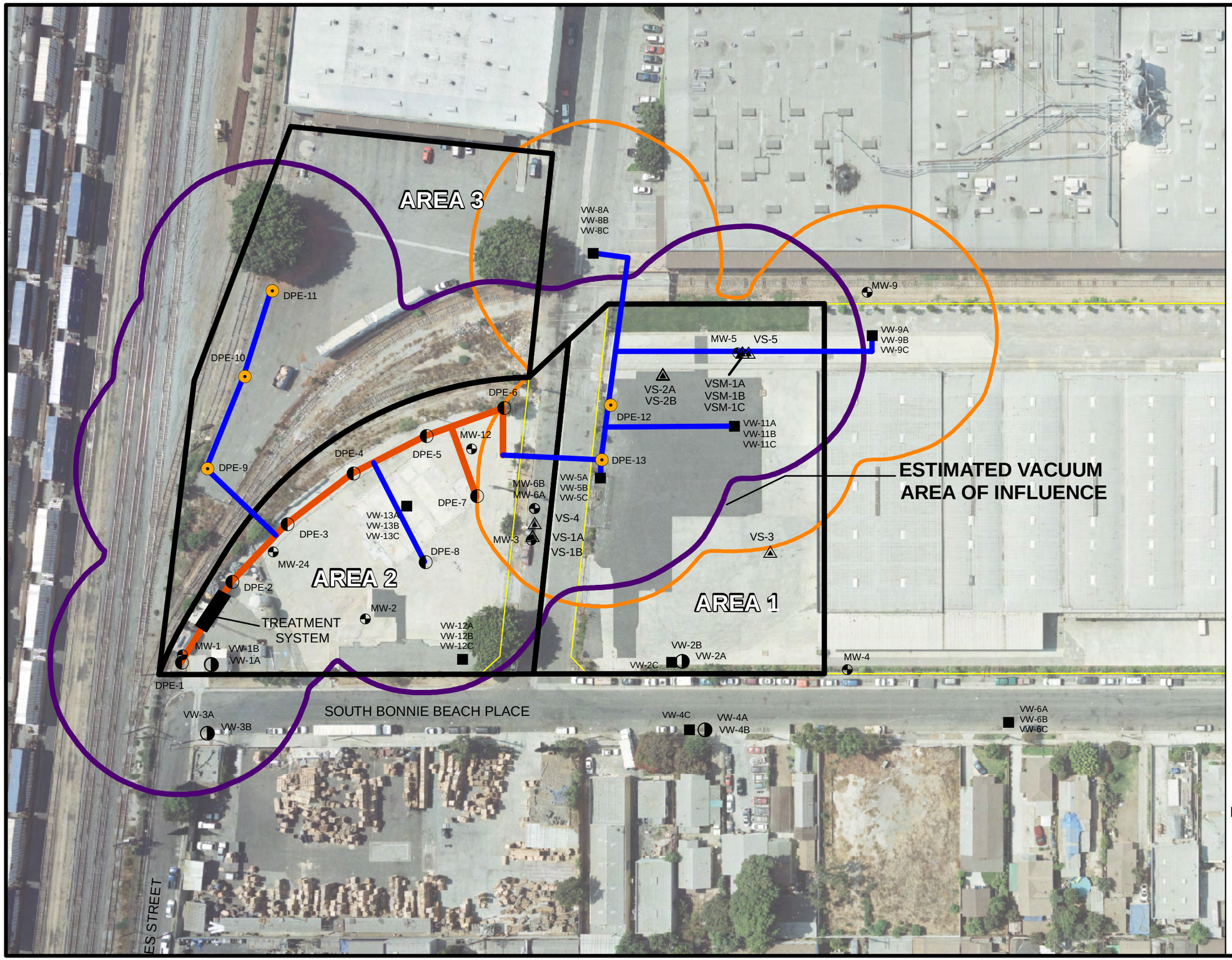
APPROXIMATE EXTENT OF PLUMES IN EXPOSITION AQUIFER AND TARGET AREAS OF REMEDIATION

FORMER UNIVAR USA INC. FACILITY
1363 SOUTH BONNIE BEACH PLACE
LOS ANGELES, CALIFORNIA

RUBICON
Engineering Corporation

P:\1001 Univar\01 Bonnie Beach\Interim Measure-Ground Water\Interim Measures work plan\Figures\Cad\Approximate Extent of Plumes.mxd

P:\1001 Univar\01 Bonnie Beach\Interim Measure-Ground Water\Figures\Autocad and ArcGIS\Figure 10 - Estimated Vacuum Area of Influence for DPE Wells and Proposed Conveyance Piping Locations-updated.mxd



LEGEND

- MW-2 — GROUND WATER MONITORING WELL
- DPE-8 — DUAL-PHASE EXTRACTION WELL
- VW-4B — VAPOR MONITORING WELL
- VS-5 — VAPOR WELL INSTALLED BY HARDING LAWSON (1996)
- VW-8A — NEW VAPOR MONITORING WELLS
- DPE-10 — PROPOSED DPE WELL*
- SITE BOUNDARIES
- AREA BOUNDARIES
- BELOW GROUND CONVEYANCE PIPING
- ABOVE GROUND CONVEYANCE PIPING
- LOWER VADOSE ZONE ESTIMATED VACUUM AREA OF INFLUENCE
- INTERMEDIATE VADOSE ZONE ESTIMATED VACUUM AREA OF INFLUENCE

* APPROXIMATE LOCATION

ESTIMATED VACUUM AREA OF INFLUENCE BASED ON 2001 SOIL VAPOR EXTRACTION TESTING (ENGLAND GEOSYSTEM, DEC 2002)

1:960

80 0 80 Feet

ATTACHMENT F

ESTIMATED VACUUM AREA OF INFLUENCE FOR VAPOR EXTRACTION WELLS AND PROPOSED CONVEYANCE PIPING LOCATIONS

FORMER UNIVAR USA INC. FACILITY
1363 SOUTH BONNIE BEACH PLACE
LOS ANGELES, CALIFORNIA

RUBICON Engineering Corporation

P:\1001 Univar\01 Bonnie Beach\Interim Measure-Ground Water\Interim Measures work plan\Figures\Cad\ProcessFlowDiagram.dwg

SOIL-THERM MODEL 2010-CLR

TO ATMOSPHERE

MOISTURE KNOCKOUT TANK

TRANSFER PUMP

KNOCKOUT WATER

VAPOR EXTRACTION BLOWER (200 to 700 scfm)
ROOTS MODEL RAI 59

THERMAL OXIDIZER

ACID SCRUBBER/ NEUTRALIZATION TANK

NaOH

SODIUM HYDROXIDE (NaOH) HOLDING TANK

CITY WATER

SOIL VAPOR

GROUND WATER (~30 gpm)

EQUALIZATION TANK

TRANSFER PUMP

IN-LINE FILTERS

AIR STRIPPER OFF-GAS

AIR STRIPPER BLOWER (250 TO 300 scfm)
ROOTS MODEL RAI 53

SUPPLEMENTAL FUEL (NATURAL GAS)

BLOWDOWN WATER OUTLET (~2 gpm)

AIR STRIPPER
MFR: QED
EZ-Stacker Model 4.6P

TREATED GROUND WATER

AMBIENT AIR

DISCHARGE TO SANITARY SEWER

SOIL GAS VA

IN-WELL WATER PUMP

WELL (TYPICAL)

ATTACHMENT G

LEGEND

- VAPOR PROCESS
- WATER PROCESS

FIGURE 11

PROCESS FLOW DIAGRAM
DPE SYSTEM

FORMER UNIVAR USA INC. FACILITY
1363 SOUTH BONNIE BEACH PLACE
LOS ANGELES, CALIFORNIA

RUBICON
Engineering Corporation