

## INITIAL STUDY

*The Department of Toxic Substances Control (DTSC) has completed the following Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations).*

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I. PROJECT INFORMATION

Project Name: Rho-Chem Interim Measures Work Plan - Soil Vapor Extraction System

Site Address: 425 Isis Avenue, City of Inglewood, California 90301

City: City of Inglewood State: California Zip Code: 90301 County: Los Angeles

Company Contact Person: Mr. Brian Mastin of Cemex, Inc./ Mr. Pramod Tendulkar of Rho-Chem Corp.

Address: 430 N. Vineyard, Suite 500

City: Ontario State: CA Zip Code: 91764 Phone Number: (909) 974-5562

Project Description:

Pursuant to the Corrective Action Consent Agreement (CACA), the Department of Toxic Substances Control (DTSC) is proposing to approve an Interim Measure (IM) consisting of construction and operation of a Soil Vapor Extraction System (SVE) to control and/or limit existing soil contamination at the Rho-Chem Corporation (RC), a subsidiary of Philip Services Corporation, Hazardous Waste Management Facility in the City of Inglewood, Los Angeles County, California (see Figure 1). The previous owner of the facility, Cemex, Inc., is responsible for the corrective action and has submitted the Interim Measures (IM) work plan. The IM work plan was required by the CACA, docket number HWCA P3-01/02-005, effective in November 25, 2002. The CACA was issued pursuant to the California Health and Safety Code, section 25187, which requires the owner/operator to clean up any spill, hazardous substances, and/or contaminants found at and adjacent to the site.

The purpose of the IM-SVE is to reduce the mass of the volatile organic constituents of concern (COCs) that have contaminated the soils so that further migration to ground water is minimized while the remainder of the investigative work is performed, and final corrective measures are evaluated and implemented. Although it is highly likely that the SVE will be a part of the final corrective measures, implementation as an interim measure will expedite overall site clean-up.

The principal COCs found in the subsurface soil at the Rho-Chem facility are chlorinated and non-chlorinated volatile organic compounds (VOCs). Trichloroethene (TCE), tetrachloroethene (PCE), 1,1,1-trichloroethane (1,1,1-TCA), and toluene represent the majority of the VOC mass present in the affected soil at the facility.

The highest concentrations of these VOCs were found in samples collected from 23 feet below ground surface (bgs) and 15 feet bgs according to the 1992 Phase II RCRA Facility Investigation (RFI) Report for Rho-Chem. The concentrations for PCE varied from non-detect to 66,520 micrograms per liter ( $\mu\text{g/l}$ ) and with TCE concentrations ranging from 35  $\mu\text{g/l}$  to 42,950  $\mu\text{g/l}$ . 1,1,1-TCA was detected at levels ranging from 5  $\mu\text{g/l}$  to 146,300  $\mu\text{g/l}$ . The elevated concentrations of VOCs were detected from the north driveway, lodging dock, USTs on the west side of the property, and the bottling area in the southwestern part of the facility (See Figure 2).

The IM work plan includes the following activities that comprise the IM-SVE System:

- 1) Performance of a soil vapor survey to establish vapor phase contaminant distribution and baseline concentrations prior to installing the extraction wells and other system components. Sampling probes are proposed to be installed at approximately 30 locations (see Figure 3)) across the facility. Installation involves boring a small diameter hole, less than 2 inches in diameter, placing metal probe tips and thin (1/4 inch or less in diameter) plastic tubing in the hole, placing sand around the probe tips, and backfilling the hole with grout. These are expected to be completed within three (3) months after the IM-SVE workplan approval. Sampling probe locations target interior waste storage areas that had observably impaired concrete pavement,

operational and/or storage areas within the main building that had not previously been investigated, and areas proposed for the IM vapor probe wells and/or extraction wells. The secondary containment areas, with one exception, were not targeted in order to preserve their integrity. Neither were the locations of former USTs at the west side of the facility targeted since data had been obtained during the removal activities;

- 2) Installation of at least eleven (11) shallow or *Zone 1* extraction well clusters. *Zone 1* extends from ground surface to approximately 40-45 feet bgs. Each cluster is to consist of two single wells with perforations to allow gas migration into the well from 5 to 20 feet bgs in the shallow *Zone 1* wells and from 25 to 40 feet bgs in the deeper *Zone 1* wells. Installation involves drilling a borehole with 2 or 4 inch diameter, inserting perforated well pipe, packing sand in the borehole around the perforations, and grouting from the top of the sand to the surface. Soils from the borings will be characterized and disposed of accordingly. Although, the number of clusters may vary depending on the results of the soil vapor survey, a maximum of 11 clusters, each with a shallow and deep well, are proposed to be installed. The proposed locations are shown on Figure 3;
- 3) Installation of at least two (2) deep extraction wells within *Zone 3*, which extends from 65 to 145 feet bgs. *Zone 2* is a low permeability layer which ranges in depth from 40 to 65 feet bgs. Ground water occurs at a depth of approximately 100 feet bgs, and therefore the perforations in the wells will only be from approximately 75 to 95 feet bgs. The number of wells may vary depending on the results of the soil vapor survey. Soils from the borings will be characterized and disposed of accordingly. The proposed locations are shown on Figure 3;
- 4) Installation of a positive displacement blower or liquid ring vacuum pump capable of creating a vacuum of 18 inches of mercury or greater to extract soil vapor from the extraction wells and the lateral perforated piping installed in summer 2002 in the excavation. The proposed location of this portion of the system is shown on Figure 3;
- 5) Installation of a thermal/ catalytic oxidation system to treat 300 standard cubic feet per minute (scufm) of soil vapor extracted by the vacuum pump; and
- 6) A network of deep nested soil vapor monitoring probe clusters, with probes in each individual cluster at depths of approximately 10 feet ("Zone 1"), 30 feet ("Zone 1"), 50 feet ("Zone 2"), 75 feet ("Zone 3"), and 90 feet ("Zone 3"). The final determination of probe placement depth will be based on examination of lithology from the continuous core and the selection of coarser-grained materials; with the exception of the probe to be completed in the fine-grained soil of "Zone 2" at approximately 50 feet bgs. These probe clusters will be used to establish a vertical baseline on soil vapor conditions, to evaluate progress of the SVE, and to assess the effectiveness of the IM. The deep nested probe clusters are separate from the extraction wells and locations and numbers of installations are dependent on the results of the soil vapor survey. It is expected that the maximum number of deep nested soil vapor probe clusters will be five. Each will consist of borings as deep as 75 feet bgs with individual tubing terminating in probes at the depths specified. Soils from the borings will be characterized and disposed of accordingly. Sand will be placed at the probes and grout installed on the sand up to the level of the next probe.

The IM-SVE System is proposed to be installed and in operation within six months after the IM-SVE Workplan approval. The operation period will be dependent on system performance evaluations utilizing the results of soil probe monitoring that will be on-going. It is estimated that the IM will continue for at least three years. At that time, the interim measures may be incorporated into DTSC's final remedy determination.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Initial Permit Issuance | <input type="checkbox"/> Closure Plan         | <input type="checkbox"/> Removal Action Workplan                                |
| <input type="checkbox"/> Permit Renewal          | <input type="checkbox"/> Regulations          | <input type="checkbox"/> Interim Removal  |
| <input type="checkbox"/> Permit Modification     | <input type="checkbox"/> Remedial Action Plan | <input checked="" type="checkbox"/> Other (Specify)<br>Interim Measure Workplan |

Program/ Region Approving Project: Hazardous Waste Management Program/  
Southern California Permitting and Corrective Action Branch

DTSC Contact Person: Mr. Liang C. Chiang, P.E.Address: 1011 North Grandview AvenueCity: Glendale State: CA Zip Code: 91201 Phone Number: (818) 551-2964III. ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The boxes checked below identify environmental resources in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section found to be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact."

- |   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> None Identified | <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Agricultural Resources      |
| <input type="checkbox"/> Air Quality                | <input type="checkbox"/> Biological Resources            | <input type="checkbox"/> Cultural Resources          |
| <input type="checkbox"/> Geology And Soils          | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Land Use and Planning      | <input type="checkbox"/> Mineral Resources               | <input type="checkbox"/> Noise                       |
| <input type="checkbox"/> Population and Housing     | <input type="checkbox"/> Public Services                 | <input type="checkbox"/> Recreation                  |
| <input type="checkbox"/> Transportation and Traffic | <input type="checkbox"/> Utilities and Service Systems   |  |

IV. ENVIRONMENTAL IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental resources that exist within the area affected by the proposed project and an analysis of whether or not those resources will be potentially impacted by the proposed project. Preparation of this section follows guidance provided in DTSC's California Environmental Quality Act Initial Study Workbook [Workbook]. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each section below.

Mitigation measures which are made a part of the project (e.g.: permit condition) or which are required under a separate Mitigation Measure Monitoring or Reporting Plan which either avoid or reduce impacts to a level of insignificance are identified in the analysis within each section.

1. Aesthetics

*Project activities likely to create an impact:* None.

*Description of Environmental Setting:* The facility is located in a predominantly industrial area that is characterized by large buildings, asphalt or concrete paved parking lots and driveways. The facility and others in the immediate vicinity have external machinery on various portions of their sites (see Figure 1). At Rho-Chem, these consist of tanks, piping, pumps, stills, drums, etc.

*Analysis of Potential Impacts:* Most of the SVE system will be below ground. The blower and carbon canisters are relatively small, having footprints of less than 10 square feet each. They look similar to the other site industrial features on this and surrounding sites, such as tanks, stills, etc. In fact, the aboveground system components are smaller in size than most of the existing tanks, etc. The project will not add new light or glare, block views, obstruct scenic vistas, damage scenic resources, or result in an aesthetically unpleasant site. The current configuration of the facility will not significantly alter.

*Describe to what extent project activities would:*

- a. *Have a substantial adverse effect on a scenic vista.*  
No, the site will not have a substantial adverse effect on any scenic vista. There is no scenic vista associated with the area which is designated as a light industrial area or M-1 pursuant to the City of Inglewood Land Use Planning Map.

- b. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.*  
No, the proposed project requires aboveground installation of only a blower and carbon canisters. These will not be located to affect any scenic building or highway pursuant to the references at the end of this section. The installation of the aboveground components of the SVE system will be on existing paving and therefore the project will not damage any scenic resources, including trees, rock outcropping and historic buildings within a state scenic highway.
- c. *Substantially degrade the existing visual character or quality of the site and its surroundings.*  
No, the project will not degrade the existing visual character or quality of the site or its surroundings pursuant to the references at the end of this section.
- d. *Create a new source of substantial light of glare that would adversely affect day or nighttime views in the area.*  
No, the project will not create a new source of substantial light of glare that would adversely affect day or nighttime views in the area. No new lighting will be required as part of the SVE system installation or operation.
- e. *Create a light of glare that would adversely affect day or nighttime views in the area pursuant to the Los Angeles City General Plan.*  
No, the project will not create a light of glare that would adversely affect day or nighttime views in the area pursuant to the Los Angeles City General Plan. No new lighting will be required as part of the SVE system installation or operation.

*Specific References :*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## **2. Agricultural Resources**

*Project activities likely to create an impact:* No, the proposed project for installing, operating, and monitoring of soil vapor extraction system will not create an impact on the agricultural resources of the site.

*Description of Environmental Setting:* The facility is located in a predominantly industrial area which is characterized by concrete tilt-up buildings and asphalt- or concrete-paved parking lots and roads. The site is not located at or even near any prime, unique, or statewide importance farmland (Farmland) pursuant to Farmland Mapping and Monitoring Program of the California Resources Agency. The project manager inspected the facility on February 10, 2004, and found that the site was totally surfaced with both asphalt and concrete paving and containment structures.

*Analysis of Potential Impacts:* The site is designated as a light industrial area as M-1 pursuant to the City of Inglewood Land Use Planning Map and there will be no conversion of usage associated with the proposed project. The IM will be on-site and will occupy only a few hundred square feet. There is no local agriculture at all. Therefore, the proposed project will not conflict with existing zoning or agriculture use, or Williamson Act contract, or involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural uses.

*Describe to what extent project activities would:*

- a. *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.*  
No, this proposed project will not involve in the conversion of any Farmland into non-agriculture use. The site fully

paved and is designated as a light industrial area or M-1 pursuant to the City of Inglewood Land Use Planning Map. There is no agricultural use anywhere in the area.

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

No, the site is fully paved and is designated as a light industrial area or M-1 pursuant to the City of Inglewood Land Use Planning Map. This monitoring project will not involve in the conversion of the Farmland into non-agriculture use, therefore, will not conflict with existing zoning or agriculture use, or William Act contract. There is no agricultural use anywhere in the area.

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

The proposed project will not involve any changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agriculture uses. Relatively small pieces of industrial equipment are being added to the large amount already existing on-site.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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### **3. Air Quality**

*Project activities likely to create an impact:* Construction of SVE System, worker vehicles and heavy equipment (drill rig and dump trucks).

*Description of Environmental Setting:*

The proposed project is located in the South Coast Air Basin (SCAB), a 6,600 square mile area. The basin is an area of high air pollution potential and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAB is designated a non-attainment area for federal and state standards for ozone, fine particulate matter (PM10), carbon monoxide (CO), and nitrogen dioxides (NO2). The Facility performs its normal operations under a SCAQMD permit. In addition, another SCAQMD permit must be obtained for operation of the SVE system.

*Analysis of Potential Impacts:* Air quality impacts are determined according to the criteria set by the federal, state and local pollution standards. The short term impacts on the air pollutants (i.e., ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM10) from the fugitive dust and construction equipment due to construction activities have been analyzed. The unmitigated construction emissions are estimated to be lower than the suggested SCAQMD criteria. With implementation of dust suppression measures, PM10 would be further reduced by 50 percent.

A permit will be obtained from SCAQMD for the control of emissions from the SVE system. Field personnel will observe and supervise the installation and operation of the SVE system and perform periodic field screening to assure that SCAQMD emission requirements are met. The SVE system exhaust will have emission controls meeting best available control technology (BACT) requirements (to be specified in the SCAQMD permit). Other emissions associated with the proposed project are very small since there will be a very small number of vehicle trips and very little soil disturbance involved.

A summary of federal and state air quality standards is provided in Table 1 and potential health effects are shown in Table 2. The U.S. Environmental Protection Agency established national ambient air quality standards pursuant to adoption of federal Clean Air Act. The California Air Resources Board (CARB) establishes state air quality standards under the mandate of the Mulford-Carrell Act. Currently, federal and state standards for ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are often exceeded in the Basin. The SCAQMD monitors criteria pollutant levels at various stations within the Basin. As shown in Table 3, criteria pollutant levels near the project site are based on data from the Southwestern Los Angeles County monitoring station (located approximately ten miles from site). The air quality impacts

are determined according to the criteria set on the federal, state and local pollution standards/regulations. Impacts would be considered significant if the proposed project emissions met any of the following criteria:

1. The proposed project would be capable of an increase in daily emissions that exceed the following SCAQMD suggested threshold criteria:

Pollutant	Threshold criteria (lbs/day)
ROG	55
CO	550
NOx	55
SOx	150
PM10	150

2. Proposed project emissions would increase ambient pollutant levels from below the KNACKS/CACAOS to above these table standards.
3. Proposed project would be not consistent with the 1991 Air Management Plan (AMP).
4. Proposed project would exceed the provision of significant deterioration (PSD) pollutant increment.

Air pollutant emissions and/or ambient concentration increments from existing, project related and cumulative sources that could potentially impact sensitive receptors within the project area or its vicinity have been estimated. The air quality impact was evaluated on the short term impacts due to construction activity, long term impacts due to project operation, and conformity with the AMP. The air emission calculation work-sheets are presented in Tables 3, 4 and 5.

It is estimated that an average 300 square feet of foundation would be done within four weeks after the SVE Interim Measures work plan is approved by DTSC. This square footage was averaged over two (2) working days to estimate a maximum daily construction rate of 150 square feet. SCAQMD emission factors were then utilized to estimate emissions of air pollutants during these construction activities. The estimated construction emissions are provided in the following table.

#### **Unmitigated Construction Emission Estimates (lbs/day)**

Pollutant Activities	ROG	CO	Nox	SOx	PM10
Fugitive Dust	13.3	195.2	42.4	1.7	22.04
Construction Equipment	0.6	2.2	10.5	0.6	0.6
Total Emissions	13.9	197.4	52.9	2.3	22.64
Suggested SCAQMD Criteria	55	550	55	150	150
Exceed Threshold Criteria	No	No	No	No	No

Fugitive dust impacts might temporary result from the project concrete demolition activities. Specifically, particulates would be emitted by the engines of demolition and hauling equipment, and dust would be generated from soil excavation and back-filling. Use of water or other soil stabilizers which would be used to control fugitive dust, as required by SCAQMD Rule 403, can reduce emissions by a minimum of 50 percent. Using the SCAQMD emission factors and data furnished by the project proponent, PM10 emissions were calculated for the construction phase of the project. Assuming an average of 300 square feet for 2 days of development, total PM10 emissions from construction activities would be 22.64 pounds per day per Table 1.

With implementation of the dust suppression measures which are proposed in the IM-SVE Workplan, PM10 would be reduced by 50 percent, to approximately 11.3 pounds per day. These calculated data do not exceed the suggested SCAQMD criteria for particulates of 150 pounds per day. Therefore, PM10 emissions that would be generated from implementation of the proposed project would not result in significant impact on air quality. Based on the information provided by the facility and the subsequent air quality analysis done by DTSC, the remedy selected activities will not significantly affect the air quality of the area. This project will not conflict with or obstruct implementation of the applicable air quality plan or violate any air quality standard or contribute substantially to an existing or projected air quality violation. This project will not 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). This project will not expose sensitive receptors to substantial pollutant concentrations. This project will not create objectionable odors affecting a substantial number of people. This project did not involve in the removal of old building constructed before 1950 and the site is not located at any asbestos

mine site lists, therefore, this project will not result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, f.).

**Table 1. Federal and State Ambient Air Standards**

Pollutant	Averaging Time	Federal Standard	California Standard
Ozone	1 Hour	0.12 ppm	0.09 ppm
Carbon	1 Hour	35.0 ppm	20.0 ppm
Monoxide	8 Hours	9.0 ppm	9.0 ppm
Nitrogen	1 Hour	---	0.25 ppm
Dioxide	Annual	0.05 ppm	---
Sulfur	1 Hour	---	0.5 ppm
Dioxide	24 Hours	0.14 ppm	0.05 ppm
	Annual	0.03 ppm	---
PM10	24 Hours	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
	Annual	50 µg/m <sup>3</sup>	30 µg/m <sup>3</sup>

ppm : Parts per million; µg/m<sup>3</sup>: Micrograms per cubic meter  
Source: South Coast Air Quality Management District, 1993.

**Table 2. Air Pollutants Summary:**

Air Pollutant	Source	Health Effects
Ozone	Photochemical reaction between other pollutants	General respiratory irritation and Discomfort
Carbon Monoxide	Incomplete fuel combustion	Interference with normal oxygen transfer to the blood; oxygen deprivation
Nitrogen Oxides	Combustion	Respiratory irritation
Sulfur Dioxide Particulates	Combustion of fuels containing industrial, transportation, agriculture, construction activities	Upper respiratory irritation; lung tissue injury; adverse effects on respiratory system

Source: Bay Area Air Quality Management District (November 1985)

**Table 3. Summary Air Pollutant Data from Southwest Coastal LA County Monitoring Station (2000-2002)**

Pollutant	SCAQMD Station Data		
	2000	2001	2002
CO:			
Max. Conc.(ppm) 1 hour	9	7	7
Max. Conc.(ppm) 8 hours	7	5.14	6.1
8-hours > 9.5 ppm (F)	0	0	2
8-hours > 9.0 ppm (S)	0	0	0
Ozone:			
Max. Conc.(ppm) 1-hour	0.10	0.098	0.088
Max. Conc.(ppm) 8-hour	0.075	0.08	0.073
1-hours > 0.12 ppm (F)	0	0	0
1-hours > 0.09 ppm (S)	1	0	0
NOx			
Max. Conc.(ppm) 1-hour	0.13	0.11	0.10*
Max. Conc.(ppm) 24-hour	0.027	0.08	NM
Days > 0.25 ppm (S)	0	NM	0
Average	0.0275	0.025	0.024

Sox			
Max. Conc.(ppm) 1-hour	0.01	0.04	0.07
Max. Conc.(ppm) 24-hour	0	0.012	0.007
Days > 0.05 ppm	NM	NM	NM
PM10			
Max. Conc.(µg/m3) 24 hrs	74	75	121
Annual Average	33.41	34.4	34
Days > 150 µg/m3 (F)	0	0	0
Days > 50 µg/m3 (S)	9	8	12

NM: Not measured; µg/m3: Micrograms per cubic meter; ppm: Parts per million;  
 F: Federal Standards; S: State Standards. \*: Less than 12 full months of data.  
 (Source: SCAQMD Annual Monitoring Reports, 2000-2002)

**Table 4. Construction Equipment Emissions (Using Future Land Use to Calculate, April 1993 CEQA Handbook, Table A9-3)**

Land Use	Annual	Daily	Total	
			Annual	Daily
Sq. Footage	<b>300</b>	<b>150</b>	<b>300</b>	<b>150</b>
P.C.E.E.*	22,046	22,046		
FxG(BTU*1E6)	6.6	3.3		
H:				
ROG (#/BTU*1E6)	0.2	0.2		
CO (#/BTU*1E6)	0.7	0.7		
NOx (#/BTU*1E6)	3.4	3.4		
SOx (#/BTU*1E6)	0.2	0.2		
PM10 (#/BTU*1E6)	0.2	0.2		
E:				
ROG (#)	4.2	0.6	4.2	0.6
CO (#)	14.6	2.2	14.6	2.2
NOx (#)	71.1	10.5	71.1	10.5
SOx (#)	4.2	0.6	4.2	0.6
PM10 (#)	4.2	0.6	4.2	0.6

\* P.C.E.E.: Project Construction-related Exhaust Emissions, includes construction equipment and worker's travel exhaust emissions, and truck exhaust emissions, from table A9-3-H.

ROG: Reactive Organic Gases

**Table 5. Estimating PM10 Emissions from Fugitive Dust:**

**1. Trucks/Paved Parking Lots with Street Cleaning:**

Assuming one internal transportation trucks will be used in the parking lots moving in and out, and the parking space for each car will be 10 feet (width) by 30 feet (length). The PM10 emissions will be 0.12 pounds per day.

$$E = 0.003 \text{ gms/vehicle} \times 1 \times (10+30) = 0.12 \text{ (Table A9-9 of SCAQMD CEQA Hand Books 1993)}$$

**2. Debris Pushing:**

Assuming one Front-end loader is operating 1 hour/day, and the emission rate of 21.8 pounds, lbs/hour per loader results 21.8 pounds per day of PM10.

$$E = 21.8 \text{ (lbs/hour)} \times 1 \text{ (No. of Bulldozers)} \times 1 \text{ (Hour of Operation per Day)} = 21.8 \text{ pounds per day.}$$

**3. Truck Filling or Storage:**

Assuming 12 cubic yards of export/import, and 12 cubic yards per trip, and assuming that each cubic yard weights 1,000 pounds or 0.5 ton:

12 x 0.5 = 6 ton/day of demo debris.

6 x 0.02205 lbs/ton = 0.12 lbs/day of PM10 from truck filling or storage.

**Total PM10 Emissions from construction work, including construction equipment:**

$E_t = 0.12 + 21.8 + 0.12 = 22.04$  lbs/day

22.04 pounds per day. < 150 lbs/day SCAQMD suggested threshold criteria.

**Ref:**

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Describe to what extent project activities would:*

- a. *Conflict with or obstruct implementation of the applicable air quality plan.*  
The project will not conflict or obstruct implementation of the applicable air quality plan. The reasons are provided in the foregoing description.
- b. *Violate any air quality standard or contribute substantially to an existing or projected air quality violation.*  
No, the reasons are provided in the foregoing description.
- 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).*  
No, the proposed project will not result in cumulatively net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The reasons are provided in the foregoing description.
- d. *Expose sensitive receptors to substantial pollutant concentrations.*  
No, the project will not expose sensitive receptors to substantial pollutant concentrations. The reasons are provided in the foregoing description.
- e. *Create objectionable odors affecting a substantial number of people.*  
This proposed project will not significant create objectionable odors affecting anyone much less a substantial number of people. The SVE is specifically designed to capture vapors removed from the subsurface. The facility is located at the light industrial zone area. The closest residences, at most three, are at Hillcrest Street, about 1/4 miles south of the Facility. Quarterly or annually monitoring activities and operation of the SVE system may allow exceeding small amounts, on the order of parts per billion by volume (ppbv), of volatile organic compounds (VOCs) to escape but are not expected to cause any objectionable odor ---even adjacent to the operating equipment.
- f. *Result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, f.).*  
No asbestos is involved in this proposed project. The Facility is not located in any of the asbestos mine areas and no demolition or removal of any buildings or appurtenant structures is involved. Therefore, the project will not result in human exposure to naturally-occurring asbestos.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000
4. CEQA Initial Study Workbook, DTSC, April 2004
5. CEQA Air Quality Handbook, SCAQMD, April 1993

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**4. Biological Resources**


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*Project activities likely to create an impact:* No, the proposed project will not create an impact on any biological resources at the site.

*Description of Environmental Setting:* The site is located in a predominantly industrial area of the City of Inglewood in County of Los Angeles, is characterized by large stucco/steel building and surrounding areas of asphalt-or concrete-paved parking and access roads. There is a very low potential for the site to support sensitive biological resources because of improvements which is paved or a building and location in the industrialized area. The Current Condition Report of the Rho-Chem Facility indicates that the search of the National Environmental Policy Act (NEPA) database reveals that there are no designated wilderness areas, wildlife preserves, wetlands, or 100-year floodplains located within one-mile radius of the site. Review of available information in the California Biodiversity Database revealed two plants, the coastal dunes milk-vetch and the southern tar plant, as endangered species in the general vicinity. However, based on the information provided, the habitat for both plants is the coast dune and wetlands in southern California. This facility, however, is fully paved and is not suitable a habitat for these plants. The last observed occurrences of these plants were in the early 1900s.

*Analysis of Potential Impacts:* No impacts to biological resources are expected as a result of the implementation of the project because the surrounding area is fully developed. Moreover, the proposed project will affect only a few hundred square feet of the facility which is itself fully paved. Therefore, the project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species, on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service. The project will not have any impact on plant life in general, or rare and unique plant life or those ecological communities dependent on such plant life. There will not be any adverse effect on listed, threatened, and endangered plants, on species of plants listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted there under, nor on marine and terrestrial plant species subject to the jurisdiction of the Department of Fish and Game or the ecological communities in which they reside. The project will not 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. The project will not 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. The project will not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Describe to what extent 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.*  
 No impacts to biological resources are expected as a result of the implementation of the project because the facility is fully paved and surrounding region is thoroughly developed. The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species, on any riparian habitat or other sensitive natural community identified in local or regional

plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service.

- 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.*

The proposed project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service. The facility is fully paved and surrounding region is thoroughly developed. No run-off is expected to result from the proposed project.

- 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.*

No, the project will not 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. The facility is fully paved and surrounding region is thoroughly developed. No run-off is expected to result from the proposed project.

- 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.*
- No, the project will not 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. The facility is fully paved and surrounding region is thoroughly developed.

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

No impacts to biological resources are expected as a result of the implementation of the project because both the facility and surrounding region are developed thoroughly. The proposed project will not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. There are no trees at the facility.

- 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.*

No impacts to biological resources are expected as a result of the implementation of the project because both the site and surrounding region are developed thoroughly. The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### Specific References:

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

#### Findings of Significance:

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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## 5. Cultural Resources

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*Project activities likely to create an impact:* Drilling of wells and minor excavation.

*Description of Environmental Setting:* The facility has been previously graded and covered in asphalt and concrete. The proposed project will affect only a few hundred square feet of the facility which is already covered by concrete. It is located

in a primarily industrial area. No known unique ethnic cultural values or cultural resources have been observed by the project manager or have otherwise been reported at the facility. There are no bedrock exposures on-site and the fluvial nature of the underlying geological materials obviate the likelihood of any paleontological resources.

*Analysis of Potential Impacts:* There are no reported unique ethnic cultural values, archeological resources or cultural/paleontological resources at the facility. The site is not on the historical properties/ buildings list pursuant to Office of Historic Preservation. Neither have the project manager and other inspectors observed such during site visits or during past excavation and removal of underground tanks. The site is designated and zoned for light industrial use as M-1. The footprint of the IM-SVE System is minimal, less than 100 square feet, and will be installed on an existing concrete slab so that no excavation will be required. Small diameter boreholes, each with less than 12 square inches in area, scattered across the facility would represent a minimum invasion of the subsurface, even if the existing concrete concealed cultural or archeological resources. Logs from previous exploratory borings have not revealed any evidence of cultural or archeological resources. Operation of the soil vapor extraction and treatment system with soil vapor monitoring activities removes vapor from the interstices of the soil and cannot have any significant adverse impact on historical resources or archeological resources in any event. This proposed project will not cause an adverse change on a significance of a historical resources or archeological resource as defined in 15064.5.

*Describe to what extent project activities would:*

- a. *Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.*  
No. No building or other structure of the facility is on the historical properties/ buildings list pursuant to Office of Historic Preservation, the IM-SVE System project is primary soil vapor extraction and treatment system with soil vapor monitoring activities which will not have any significant adverse impact on historical resources at the site as defined in 15064.5.
- b. *Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.*  
The site is not on the archeological resources list pursuant to electronic information provided through the California Native American Heritage Commission<sup>2</sup> and Office of Historic Preservation<sup>6</sup>. The site lies within the ancestral lands of the Gabrielino/Tongva which stretch from Topanga Canyon in Los Angeles County through Aliso Creek in Orange County<sup>2,5</sup>. The facility does not lie on or near any reported sites of sacred importance to the Gabrielenos.<sup>5</sup> Importantly, the location has extensive previous disturbance due to some 30 or more underground tanks being removed<sup>3</sup>. No further excavation of any part of the site is proposed as part of this project although drilling will occur. The drilling proposed for the project has little potential for inadvertent discovery since borings would be made through the existing concrete cover and, moreover, the aggregate surface area that would be affected by drilling would be less than two square feet (each boring would affect approximately 12 square inches). In the event that an inadvertent discovery of archaeological resources is unearthed, all project activities shall cease and a qualified professional archaeologist shall be retained to assess the discovery and make recommendations to the appropriate persons and property owner as to the significance of the find
- c. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.* This project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- d. *Disturb any human remains, including those interred outside of formal cemeteries.*  
No known unique ethnic cultural values or cultural/paleontological resources at the facility have been observed during site-visits by the project manager and other DTSC inspectors. No cemeteries were found during the extensive excavations done as a part closure of a number of USTs at the facility. It is not anticipated that this project will disturb any human remains, including those interred outside of formal cemeteries. If, however, in the unlikely event of an inadvertent discovery of human remains, the project will cease activities in the immediate area and the county coroner contacted to assess the discovery. The appropriate authorities shall be contacted and the proper procedures followed pursuant to Public Resources Code 5097.9.

Specific References:

- 1 Health and Safety Code 7050.5: <http://www.leginfo.ca.gov/calaw.html>
2. California Native American Heritage Commission: <http://www.ceres.ca.gov/nahc/cr.html> [contact person is Rob Wood]
3. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003, (Page 27-29)
4. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003, Interim Measures Work Plan, GMX, January 31, 2000

5. Gabrieleno/Tongva sacred sites <http://www.Tongva.com>.
6. Office of Historic Preservation <http://ohp.parks.ca.gov>.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 6. Geology and Soils

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*Project activities likely to create an impact:* No, the proposed project for installing, operating, and monitoring of soil vapor extraction system will not create a significant impact on the geology and soils of the facility.

*Description of Environmental Setting:* The Rho-Chem facility is located in Section 32, Township 2 South, Range 14 West, San Bernardino Base and Meridian within the City of Inglewood, County of Los Angeles, California. Topographic map coverage of the site vicinity is provided by the U.S. Geological Survey, Inglewood and Venice, California Quadrangle 7.5 minute series (1954, 1964, and photo-revised in 1981). A copy of the modified Inglewood and Venice topographic quadrangle portraying the site location is provided in Figure 1.

The Rho-Chem Current Condition Report indicates that the elevation of the site is approximately 100 feet above mean sea level with a local topographic gradient of flat and slopes gently to the southeast. The site does not lie within 100-year flood plain. In addition, there are no waterways or wetlands within one-mile radius of the facility.

The site is located in the West Coast Basin (also referred to as West Basin). The basin is bounded by the Newport-Inglewood Fault Zone (Newport-Inglewood Uplift) to the east, the Ballona Gap and Santa Monica Mountains to the north, Santa Monica Bay to the west, and Palos Verdes Hills and San Pedro Bay to the south (DWR, 1961). Major geologic features in the area include the Charnock Fault, the Gardena Syncline, and the Newport-Inglewood Fault Zones. These features trend from northwest to southeast in the basin. The Charnock Fault is located approximately one-half mile to the southwest of the site. The Gardena Syncline, a basin-wide structure, underlies the site, and Newport-Inglewood Fault is located approximately one mile east of the site. The geologic formation materials in this portion of the West Basin consist of approximately 600 feet of alluvial deposits of Pleistocene-aged San Pedro and Pico Formations.

In the vicinity of the site, the surface geology and geological materials to a depth of approximately 150 feet below ground surface (bgs) consist of the undifferentiated alluvium of the Lakewood Formation and are underlain by the Gage aquifer (Lakewood Formation) from a depth of approximately 150 to 200 feet bgs. The Lakewood Formation is underlain by the San Pedro Formation, an undifferentiated alluvium from approximately 200 to 300 feet bgs. The Lynwood aquifer is at the depth of approximately 300 to 325 feet bgs, and the Silverado Aquifer is from a depth of approximately 400 to 600 feet bgs.

The water-bearing series consists of poorly sorted, permeable unconsolidated deposits of Quaternary (Pleistocene to Holocene) age, and are classified as the Recent alluvium, the Older alluvium and the Saugus formation. Thickness of the water-bearing series is range from zero next to the flanks of the surrounding mountains and hills to over 1,000 feet in the central and western portions of the valley. In the vicinity of Rho-Chem, the total thickness of the geologic units within the water bearing series is approximately 1,000 feet. The gravel, sand and clay deposits are poorly sorted and form lenses that are laterally discontinuous. It is difficult to differentiate between the three geologic units. The water-bearing geologic units tend to act as one aquifer that is semi-confined. The base of the western basin is underlain by relatively impervious sedimentary rocks of Tertiary Cretaceous age.

Site specific lithologic information from on-site borings indicate that the site is immediately underlain by fluvial deposits which consist of a heterogeneous mixture of silty and sandy clays with inter-bedded fine-to medium-grained sands. The fine-grained units extend from the ground surface to a depth of approximately 189 feet (the depth of exploration). Four general zones were reported based on the lithologic logs developed during drilling and sampling conducted in 1991. Zone 1 ranges from ground surface to approximately 35 to 40 feet bgs and is comprised of inter-bedded silty sands, silts, clayey sands, and clays. Zone 2 ranges from a depth of approximately 40 to 65 feet bgs and is characterized by a silty clay of relatively consistent thickness across the facility. Zone 3 extends from approximately 65 feet to 145 feet bgs and is characterized by silty sands, sands, and gravely sands in approximately equal proportions with minor silt and clay lenses. Groundwater occurs in this zone at depths of 100 feet bgs and greater. Zone 4 extends from approximately 145 to 189

feet bgs and is characterized by coarse gravely sands with large cobbles. Historical well logs for the area suggest that a thick, clay-dominated layer forms the base of this zone at approximately 200 to 210 feet bgs. This fine-grained zone is also interpreted to occur at a depth of approximately 200 feet bgs at the site.

*Analysis of Potential Impacts:* The proposed project will not result in unstable earth conditions or any changes to the underlying geological materials, topography, or ground surface. Extensive excavation has previously occurred across portions of the Facility, however, no further excavation is anticipated except the construction of the foundation pad of approximately 300 square feet for the SVE system at the southwestern corner of the facility which was concrete paved. Therefore, no significant impacts are expected to the building foundations or the underlying soil structure from project activities. The Facility is paved, there will be no exposure of surface soil and neither wind or water erosion of soil, can result, on-site or off-site. The Facility is approximately 5 miles west of the Pacific Ocean and this proposed project will not affect deposition or erosion of beach sands. Because there will be no exposure of soils, neither siltation, deposition, or erosion will occur which may cause modification of a channel of a river or stream or the bed of the ocean or any bay, inlet or lake. In addition, it should be noted that the nearest surface drainage is Ballona Creek, a concrete-lined channel which is located approximately 4.5 miles northwest of the Facility. The Facility was reinforced and upgraded to meet requisite building code standards in 1995 and the main building is not expected to expose people or property to geologic hazards such as earthquakes, landslides, mudslides, or ground failure. No major fault is known to cross the Facility.

*Describe to what extent 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.*

The proposed project will not involve the building at all. The soil vapor extraction and treatment system will be constructed outside and is not expected to cause any exposure to people or structures due to the effects of surface rupture, shaking, ground failure, or landslides. The Facility's site is level and ground water is at 95 feet bgs, which obviates landslides and liquefaction issues. No fault is known to cross the Facility, therefore, the project is unlikely to be affected by surface rupture. Strong seismic shaking is always a possibility in the LA basin, however, the proposed project is unlikely to expose people or structures to loss, injury, etc., as a result of such shaking.

- b. *Result in substantial soil erosion or the loss of topsoil.*  
No construction activities are proposed that would involve substantial or significant grading and, therefore, no soil erosion or the loss of topsoil is expected at all.
- 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.*  
The proposed project will not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project. There will be no potential for project-related on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- 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.*  
The proposed project will not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), and will not, therefore, create substantial risks to life or property.
- 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.*  
The Facility is connected to a sewer and therefore the proposed project will not involve the use of septic tanks or alternative waste water disposal systems.
- f. *Be located in an area containing naturally occurring asbestos (see also Air Quality, f.).*  
The site is not located in an area containing naturally occurring asbestos.

## Specific References:

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**7. Hazards and Hazardous Materials**


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*Project activities likely to create an impact:* The operating SVE system.

Description of Environmental Setting: The Rho-Chem facility operates as a solvent recycler and is obligated to comply with the DTSC permit conditions /limitations for the safe management of hazardous wastes and materials. It is located in a commercial/manufacturing area. There are only three residences within ¼ mile, and these are primarily used for businesses. A major transportation artery, Manchester Boulevard, is located within ½ block and links to the 405 Freeway within 1 mile of the Facility. Therefore, transportation of any hazardous materials from the project would not be on residential streets.

*Analysis of Potential Impacts:* There are limited health hazards or safety risks that could potentially impact the surrounding community due to hazardous material or waste discharge. The health and safety training and monitoring plans will prevent or limit the hazardous material or waste discharged into the environment. The implementation of the contingency plan at the site will control or minimize the damage if spill or fire occurred. The Facility is also connected with the private, local, and state emergency response groups within short time periods (approximately 15 to 30 minutes response time) to minimize any potential impacts from the hazards.

Hazardous material or waste discharge due to the proposed project would be limited to emissions from the SVE operation, such as the permitted emission from the thermal destruction/catalytic converter unit or from carbon absorption canisters, or during the quarterly or annually monitoring activities. No liquids are proposed to be collected or treated as part of this project except for possible condensate from the extracted gas. Emissions from operation of the catalytic converter and carbon canister components of the SVE system will be monitored for compliance with required SCAQMD permits. The Facility has adequate experience in such monitoring due to its existing monitoring program for operations for the SCAQMD. With respect to sampling, only the sampling operators and their supervising personnel will be in the designated working area. The air around these operators will be monitored as part of the IM-Health and Safety Program. The samplers and supervisory personnel are knowledgeable of the safety practices associated with the type of equipment to be used during remediation performed. In addition, the personnel who will implement the cleanup activities will be trained regarding potential safety and health risks associated with the activities as described in the IM-Health and Safety Plan. Daily safety meetings will be held during the on-site monitoring or cleanup work.

The Facility routinely transports, uses and treats hazardous materials. The project may require that carbon canisters be removed on a regular basis and transported off-site, but this will not make any significant difference in overall transport of hazardous materials. Moreover as opposed to the routine transport of liquid wastes to the Facility for treatment as part of its permitted operations, the carbon canisters being transported away from the Facility would have significantly lower concentrations and the hazardous materials would not be liquid but would be adsorbed to solid granular carbon. This would not create a significant hazard to the public or the environment throughout the, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The only potential for liquid hazardous materials associated with the proposed project could be gas condensate collected in the knockout pots. This waste would be stored in 55-gallon drums and managed by the on-site permitted hazardous waste management unit(s) or recycled in the existing Facility treatment operations at a frequency of at least every 90 days. A certified hazardous waste hauler will be used if waste is required to be transported off-site. The project may generate some sampling wastes, such as water used to clean sampling gear, which might be hazardous. This would be appropriately disposed of pursuant to the IM-Sampling Plan.

There is no existing or proposed school within one-quarter mile. The proposed project is not 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, it would not create a significant hazard to public or the environment. The proposed project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

*Describe to what extent project activities would:*

- a. *Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.* The proposed project will not create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials. The only additional hazardous materials for the activities associated with the proposed project could be condensate collected in the knockout pots and then stored in 55-gallon drums or material trapped on the carbon granules in carbon canisters used to remove the contaminants from the extracted soil gas. Any such waste will be sent off-site for hazardous waste disposal or treatment at a frequency of at least every 90 days. A certified hazardous waste hauler with appropriate hazardous waste manifest will be used for transportation of any generated wastes. These wastes will be treated or disposed of at approved hazardous waste management facility.
- 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.*  
The project will not 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. The personnel who will implement the proposed project will be trained regarding potential safety and health risks associated with the activities as described in the IM-Health and Safety Plan. Daily safety meetings will be held during the on-site monitoring or cleanup work. The health and safety training and monitoring plans will prevent or limit the hazardous material or waste discharged into the environment. The implementation of the contingency plan at the site will control or minimize the damage if spill or fire occurred. The facility also contracted with the private, local, and state emergency response groups within short time periods (approximately 15 to 20 minutes response time) to control/respond the upset and accident conditions which would minimize the hazards impacted.
- c. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.* Emissions from the SVE system will be permitted by SCAQMD. There is no existing or proposed school within one-quarter mile.
- 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.*  
The proposed project is not 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.
- e. *Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.*  
Neither the construction, operation or monitoring associated with the proposed project will impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

#### *Specific References*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
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#### *Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## **8. Hydrology and Water Quality**

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Project activities likely to create an impact: No, the proposed project for installing, operating, and monitoring of soil vapor extraction system will not create an impact on the hydrology and water quality at the Facility.

*Description of Environmental Setting:* The Facility is located in the northeastern portion of the West Coast Groundwater Basin (also referred to as West Basin). The 160 square-mile basin is bounded by the Newport-Inglewood Fault Zone (Newport-Inglewood Uplift) to the east, the Ballona Gap and Santa Monica Mountains to the north, Santa Monica Bay to the west, and Palos Verdes Hills and San Pedro Bay to the south (DWR, 1961). Major geologic features in the area include the Charnock Fault, the Gardena Syncline, and the Newport-Inglewood Fault Zones. These features trend from northwest to southeast in the basin. The Charnock Fault is located approximately one-half mile to the southwest of the site. The Gardena Syncline, a basin-wide structure, underlies the site, and Newport-Inglewood Fault is located approximately one mile east of the site. The geologic formation materials in this portion of the West Basin consist of approximately 600 to 1000 feet of alluvial deposits of Pleistocene-aged San Pedro and Lakewood Formation, which contain the primary drinking water aquifers. The depths and thickness of these aquifers vary across the basin. The major aquifers of concern from the oldest to the youngest (deep to shallow) are: Silverado, Lynwood, and Gage Aquifers. Most of these aquifers are separated by regionally extensive aquitards or low permeability units. However, areas within two mile radius of the Rho-Chem site where all of these aquifers merge are hydraulically connected. (Rho-Chem Operation Plan, November 2004).

The Facility is underlain by alluvial deposits of silt, fine sands, and clay to a depth of 50' feet as reported by J.H. Kleinfelder & Association. The depth of groundwater occurred at approximately 100 feet below ground surface (bgs). In the vicinity of the Facility, the Lakewood Formation is known to contain undifferentiated Quaternary deposits, the Bellflower Aquiclude and Gage Aquifer. The undifferentiated Quaternary deposits extended from the ground surface to a depth of approximately 100 feet bgs. This unit is composed of a heterogeneous mixture of fine-grained continental, marine, and wind-blown sediments. The Bellflower Aquiclude underlies the undifferentiated Quaternary deposits, and is approximately 40-50 feet thick in the site vicinity. The Gage aquifer is the basal member of the Lakewood Formation. Regional water level information from the West Coast Groundwater Basin, indicates that the Bellflower unit is the uppermost water bearing unit and contains small quantities of ground water.

The San Pedro Formation contains the Lynwood and Silverado which are the primary drinking water aquifers in the vicinity of the site. The Lynwood Aquifer underlies the Gage Aquifer at a depth of 50 feet thick. The Lynwood Aquifer is separated from the Gage Aquifer by a lower permeability unit which is 50 to 100 feet thick. The Silverado Aquifer underlies the Lynwood Aquifer at a depth of approximately 400 feet, and is roughly 200 feet in thickness in the vicinity of the site.

### **Surface Water**

There are no surface waters within one mile of the site. The nearest surface water body appears to be the Centinela Park Reservoir located approximately 2 mile to the northeast. Surface water run-off at the Facility is collected by storm drain catch basins on-site and either treated on-site or directed to off-site stormwater drains. According to information obtained from the state of California Department of Water resources, two inactive wells exist within one mile of the Facility. There are no known drinking-water wells within one mile radius of the site. (OP, February 6, 1996)

*Analysis of Potential Impacts:* This proposed project is directed at removing contaminated soil gas from the vadose zone beneath the Facility. This contaminated soil gas might otherwise find its way downward into the ground water. Therefore, the proposed project will act to prevent further degradation of water quality. However, the proposed project will not involve nor result in any physical change of any water body, water course, nor wetland nor will it change any currents, courses of direction of water movement, in either marine or fresh water, alter the flow of flood waters or expose people to water-related hazards. There is no riparian land, rivers, streams, water courses, or wet-lands under state or federal jurisdiction at or near the Facility. Further, since the proposed project does not include any grading, no alterations of any surface water bodies, etc. would be possible in any event. There is no "downstream" from the Facility since there are no nearby surface water courses. Moreover, there are no drinking water intakes along any natural surface water bodies within 15 miles of the site. The California Department of Fish and Game, has indicated in its Natural Diversity Data Base (October 19, 1991) that there are no sensitive environments located within 15 miles "downstream" of the Facility.

The proposed project does not extract groundwater or utilize water as part of the gas-phase extraction, etc. However, incidental wastewater may be generated by condensation of water vapor in the extracted soil gas which could also contain condensed waste constituents. Moreover, sampling and general cleanup may result in small volumes of waste water. The foregoing will be collected and consolidated into 55-gallon drums which will be located in existing on-site permitted

containment areas. This small volume of wastewater will be analyzed and sent off-site for proper treatment or disposal. No discharge of waste waters will be made to any marine or fresh waters. On-site surface run-off, a.k.a. non-industrial waste water (rainwater), is currently discharged to the storm drain collection systems, and flowed west into Ballona Creek where in turn is discharged into the Pacific Ocean which is approximately 5 miles northwest of the site. The proposed project does not include any grading or paving and therefore will not result in changes in absorption rates, drainage patterns, or the rate, interfere with groundwater recharge, and amount of surface run-off. The Facility is not located within a 100-year or 500-year flood plain, is not near any topographic expression, is not near any surface water bodies, is 5 miles from the ocean, and is at an elevation of 200 feet above mean sea level, none of the flooding, seiching, mudflow, or tsunami-related concerns are applicable. The proposed project will involve the construction of approximately 300 square feet area concrete pad for the SVE system on the existing concrete of the southwestern corner of the site. This will not result in alterations to the course or flow of flood waters. No discharge is proposed as part of this project, therefore, it will not result in a discharge into surface waters, or in any alteration of surface water quality, including but not limited to, temperature, dissolved oxygen or turbidity. Similarly, no project-generated waste water will be discharged to ground water, therefore, the project generated waste water will not violate any water quality standards or waste discharge requirements for ground water. Moreover, since groundwater extraction is not part of the proposed project, it will not substantially deplete groundwater supplies.

*Describe to what extent project activities would:*

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

The proposed project is directed at removing contaminated soil gas from the vadose zone and thereby protecting against its discharge into the underlying ground water. The removed contaminants will be primarily destroyed in a thermal treatment system, captured by granular carbon in an absorption component to the system and transported off-site, or condensed into knockout pots as the gas in transit cools. Any wastewater generated by gas condensate will be collected and sent off-site for further treatment and disposal and therefore will not be discharge as part of the proposed project. Therefore, project generated waste water will not violate any water quality standards or waste discharge requirements.
- b. *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net 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).*

No ground water will be extracted and therefore no depletion of groundwater supplies will result as part of the proposed project. There is no grading, coverage of bare ground surface or diversion of surface water run-off from the Facility proposed as part of the project. Therefore, the proposed project will have no effect on groundwater recharge. Any water generated from gas condensate will have negligible effect on recharge since the soil moisture that evaporated into the removed gas is trapped beneath paving to begin with and moreover will be of insignificant volume ( on the order of a few ten's of gallons).
- 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.*

The proposed project does not include any grading and the Facility is fully paved as it now exists. Therefore, the proposed project will not 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.
- 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.*

The proposed project does not include any grading and the Facility is fully paved as it now exists. It will not 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.
- 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.*

The proposed project will not create or contribute run-off water at all. Therefore there would be no effect such as exceeding the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff.

*f. Otherwise substantially degrade water quality.*

The proposed project will remove contaminated soil gas and thereby prevent it from migrating downward and degrading the water quality of underlying ground water. There will be no surface water run-off effects from the proposed project since any spillage will be within the existing containment systems designed to handle such occurrences from site operations.

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

No structures are being proposed as part of this project which would be within a 100-flood hazard area or which would impede or redirect flood flows. The Facility is not within a 100-year flood hazard area. The SVE system which will be constructed is not a building structure and moreover will have a small footprint, no more than 150 to 200 square feet, and will be placed inside existing containment.

*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.*

The project does not include construction or reliance on a levee or a dam. Neither levees nor dams exist within a several mile radius of the Facility. The contaminated soil gas removed from the vadose zone is to be oxidized as it is removed. If carbon canisters are used as well, the volume and concentration of contaminants will be considerably less than that stored as part of daily Facility operations. Therefore it is expected that the proposed project will not 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.

*i. Inundation by seiche, tsunami or mudflow.*

The proposed project is many miles inland and not subject to threat of tsunami. There are no adjoining surface water bodies, not even swimming pools, which can be affected by seiching. The facility is located in flat terrain with no nearby source of material to sustain a mudflow. Therefore, the proposed project will not be subject inundation by seiche, tsunami or mudflow.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000
4. Guidelines for Evaluating and Mitigating Seismic Hazards in California, Department of Conservations, Division of Mines and Geology, March 13, 1997.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

**9. Land Use and Planning**

Project activities likely to create an impact: The proposed project for installing, operating, and monitoring of soil vapor extraction system will not create any impact on the local land use and planning or the status of the Facility

*Description of Environmental Setting:* The site is located in the City of Inglewood which is part of the metropolitan area of Los Angeles County. The City of Inglewood Urban Water Management Plan, dated December 31, 1995, indicates that in 1995 the population in the city is estimated to be approximately 114,583 people. The city does not currently have published projections regarding the estimated population by the year 2010. The site is designated or zoned as M-1, which is industrial. The site is located south of Manchester Avenue. Land use in the vicinity of the site is zoned for industrial and commercial purposes. Based on the existing conditional use permit, the Facility is compatible with existing zoning.

*Analysis of Potential Impacts:* This project does not include a change of the land use designation. Therefore, it will not conflict with any applicable land use plan such as the General Plan, zoning ordinance, regulation, or policy of the City of Inglewood which has jurisdiction over the proposed project. The Facility is not within the coastal zone and is not subject

to any local coastal program. Neither is there any applicable City of Inglewood habitat conservation plan or natural community conservation plans. Finally, this proposed project does not contain any elements requiring grading, paving, etc. which would affect habitat or community

*Describe to what extent 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.*  
The proposed project will not 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.
- b. *Conflict with any applicable habitat conservation plan or natural community conservation plan.*  
The proposed project will not conflict with any applicable habitat conservation plan or natural community conservation plan.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000
4. Urban Water Management Plan, City of Inglewood, December 31, 1995.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 10. Mineral Resources

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Project activities likely to create an impact: No, the proposed project for installing, operating, and monitoring of soil vapor extraction system will not create an impact on the mineral resources of the site.

*Description of Environmental Setting:* The Facility is located in an industrial area which is characterized by large industrial buildings and paved parking lots and roads. Neither this Facility nor the surrounding area are currently used for the extraction or used of mineral resources.

*Analysis of Potential Impacts:* No locally-important mineral resource recovery site is delineated on any local general plan, specific plan or other land use plan for the City of Inglewood. Moreover, no paving, grading or excavation is proposed, therefore, this proposed project will not result in the loss of availability of any resource.

*Describe to what extent project activities would:*

- a. *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.*  
This proposed project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- b. *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.*  
The proposed project will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**11. Noise**

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*Project activities likely to create an impact:* Operating soil vapor extraction system.

*Description of Environmental Setting:* The Facility is located in a primarily industrial area which is characterized by airport and vehicle noise. In addition, the Facility itself operates heavy machinery and equipment which makes noise as do some of the neighboring industrial sites. The closeness of the airport means that there can be substantial noise from aircraft landing and taking off. A two-lane surface street is located in front of the Facility. The foregoing represents ambient sound for the area of the Facility.

*Analysis of Potential Impacts:* The ambient sound at the property line is not expected to be significantly increased since the site is currently operating and the proposed project is set back several hundred feet from the two-lane street. Intermittent construction of the extraction and treatment components of the SVE system and installation of the extraction wells portion of the SVE system will last for 2-3 months. The construction noise will be for a few days on and off during that period.

The proposed project will involve the use of several pieces of equipment that will create noise. These include a truck-mounted drill rig and jack hammer or concrete corer. The working time will actually be limited to one day or two days quarterly of annually sampling activities over the proposed five years period. It is expected that the noise created by sampling activities will be well below 65 dB(A) and will not increase either ambient or peak noise levels of the site. The main components of the SVE include a blower for creating negative pressure in the subsurface and the thermal catalytic converter which treats the contaminants. The catalytic converter operates well below 65 dB(A) while the proposed blower operates at 75 dB(A) if it has no shielding or barrier. Shielding is proposed to be provided as a barrier. These pieces of equipment, with appropriate shielding for the blower, are compatible with the existing baseline noise caused by industrial activities in the area, the air traffic related to the Los Angeles International Airport, and vehicle traffic on surrounding streets. Moreover, the equipment is proposed to be installed at a corner of the facility which is further baffled on one side by parked transport vehicles in Rho-chem's transport yard and on another by a two story concrete wall, with no openings, of an adjoining metal window fabrication company. The equipment will be some 10 to 20 feet from the neighboring fabrication company and 50 feet from the nearest point of the Rho-chem building. It will be some 300 feet from the nearest street. Even without shielding on the blower, attenuation will be significant to any receptor. This proposed project will not expose persons to or generate noise levels in excess of the 65 dB(A) standard established by the City of Inglewood in its local general plan and noise ordinance, or applicable standards of other agencies (i.e. OSHA). In order to operate properly over a long period of time, the blower construction must minimize vibration. Furthermore, the standard blower installation protocol using isolation pads will also serve to reduce transmission of noise into the ground. Therefore, the project will not generate excessive ground-borne vibration or ground-borne noise levels. This proposed project will not have a substantial temporary, or periodic, or permanent increase in ambient noise levels in the vicinity above levels existing without the project. For example, passing vehicles, including motorcycles, on Isis Street may exceed 80 dB(A). This project will not have any site-specific or cumulative noise impacts. During the operation phase, the small numbers of waste drums will require a truck approximately once per quarter. Other project-related trips are passenger vehicles for technician visits for equipment maintenance, which may occur twice per week.

*Describe to what extent 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.*

This proposed project will not result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- b. *Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.*  
This proposed project will not result in exposure of persons to or generation of excessive ground-bourn vibration or ground-bourn noise levels.
- c. *A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.*  
This proposed project will not result in substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.
- d. *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*  
This proposed project will not result in substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 12. Population and Housing

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*Project activities likely to create an impact:* No, the proposed project for installing, operating, and monitoring of soil vapor extraction system will not create an impact on the population and housing of the site.

*Description of Environmental Setting:* The Facility is located in the City of Inglewood in a metropolitan area of Los Angeles County. In 1995 the population in the city was estimated at approximately 114,583 people [City of Inglewood Urban Water Management Plan, dated December 31, 1995].

*Analysis of Potential Impacts:* The Facility is located in an area designated for industrial use. There is no construction, conversion or demolition of buildings, either homes or commercial/industrial, associated with the proposed project. The proposed project will require any additional permanent workers at the Facility. Therefore, this project will not affect existing housing, public services, infrastructure, or creates demands for additional housing. Because no additional permanent workers are required and the project does not displace any existing housing or workplaces, the proposed project will not alter the location, distribution, density, or growth rate of the human population of the area. There are no existing recreational opportunities at the Facility and neither construction nor operation of the SVE will impact the quality or quantity of existing recreational opportunities either at the Facility or in the area. Since there is no additional permanent workforce, no additional infrastructure and no new homes associated with the proposed project, there will be no direct or indirect inducement for any population growth in area. There is no construction or demolition proposed as part of the project. Therefore, there will not be displacement of any existing housing or population and no necessity of construction of replacement housing elsewhere.

*Describe to what extent project activities would:*

- a. *Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).*  
The proposed project will not induce any population growth in area, either directly or indirectly.

- b. *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.*  
The proposed project will not displace any existing housing, and will not necessitate construction of replacement housing elsewhere.
- c. *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.*  
The proposed project will not displace any people or necessitate construction of replacement housing elsewhere.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000
4. Urban Water Management Plan, City of Inglewood, December 31, 1995.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**13. Public Services**

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Project activities likely to create an impact: No, the proposed project for installing, operating, and monitoring of soil vapor extraction system will not create an impact on public services for the Facility or for the area.

*Description of Environmental Setting:* Emergency Services are provided by the City of Inglewood Police Department and the Los Angeles County Fire Department. The nearest police station is the City of Inglewood Police Department Station, located approximately two miles northeast of the Facility on Manchester Avenue. Response to a structural fire is provided by fire station number 171, whose emergency response time would be approximately four to five minutes. The nearest hospital is Centinela Hospital Medical Center which is located within approximately five miles from the Facility. The hospital has an approximate cumulative capacity of 370 beds. The closest four-year college, University of West Los Angeles, is approximately 0.25 miles to the south of the facility. The Northrop Rice Aviation Institute of Technology is located on the same campus. Non-hazardous municipal waste generated in City of Inglewood is collected by three private haulers, Waste Management, B.F.I. and Crown Disposal. The only anticipated hazardous wastes are carbon granules that may be used to capture gas-phase contaminants and condensate recovered from knockout pots which are part of the SVE system. These will be managed either at the Facility or by transportation to an independent off-site treatment or disposal vendor.

*Analysis of Potential Impacts:* The proposed project is not expected to have any impact on the public services. Relatively few workers will be associated with the proposed project, even during construction. During monitoring or maintenance, even fewer will be on-site at any point in time. Therefore, the probability for any significant impact on emergency services is minimal. The SVE system and operations are not particularly risky from the perspective of fire. The project will not require provision of new government facilities or any or any physical alteration to existing ones. Since no such construction is necessary and therefore not serve as causation of significant environmental impacts. Because it has no additional requirements, the proposed project will not have any effect on acceptable service ratios, response times or other performance objectives for any public services.

*Describe to what extent 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, Police protection, Schools, Parks, and Other public facilities.*

This proposed project will not result in any 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, i.e., fire protection, police protection, schools, parks, and other public facilities.

*Specific References):*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**14. Recreation**

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Project activities likely to create an impact: No, the proposed project for installing, operating, and monitoring of soil vapor extraction system will not create an impact on recreation in the vicinity of the Facility.

*Description of Environmental Setting:* The Facility is located in the City of Inglewood in a metropolitan area of Los Angeles County. In 1995 the population in the city is estimated of approximately 114,583 people [City of Inglewood Urban Water Management Plan, dated December 31, 1995]. There are no recreational sites nearby the Facility.

*Analysis of Potential Impacts:* The Facility is in an area designated for industrial use which has no recreational sites near the Facility. The proposed project will not add either population or housing, will add only a few workers for limited times over any given quarter, and will therefore, not alter the location, distribution, density, or growth rate of the human population of the area. Because the proposed project neither adds homes or residents, it will not affect existing housing, public services, infrastructure, or create demands for construction or expansion of additional recreational facilities. Because the proposed project is contained within the Facility, it will not impact the quality or quantity of existing recreational opportunities.

*Describe to what extent project activities would:*

- a. *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.*  
 This proposed project will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of those facilities would occur or be accelerated.
- b. *Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.*  
 The proposed project will not include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000
4. Urban Water Management Plan, City of Inglewood, December 31, 1995.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 15. Transportation and Traffic

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*Project activities likely to create an impact.* None.

*Description of Environmental Setting:* Regional access to the Facility is provided by the eight-lane "I-405" San Diego Freeway and four-lane Manchester Avenue. Primary local access is from Manchester Avenue via Isis Avenue. Isis Avenue is a two-lane, north-south street, with traffic signal at the intersection with Manchester Avenue. Manchester Avenue is a four-lane main east-west thoroughfare, approximately 3/4 mile west of the San Diego Freeway, and serves industrial and commercial areas in the City of Inglewood. Aviation Avenue runs parallel to and one block to the west of Isis Avenue. It is a four-lane thoroughfare. Traffic flow is heavy on both Aviation and Manchester Avenues. A twenty-four hour car count was performed in 2000, on Manchester Avenue between Aviation Avenue and La Cienega Boulevard. This is the nearest and most recent volume measurement to the Rho-chem facility. The average 24-hour total traffic flow volume was 32,200 vehicles. Data are not available for Isis Avenue, however, the Inglewood Department of Public Works estimates that the average 24-hour daily traffic flow volume on Isis Avenue near Manchester Avenue is approximately 2,000 to 3,000 vehicles.

*Analysis of Potential Impacts:* Construction of the SVE would require 2-3 months of approximately 2 to 4 additional vehicles ingressing and egressing the Facility each day. This is a fraction of a percent of even the traffic estimated for Isis. Maintenance of the SVE and monitoring of the progress of the cleanup will require 2 to 4 vehicles ingressing and egressing the Facility over each quarter. For example, although the actual volume of materials to be removed is not known, it is estimated that the proposed removal of sampling wastes would be one or two truck-load trucks per quarter moving along the two-lane surface street. This is even less of an impact than the construction phase and will not result in a significant increase in compared to the existing traffic flow and pattern. Therefore, there will not be any significant impact to the environment. The proposed project will not exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway. No changes to site paving- or adjoining- roads is proposed. Therefore, the project will not substantially increase hazards due to a design. The equipment necessary to the proposed project will not be incompatible with approved uses of the existing roadways. The construction and maintenance activities necessary for the proposed project will not result in inadequate emergency access since these activities must comply with the site safety plan. The estimated 2 to 4 vehicles each day for several months and thereafter each quarter will not result in inadequate parking capacity, or conflict with adopted policies, plans, or programs supporting alternative transportation. The additional vehicles will be handled on-site.

*Describe to what extent 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).*  
This proposed project will not cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.
- b. *Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.*  
This proposed project will not exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.
- c. *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*  
This proposed project will not substantially increase hazards due to a design feature.
- d. *Result in inadequate emergency access.*  
This proposed project will not result in inadequate emergency access.
- e. *Result in inadequate parking capacity.*  
This proposed project will not result in inadequate parking capacity.

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

This proposed project will not conflict with adopted policies, plans, or programs supporting alternative transportation.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 16. Utilities and Service Systems

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Project activities likely to create an impact: No, the proposed project for installing, operating, and monitoring of soil vapor extraction system will not create an impact on the utilities and services systems.

*Description of Environmental Setting:* Electricity is provided by the City of Los Angeles Department of Water and Power. Natural gas is provided by The Southern California Gas Company. Water needs are met by the City of Los Angeles Department of Water and Power. Sewage is disposed through Los Angeles County Sanitation Districts and is generally treated at the Hyperion Water Reclamation Plant.

*Analysis of Potential Impacts:* No new or expanded utility systems or significant alteration to the existing service systems will be needed for this proposed project. Construction and operation of the SVE system will require use of electricity and water. For example, the blower for the SVE is electrical and water will be needed to clean sampling gear. The amount of either electricity or water needed by the proposed project is minimal. None of the project-related waste will be disposed of using city services nor through the industrial sewer. Any waste water from cleaning of sampling gear or generated from gas condensate in the SVE system will be collected and sent off-site for treatment. Therefore, this project will not exceed wastewater treatment requirements of LARWQCB, or require or result in the construction of new water or wastewater treatment facilities, new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects. The existing water supplies from the Los Angeles Department of Water and Power will have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed. This project will not 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. The proposed project's solid waste disposal needs will be minimal and will be served by a landfill with sufficient permitted capacity. This project will comply with federal, state, and local statutes and regulations related to solid waste.

*Describe to what extent project activities would:*

- a. *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.*  
This proposed project will not exceed wastewater treatment requirements of LARWQCB.
- 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.*  
This proposed project will not 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.
- 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.*

This proposed project will not 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.

- d. *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.*  
This proposed project will have sufficient water supplies available to serve the project from existing entitlements and resources. No new or expanded entitlements are needed.
- 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.*  
This proposed project will not result in determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.  
General reference:
- f. *Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.*  
This proposed project will be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.
- g. *Comply with federal, state, and local statutes and regulations related to solid waste.*  
This proposed project will comply with federal, state, and local statutes and regulations related to solid waste.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**17. Mandatory Findings of Significance**

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*Analysis of Potential Impacts:*

As discussed in sections on Biological Resources, Air Quality, Hydrology and Water Quality in this Initial Study, the project activities will 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. The project will not have impacts that are individually limited but cumulatively considerable. In other words, the incremental effects of an individual project are not considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

*Describe to what extent project activities would:*

- a. *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.*  
There is no potential for the proposed project activities to have any of the described impacts.

- b. *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.*  
The proposed project activities will not have any cumulatively considerable impacts.
- c. *Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.*  
The proposed project activities will not have any environmental effects that would indirectly or directly cause adverse effects on human beings.

*Specific References:*

1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
3. Interim Measures Work Plan, GMX, January 31, 2000

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

**V. FINDING OF DE MINIMIS IMPACT TO FISH, WILDLIFE AND HABITAT (Optional)**

Prepared only if a Finding of De Minimis Impact to fish, wildlife and habitat is proposed in lieu of payment of the Department of Fish and Game Notice of Determination filing fee required pursuant to section 711.4 of the Fish and Game Code.

Instructions

A finding of “no potential adverse effect” must be made to satisfy the requirements for the Finding of De Minimis Impact as required by title 14, California Code of Regulations, section 753.5. “No potential adverse effect” is a higher standard than “no significant impact” and the information requested to provide substantial evidence in support of a “no potential adverse effect” is not identical in either its standard or content to that in other parts of the Initial Study.

In the *Explanation and Supporting Evidence* section below, provide substantial evidence as to how the project will have **no potential adverse effect** on the following resources:

- a) Riparian land, rivers, streams, watercourse, and wetlands under state and federal jurisdiction.
- b) Native and non-native plant life and the soil required to sustain habitat for fish and wildlife.
- c) Rare and unique plant life and ecological community's dependent on plant life.
- d) Listed threatened and endangered plant and animals and the habitat in which they are believed to reside.
- e) All species of plant or animals as listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulation adopted there under.
- f) All marine and terrestrial species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside.
- g) All air and water resources the degradation of which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air and water.

V. FINDING OF DE MINIMIS IMPACT TO FISH, WILDLIFE AND HABITAT

No Finding of De Minimis Impact has been prepared for this project.

VI. DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT

On the basis of this Initial Study:

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

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

I find that the proposed project MAY HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

_____		_____
DTSC Project Manager Signature		Date
Liang Chiang	Hazardous Substances Engineer	( 818 ) 551-2964
_____	_____	_____
DTSC Project Manager Name	DTSC Project Manager Title	Phone #

_____		_____
DTSC Branch/Unit Chief Signature		Date
Jose Kou	Supervising Hazrdous Substances Engineer II	( 818 ) 551-2920
_____	_____	_____
DTSC Branch/Unit Chief Name	DTSC Branch/Unit Chief Title	Phone #

**ATTACHMENT A**  
**INITIAL STUDY REFERENCE LIST**

For

Interim Measures Work Plan-Soil Vapor Extraction System for Rho-Chem  
Corporation  
City of Inglewood Facility

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1. Current Condition Report, Rho-Chem Facility, Geomatrix Consultants, Inc., (GMX) February 7, 2003 (Page 27-29)
  2. Underground Storage Tank Removal Report, Rho-Chem Facility, GMX, February 13, 2003
  3. Interim Measures Work Plan, GMX, January 31, 2000
  4. RCRA Permit renewal Application, Part B (Operation Plan) at Rho-Chem Facility, November 15, 2004
  5. Department of Toxic Substances Control Intranet: <http://10.30.0.133/>
  6. Urban Water Management Plan, City of Inglewood, December 31, 1995.
  7. Water Resources Control Board/Regional Boards: <http://www.swrcb.ca.gov/quality.html>
  8. Los Angeles County Sanitation Districts: <http://www.casaweb.org>
  9. Local Government Land Use Planning and Public Works: <http://www.ceres.ca.gov/planning>
  10. Department of Water Resources: <http://www.dwr.water.ca.gov>
  11. Integrated Waste Management Board: <http://www.ciwmb.ca.gov>
  12. U.S. EPA: <http://www.epa.gov/epahome/topics.html>
  13. Department of Conservation/Minerals: <http://www.consrv.ca.gov/smmm/index.htm>
  14. CEQA Initial Study Workbook, DTSC, April 2004
  15. CEQA Air Quality Handbook, SCAQMD, April 1993
  16. EDR NEPA Check, The Source for Environmental Risk Management Data, Environmental Data Resources, Inc. December 10, 2002.
  17. Department of Conservation/Earthquakes: <http://www.consrv.ca.gov/dmg/eq-index.htm>
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18. Local Emergency Management: <http://hrrc.tamu.edu/related-sites/states/california.shtml>
19. Local Government SARA Title 3 information:  
[http://www.sbcfire.org/ofm/emer\\_response/becp.shtml](http://www.sbcfire.org/ofm/emer_response/becp.shtml)
20. County congestion management agencies: <http://transweb.sjsu.edu/dist4.htm>
21. Local Government planning and public works: <http://www.ceres.ca.gov/planning>
22. Department of Transportation: <http://www.dot.ca.gov>
23. County congestion management agencies: <http://transweb.sjsu.edu/dist4.htm>
24. Council of Governments contact list: <http://www.calcog.org/Default.htm>