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ENVIRONMENTAL
PROTECTION

97 FEB -4 AM 9:17

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January 31, 1997

Mr. Dale Klettke, CHMM
Hazardous Materials Specialist
Environmental Health Services
Environmental Protection (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA. 94502-6577

*Re: Owens Corning Site
2001 Marina Blvd., San Leandro, CA*

Dear Mr. Klettke:

Enclosed is a copy of the Risk Evaluation and Management Plan for the above referenced site prepared by Geomatrix Consultants, Inc. for Owens Corning. This document responds to items 2 and 4 of your letter dated October 31, 1996. I believe that with this submission, we have responded to all of the items that you requested. Please contact me if you have any comments or questions regarding this information. I look forward to receiving your response regarding the closure of this site.

Sincerely,

David L. Palochko
David L. Palochko *DLP*

DLP:llc
Encl.

ENVIRONMENTAL
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RISK EVALUATION AND MANAGEMENT PLAN

**2001 Marina Boulevard
San Leandro, California**

Prepared for

**Owens-Corning World Headquarters
Fiberglass Tower
Toledo, Ohio**

**January 1997
Project No. 3421**

Geomatrix Consultants

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
2.0 BACKGROUND	1
2.1 SITE SETTING AND HISTORICAL USAGE	1
2.2 PREVIOUS ENVIRONMENTAL INVESTIGATIONS	2
2.3 SITE REMEDIATION	2
2.4 QUARTERLY GROUNDWATER MONITORING	3
2.5 SITE GEOLOGY AND HYDROGEOLOGY	4
3.0 HUMAN HEALTH RISK EVALUATION	4
3.1 SOIL	6
3.2 GROUNDWATER	7
3.3 CONCLUSIONS	8
4.0 LONG-TERM MANAGEMENT PLAN	8
4.1 OBJECTIVES	8
4.2 LONG-TERM MANAGEMENT PLAN	9
4.2.1 Soil Containment	9
4.2.2 Soil Management Procedures for Construction	10
4.2.3 Long-Term Soil Management Procedures	11
5.0 REFERENCES	13

LIST OF TABLES

Table 1	Summary of Volatile Organic Compounds in Stockpiled Soil
Table 2	Assessment of Cumulative Effects of Volatile Organic Compounds in Stockpiled Soil
Table 3	Summary of Metal Compounds in Stockpiled Soil

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Map

TABLE OF CONTENTS
(Continued)

LIST OF APPENDICES

- Appendix A Summary of Chemical Data from Soil Sampling, Ensco Investigations
- Appendix B Summary of Historical Groundwater Quality Data
- Appendix C Summary of Stockpile Characterization Data
- Appendix D Summary of Historical Groundwater Elevation Data

RISK EVALUATION AND MANAGEMENT PLAN

2001 Marina Boulevard
San Leandro, California

1.0 INTRODUCTION

Geomatrix Consultants, Inc. (Geomatrix), has prepared this Risk Evaluation and Management Plan on behalf of Owens Corning Fiberglas Corporation (Owens Corning) for the site located at 2001 Marina Boulevard, San Leandro, California (the site; Figure 1). The Risk Evaluation and Management Plan has been prepared in response to a 31 October 1996 letter from the Alameda County Health Care Services Agency (ACHCSA) to Owens Corning. Items 2 and 4 of that letter request that a risk assessment be performed on the environmental conditions of the site and a management plan be prepared for on-site reuse of soil containing petroleum hydrocarbons, respectively.

2.0 BACKGROUND

This section describes the site setting, historical site usage, previous environmental investigations and remediation activities conducted at the site, and the site geology and hydrogeology.

2.1 SITE SETTING AND HISTORICAL USAGE

The site is an approximately 9.5-acre parcel located in a commercial/light industrial portion of San Leandro, California. The site formerly housed a roofing and asphalt manufacturing plant. The plant was dismantled in 1988, and the site has been vacant since that time. The manufacturing plant consisted of a large warehouse building, a paved and unpaved parking area, and several above- and below-ground product storage tanks.

The underground storage tanks (USTs) consisted of two waste oil tanks formerly located in the paved parking area, gasoline and diesel USTs (one each) formerly located near the southeast corner of the warehouse building, and an underground cistern located west of the southwest

portion of the warehouse building (Figure 2). The two waste oil USTs and the gasoline and diesel USTs were removed by Zaccor Corporation in March 1988. The underground cistern, which reportedly contained waste water and petroleum product from the asphalt processing plant, was located and removed during site remediation activities conducted in 1989.

2.2 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Ensco Environmental Services (Ensco) conducted several environmental investigations of the site between 1988 and 1989. This work included the installation of 18 soil borings and 8 on-site monitoring wells (MW-1 through MW-8), sampling the monitoring wells for chemical analysis, and collection of groundwater level measurements to evaluate the groundwater gradient beneath the site (Ensco, October 1988; Ensco, July 1989; and Ensco, November 1989). Appendices A and B consist of several tables that summarize the analytical results from the soil and groundwater sampling, respectively. Results of these investigations indicated the presence of heavy petroleum hydrocarbons (later determined to be blowdown oil, a waste product from the manufacture of asphaltic materials) in soil west of the warehouse building. Groundwater appeared to be minimally affected by the presence of the blowdown oil in the soil.

The blowdown oil-containing soil appeared to extend to the western boundary of the site. Therefore, Exeltech (formerly Ensco) installed two off-site monitoring wells (OCF-9, OCF-10) on the adjacent property west of the site in 1990 to better assess the possible effect of the blowdown oil-containing soil on off-site groundwater.

2.3 SITE REMEDIATION

Exeltech excavated approximately 20,000 cubic yards of blowdown oil-containing soil from the area west of the former warehouse building between February and July 1990. The areal extent of the final excavation is illustrated on Figure 2; the excavation extended to a depth of approximately 17 feet below grade. Exeltech attempted to bioremediate the excavated soil during 1990 and 1991; however, the bioremediation did not significantly accelerate natural bioremediation. Therefore, the soil has remained stockpiled at the site since that time.

In December 1995, McLaren Hart collected 10 soil samples from the stockpile soil for characterization, including analysis for volatile organic compounds (VOCs; EPA Method 8240), total petroleum hydrocarbons as blowdown oil (TPH_{bo}; modified EPA Method 8015), semivolatile organic compounds (SVOCs; EPA Method 8270), Title 22 metals (EPA Methods 6000/7000) and reactivity, corrosivity, and ignitability (RCI). Results of the analytical testing of the stockpile soil samples are summarized in a series of tables contained in Appendix C.

With the exception of carbon disulfide (0.0096 milligrams per kilogram [mg/kg]), acetone (up to 0.67 mg/kg), and 2-butanone (up to 0.1 mg/kg), VOCs were not detected in the stockpile soil samples. The TPH_{bo} ranged between 410 and 6200 mg/kg. SVOCs, including polynuclear aromatic compounds (PNAs), were not detected; however, the reporting limits of the PNAs were elevated due to matrix interferences. TCLP tests were performed on two samples and analyzed for leachable PNAs; PNAs were not detected in these samples. Recent groundwater sampling conducted by McLaren Hart included analyzing groundwater samples collected from selected on- and off-site wells for PNAs; PNAs were not detected above laboratory reporting limits. Several Title 22 metals, which occur naturally in the environment, were detected in one or more of the soil stockpile samples (McLaren/Hart, 1995).

Results of the RCI testing indicated that the soil was nonreactive, noncorrosive, and not ignitable.

2.4 QUARTERLY GROUNDWATER MONITORING

Quarterly groundwater monitoring was implemented at the site in 1990 by Exeltech (now RESNA Environmental); McLaren Hart has conducted the quarterly monitoring program at the site since 1993.

Appendix B consists of a table that summarizes the historical groundwater quality data collected during the quarterly monitoring program. As indicated in this table, the highest TPH_{bo}

concentrations are detected in wells MW-4 (up to 4.9 milligrams per liter [mg/l]) and MW-6 (up to 6.5 mg/l), located adjacent to and downgradient of the excavated area that formerly contained blowdown oil-affected soil. Low (generally less than 0.4 mg/l) to non-detect concentrations of TPHbo are detected in other on-site wells. Concentrations in off-site wells OCF-9 and OCF-10, also located hydraulically downgradient of the excavation, have ranged between 0.15 to 2.2 mg/l and less than 0.5 to 0.95 mg/l, respectively.

With the exception of low concentrations detected in wells MW-1, MW-4, and OCF-9 in 1990, total petroleum hydrocarbons as gasoline, and benzene, toluene, ethylbenzene, and xylenes (BTEX) have not been detected in the groundwater beneath the site.

2.5 SITE GEOLOGY AND HYDROGEOLOGY

Sediments encountered during previous site investigations reportedly consist of silty clay to approximately 6 to 8 feet below grade. The silty clay is underlain by gravelly clay and gravelly sand, which reportedly extends to approximately 9.5 to 14.5 feet below grade. This is underlain by sandy and silty clay to about 21.5 feet below grade, the depth explored during the investigations.

Appendix D consists of a table that summarizes depth-to-water measurements and groundwater elevations collected at the site to date. Depth to water at the site generally ranges between 10 and 19 feet below grade. Groundwater elevation data obtained by Ensco in 1988 indicated a groundwater flow direction to the east on the northwestern portion of the site and generally to the south on the southern and eastern portions of the site. Recent groundwater elevation data have indicated a groundwater flow direction generally toward the west.

3.0 HUMAN HEALTH RISK EVALUATION

The potential for human health effects associated with exposure to chemicals present in soil and groundwater at this site are evaluated in this section. This evaluation is based on a comparison of

concentrations in soil to Preliminary Remediation Goals (PRGs) developed by U.S. EPA Region IX (1996). For chemicals that occur naturally in soil (e.g., metals), concentrations detected at the site were also compared with background concentrations in soil developed by Lawrence Berkeley National Laboratory (LBNL, 1995) for a variety of soil types. **Although the groundwater beneath the site is not currently used as a drinking water source, concentrations of chemicals detected in groundwater were compared to Maximum Contaminant Limit (MCL) values for the State of California for drinking water.**

PRGs are media-specific concentrations that are based on a defined level of carcinogenic or noncarcinogenic risk for a specific exposure scenario. U.S. EPA Region IX has developed PRGs in soil for either residential or industrial exposure assuming an excess cancer risk of one-in-one million (1×10^{-6}) or a hazard index (for noncarcinogenic risk) of 1. Because use of the site in the future is expected to be commercial/industrial, concentrations in soil were compared to industrial PRGs. PRGs are intended to be applied on an individual chemical-by-chemical basis, i.e., as if only one chemical is present in soil at the site. Therefore, an assessment of potential cumulative effects was also made to address the presence of multiple chemicals at the site.

The regional background data used in this evaluation were collected by the LBNL for the purpose of establishing background concentrations of selected metals in the vicinity of the laboratory (LBNL, 1995). The LBNL data set is comprised of approximately 500 samples collected from 5 geologic units in the vicinity of the LBNL. The concentrations of most metals are relatively consistent across the geologic units; therefore, as recommended by LBNL, the data were considered as a single data set. As a conservative comparison, a chemical was considered to be present at the site at concentrations within regional background concentrations if the maximum concentration of the site data was below the 95 percent Upper Tolerance Limit (UTL) of the LBNL data.

3.1 SOIL

At this site, the primary source of chemicals of potential concern (COPCs) is the blowing distillate ("blowdown") oil (measured as TPH_{bo}) associated with asphalt processing operations at the site. Blowdown oil was detected in samples of stockpiled soil (410 to 6,200 mg/kg). Blowdown oil represents a variable mixture of chemicals that does not have descriptive health criteria; therefore, it cannot be considered directly as a chemical of potential concern. Potential health risks associated with mixtures of hydrocarbons are generally evaluated by considering the aggregate toxicity of key individual chemicals within the mixture (e.g., BTEX and PNAs).

As expected for a heavy-end hydrocarbon mixture, BTEX were not detected in soil sampled prior to excavation or in stockpiled soil (since 1990). Stockpiled soil samples were also analyzed for PNAs, chemicals more commonly associated with a heavy-end hydrocarbon mixture. PNAs were not detected in stockpiled soil samples above reporting limits which ranged between 1.6 mg/kg to 16 mg/kg. Although the detection limits were elevated due to sample matrix interferences, an analysis for leachable PNAs also indicated that PNAs were not present in site soil. Therefore, potential exposure to blowdown oil-affected soil is not expected to result in adverse health effects.

Three VOCs were detected in samples of the stockpiled soil. Acetone was detected in 7 of the 10 samples of stockpiled soil at concentrations between 0.083 and 0.67 mg/kg; methyl ethyl ketone was detected in 2 of 10 samples at concentrations between 0.08 and 0.1 mg/kg; and carbon disulfide was detected in 1 of 10 samples at 0.0096 mg/kg. As shown in Table 1, the maximum soil concentrations were well below the industrial PRG for these chemicals in soil. Therefore, the concentrations of these VOCs are below levels associated with adverse health effects. The potential for cumulative effects associated with simultaneous exposure to these VOCs was evaluated by first dividing the maximum detected concentration for each chemical by its industrial PRG; this is referred to as a normalized value. If the sum of the normalized value is less than one, then simultaneous exposure should not be associated with adverse health effects. As shown in Table 2, the total normalized value is 0.0005. Therefore, even considering potential

cumulative effects, the concentrations of these VOCs are below levels associated with adverse health effects.

Concentrations of metals were also measured because of their potential association with blow-down oil used at the site. Lead was the only metal measured in samples prior to excavation. Of these samples, only three were located in areas that were not excavated (i.e., remain in place); these samples contained measurable concentrations of lead ranging from 2.66 to 10.4 mg/kg. These lead results fall within the range of lead concentrations for stockpiled soil. In addition to lead, eleven other metals were analyzed in samples of stockpiled soil (Table 3). A comparison of the maximum concentration in stockpiled soil (or all soil for lead) with industrial PRGs indicates that only the maximum concentration of arsenic (5.6 mg/kg) exceeds its industrial PRG (2.4 mg/kg). However, the maximum arsenic concentration is well below the background concentration published by LBNL (19.1 mg/kg). In addition, concentrations of metals were compared with Total Threshold Limit Concentrations (TTLCs), which are used to classify material as a hazardous waste for the purpose of disposal to land. As shown in Table 3, none of the metal concentrations exceeded their respective TTLCs, and thus the material would not be considered a hazardous waste for the purpose of land disposal.

3.2 GROUNDWATER

As discussed for soil, potential health effects associated with blowdown oil in groundwater were evaluated based on measured concentrations of BTEX and PNAs. BTEX has not been detected in groundwater at the site after 1990 and, based on the absence of BTEX in soil samples, is not considered to be associated with blowdown oil in groundwater at the site. PNAs also were not detected in groundwater at the site (detection limits from 0.2 to 2 µg/l). Therefore, potential exposure to blowdown oil in groundwater is not expected to result in adverse health effects.

Lead was the only inorganic chemical monitored in groundwater; samples were collected and analyzed by Enseco in 1988 and 1989. In samples collected in 1988, concentrations of lead at two locations (110 and 120 micrograms per liter [µg/l]; see Appendix A) exceeded the California

MCL for lead (50 µg/l). In samples collected in 1989, concentrations of lead at all locations (8 to 44 µg/l; see Appendix A) were below the MCL for lead. Since concentrations of lead in soil were within background concentrations and the more recent sampling results indicate concentrations of lead in groundwater were below MCLs, potential exposure to lead in groundwater should not be associated with adverse health effects. Although other inorganics were not analyzed in groundwater, their presence in site soils within background concentrations indicates the site soil is not a likely source of inorganics to groundwater.

3.3 CONCLUSIONS

Based on the sampling results for soil and groundwater, the chemicals detected in soil and groundwater at the site are not present at concentrations that would present health risks that exceed levels acceptable to regulatory agencies. However, blowdown oil-affected soil in stockpiles may represent a future source of petroleum hydrocarbons to groundwater. Therefore, it may be prudent to contain the soil affected by blowdown oil and to isolate this soil from groundwater through appropriate long-term management procedures as described in the following section.

4.0 LONG-TERM MANAGEMENT PLAN

As described above, concentrations of chemicals in soil and groundwater at the site are not associated with adverse health effects. However, it would be prudent to contain soil affected by blowdown oil and to isolate it from groundwater. In anticipation of future construction activities, this section describes the proposed long-term management plan for blowdown oil in soil at the site.

4.1 OBJECTIVES

The objectives of the long-term management plan are to provide procedures for:

- soil handling, stockpiling, and disposal to minimize the generation of dust and erosion (during future site development activities); and
- long-term management of site soil.

4.2 LONG-TERM MANAGEMENT PLAN

The following three sections describe the soil management procedures that should be implemented at the site.

4.2.1 Soil Containment

The petroleum hydrocarbon-containing soil that is currently stockpiled at the site should be placed at least two feet above the highest measured groundwater elevation at the site to prevent this soil from contacting the groundwater in the future. This may require excavation from chemically unaffected areas of the site (e.g., the northeastern portion) and placement of this excavated soil into the bottom of the currently existing excavation to raise the current bottom depths. The stockpiled soil containing blowdown oil would then be placed above this soil and also be placed in the newly excavated area to achieve a consistent surface grade.

Appendix D consists of a table that summarizes groundwater elevation data collected by others at the site. The depth to groundwater in the excavation area has ranged between 14 and 19 feet below grade; therefore, soil should be placed at or above a depth of 12 feet below current grade to mitigate groundwater infiltrating petroleum hydrocarbon-containing soil. Depth to groundwater is shallower near well MW-1 and has ranged between 10 and 15 feet below grade. Therefore, if soil containing blowdown oil is placed in this area of the site, it should be placed at a depth of 8 feet or less.

The low-permeability cover will reduce surface water infiltrating the soil. This cover could consist of a 1-foot-thick layer of low-permeability soil, or the first foot of soil could be improved using bentonite to decrease its permeability. Alternatively, building foundations and paved areas

could provide an acceptable low-permeability cover. For example, development of the site consisting of a commercial or light industrial building surrounded by paved parking would provide a sufficient low-permeability cover for the contained soil. If proposed site development includes landscaped areas, the landscaping should be installed above a low-permeability layer so that irrigation of the landscaping will not cause water to infiltrate the subsurface soil at the site.

A site plan should be developed following soil containment that documents the location, volume, areal extent, and depth of petroleum hydrocarbon-containing soil at the site. This site plan should be appended to the long-term management plan. Three-dimensional CAD programming may be used to facilitate the development of the site plan.

4.2.2 Soil Management Procedures for Construction

The site is currently vacant and will likely be developed in the future for commercial or light industrial use. The soil management procedures provided below should be implemented during soil containment and site development activities.

Soil Handling

Petroleum hydrocarbon-containing soil should be lightly sprayed with water to minimize dust during soil containment and site construction activities. Erosion control measures should be implemented in accordance with the California General Construction Stormwater Permit.

Soil Stockpiling

Temporary stockpiling of petroleum hydrocarbon-containing soil may be needed during site construction activities. Soil stockpiled temporarily at the site during site construction should be lightly sprayed with water to minimize dust during the "dry" season (April through October) or covered with plastic sheeting or other similar material during the "rainy" season (November to March) to control run-off and erosion.

Soil Disposal

Current plans for the site involve the containment of all of the blowdown oil-containing soil and do not anticipate generation of excess soil containing blowdown oil requiring off-site disposal. However, if blowdown oil-containing soil is excavated during site construction that cannot be replaced into containment due to site development constraints, and requires off-site disposal, the soil should be transported to an appropriate off-site landfill or recycling facility. Chemical analysis results for soil samples collected during previous site investigations indicate that disposal to a Class II facility or soil recycling facility will be possible; however, soil profiling at the time of disposal will be needed to ensure appropriate and economic disposal.

Site Access

Site access is currently limited via a fence surrounding the site and a locked gate at the site entrance. Site access should continue to be similarly limited until completion of future site construction.

4.2.3 Long-Term Soil Management Procedures

The following provides procedures for long-term maintenance of the site cover and for minimizing dust and erosion during future maintenance activities that may encounter petroleum hydrocarbon-containing soil.

Cover Maintenance

The integrity of the long-term, low-permeability cover should be inspected annually to assess for the possible presence of breaches such as cracking or other signs of wear. If a low-permeability soil cover is used to cover all or portions of the site, cracks greater than 24 inches (2 feet) in length and extending into the cover by more than 50 percent of the cover thickness should be repaired. Smaller cracks or other signs of wear should be inspected on a semiannual basis to confirm that the integrity of the cover is still intact. Paved areas should be inspected annually for cracking. Areas of significant cracking (i.e., sufficient to allow infiltration of surface water) should be repaired. A log of the inspections should be maintained at the site.

If plastic sheeting is used as a temporary site cover during site development, more frequent inspection of the cover is warranted during the “rainy” season. The plastic sheeting should be inspected weekly during the rainy season, and observed rips or tears in the sheeting should be repaired as soon as feasible.

Soil Handling, Stockpiling, and Disposal

Maintenance work following site development may require additional trenching or limited excavation that could access the contained petroleum hydrocarbon-affected soil. The risk evaluation concluded that chemicals in soil and groundwater at the site should not pose an unacceptable risk to human health. However, if future site maintenance generates waste soil containing petroleum hydrocarbons, the soil will be handled, stockpiled, and disposed as described in Section 4.2.2.

5.0 REFERENCES

- California Code of Regulations, Title 22, Section 66261.24.
- Ensco Environmental Services, Inc. (Ensco), 1988, Reconnaissance Soil and Ground-Water Quality Assessment for Owens-Corning Fiberglass, 2001 Marina Boulevard, San Leandro, California, Project No. 1649G, October 12.
- Ensco, 1989, Supplemental Soil and Groundwater Investigation for Former Owens/Corning Fiberglass Facility, 2001 Marina Boulevard, San Leandro, California, Project 1719G, July 31.
- Lawrence Berkeley National Laboratory, 1995, Protocol for Determining Background Concentrations of Metals in Soil at Lawrence Berkeley National Laboratory (LBNL) dated August 1995.
- McLaren/Hart Environmental Engineering Corporation (McLaren/Hart), 1995, Final Letter Report, Soil Characterization at Owens-Corning Fiberglass Corporation, December 21.
- McLaren/Hart, 1997, Letter Report, Quarterly Groundwater Monitoring, Fourth Quarter 1996, at Owens Corning, 2001 Marina Boulevard, San Leandro, California, for Owens Corning, Fierglass Tower, Toledo, Ohio 43659, January 9.
- U.S. EPA, Region IX, 1996, Preliminary Remediation Goals (PRGs), August 1.

TABLE 1

**SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN
STOCKPILED SOIL**

2001 Marina Boulevard
San Leandro, California

VOC¹	Number of Detections	Concentration Range (mg/kg)	Detection Limit (mg/kg)	Industrial PRG² (mg/kg)
Acetone	7 of 10	0.083 - 0.67	0.05	8,800
Carbon Disulfide	1 of 10	0.0096	0.05	24
Methyl ethyl ketone	2 of 10	0.080 - 0.1	0.005	27,000

Notes:

- ¹ Volatile Organic Compound.
- ² Preliminary Remediation Goal (U.S. EPA, 1996).

TABLE 2**ASSESSMENT OF CUMULATIVE EFFECTS OF VOLATILE
ORGANIC COMPOUNDS IN STOCKPILED SOIL**2001 Marina Boulevard
San Leandro, California

VOC¹	Maximum Concentration Range (mg/kg)	Industrial PRG² (mg/kg)	Normalized Value
Acetone	0.670	8,800	0.0001
Carbon disulfide	0.0096	24	0.0004
Methyl ethyl ketone	0.100	27,000	0.000004
TOTAL			0.0005

Notes:

- ¹ Volatile Organic Compound.
² Preliminary Remediation Goal (U.S. EPA, 1996).

TABLE 3

SUMMARY OF METAL COMPOUNDS IN STOCKPILED SOIL

2001 Marina Boulevard
San Leandro, California

Metal	Number of Detections	Concentration Range (mg/kg)	Industrial PRG¹ (mg/kg)	Background Concentrations² (mg/kg)	TTL³
Arsenic	10 of 10	1.9 - 5.6	2.4	19.1	500
Barium	10 of 10	110 - 240	100,000	323.6	10,000
Beryllium	10 of 10	0.34 - 0.6	1.1	1.0	75
Chromium	10 of 10	32 - 56	450	99.6	2,500
Cobalt	10 of 10	7.7 - 9.6	9,700	22.2	8,000
Copper	10 of 10	18 - 24	63,000	69.4	2,500
Lead	10 of 10	4 - 480	1,000	16.1	1,000
Molybdenum	9 of 10	<1.0 - 1.6	8,500	7.4	3,500
Nickel	10 of 10	4.6 - 55	3,400	119.8	2,000
Selenium	2 of 10	<0.25 - 0.38	8,500	5.6	100
Vanadium	10 of 10	25 - 42	12,000	74.3	2,400
Zinc	10 of 10	37 - 82	100,000	106.1	5,000

Notes:

- ¹ Preliminary Remediation Goal (U.S. EPA, 1996).
- ² Ninety-five percent (95%) Upper Tolerance Limit calculated for background data (LBNL, 1995).
- ³ Total Threshold Limit Concentration (CCR Title 22, Section 66261.24).

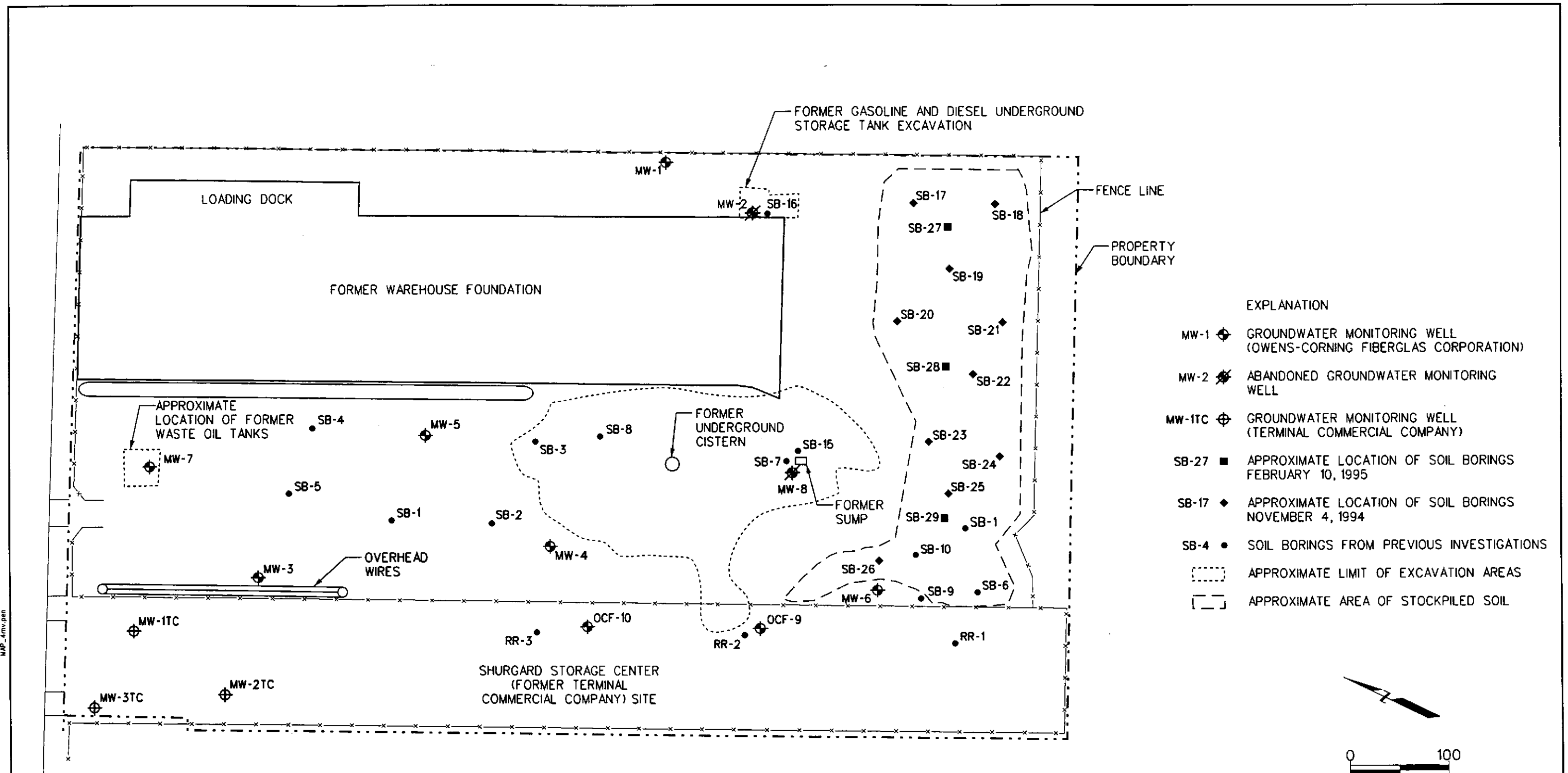


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SITE LOCATION MAP
 2001 Marina Boulevard
 San Leandro, California

Figure
 1
 Project No.
 3421



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 bw.ctb
 CHECKED:

Map Source:
 McLaren-Hart Letter Report "Quarterly Groundwater Monitoring Report Third Quarter 1996"; dated October 7 1996. Modified with information obtained in Owens-Corning project files.

SITE MAP Owens-Corning Fiberglas 2001 Marina Boulevard San Leandro, California		
 GEOMATRIX	Project No. 3421	Figure 2

APPENDIX A

(Source: Ensco, October 1988 and Ensco, July 1989)

TABLE 1
SOIL ANALYSES DATA (CONT.)

Owens Corning; 1649G

SAMPLE #	DATE SAMPLED	TPHD (ppm)	TPHG (ppm)	BENZENE (ppm)	TOLUENE (ppm)	XYLENES (ppm)	ETHYL BENZENE (ppm)	TOTAL LEAD (ppm)
SB-3-3	5/25/88	87	4	BDL	BDL	0.13	BDL	NA
SB-4-1	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-4-2	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-5-1	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-5-2	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-6-1	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-6-2	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-7-1	5/25/88	930 composite	BDL	BDL	BDL	BDL	BDL	NA
SB-7-2	5/25/88							
SB-7-3	5/25/88	BDL composite	BDL	BDL	BDL	BDL	BDL	NA
SB-7-4	5/25/88							
SB-7-5	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-8-2	5/26/88	3,300	2.3	BDL	BDL	0.10	BDL	3.0
SB-8-3	5/26/88	570	BDL	BDL	BDL	BDL	BDL	8.0
SB-8-4	5/26/88	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SB-9	5/26/88	BDL	NA	NA	NA	NA	NA	NA
SB-10	5/26/88	BDL	NA	NA	NA	NA	NA	NA
SB-11	5/26/88	BDL	NA	NA	NA	NA	NA	NA

TABLE 1
SOIL ANALYSES DATA (CONT.)

Owens Corning; 1649G

TPHG = Total Volatile Hydrocarbons as Gasoline
TPHD = Total Petroleum Hydrocarbons as Diesel
ppm = parts per million
BDL = Below Detection Limit
NA = Not Analyzed
Note: For detection limits, refer to laboratory reports

EnSCO Environmental Services, Inc.
Project No. 1719G

Owens/Corning Fiberglas
2001 Marina Boulevard
San Leandro, CA

TABLE 1
SOIL ANALYSES DATA

Sample Number	Date Sampled	Sample Depth (ft.)	TPHD (ppm)	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Total Xylenes (ppm)	Total Lead (ppm)
SB7-1 SB7-2	Composite 5/25/88	5-10	930	BDL	BDL	BDL	BDL	BDL	N.A.
MW2-1	5/23/88	6.5	N.A.	BDL	BDL	BDL	BDL	BDL	BDL
MW2-2	5/23/88	11.5	N.A.	16	0.015	0.036	0.21	0.59	4.8
SB12-1	5/22/89	5	ND	3	ND	ND	ND	ND	8.03
SB12-2	5/22/89	10	26	ND	ND	ND	ND	ND	3.36
SB12-3	5/22/89	15	27	89	ND	ND	ND	ND	5.56
SB13-1	5/22/89	5	ND	ND	ND	ND	ND	ND	10.4
SB13-2	5/22/89	10	ND	ND	ND	ND	ND	ND	2.66
SB14-1	5/22/89	5	ND	ND	ND	ND	ND	ND	2.66
SB14-2	5/22/89	10	ND	1	ND	ND	ND	ND	8.03
SB14-3	5/22/89	15	13	57	ND	ND	ND	ND	7.91
SB15-1	5/22/89	5	1,200	3	ND	ND	ND	ND	3.9
SB15-2	5/22/89	10	ND	1	ND	ND	ND	ND	3.46
SB15-3	5/22/89	15	3,200	47	ND	ND	ND	ND	6.13

Ensco Environmental Services, Inc.
 Project No. 1719G

Owens/Corning Fiberglas
 2001 Marina Boulevard
 San Leandro, CA

TABLE 1 (Continued)
 SOIL ANALYSES DATA

Sample Number	Date Sampled	Sample Depth (ft.)	TPHD (ppm)	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Total Xylenes (ppm)	Total Lead (ppm)
SB16-1	Composite	5.5	1,700	1,400	ND	ND	15	110	24.1
SB16-2		10							
SB16-3		15							
SHA-1	5/23/89	10	6,700	19	ND	ND	ND	ND	14

TPHD = Total petroleum hydrocarbons as diesel
 TPHG = Total petroleum hydrocarbons as gasoline
 ND = Not detected
 N.A. = Not available
 BDL = Below detection limits
 ppm = Parts per million
 Note: See lab reports for detection limits

EnSCO Environmental Services, Inc.
 Project No. 1719G

Owens/Corning Fiberglas
 2001 Marina Boulevard
 San Leandro, CA

TABLE 2
 GROUNDWATER ANALYSES DATA

Sample Number	Date Sampled	TPHD (ppb)	TPHG (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Total Lead (ppb)	Depth To Water (ft.)
BB-J1	5/22/89	ND	ND	ND	ND	ND	ND	---	---
MW-1	5/31/88 5/22/89	BDL ND	BDL ND	BDL ND	BDL ND	BDL ND	BDL ND	120 8	13.57
MW-2	5/31/88 5/22/89	-- ND	460 50	BDL ND	BDL ND	6.4 ND	15 ND	110 12	12.48
MW-3	5/22/89	---	---	---	---	---	---	11	18.85
MW-4	5/25/89	---	---	---	---	---	---	44	18.20
MW-5	5/22/89	---	---	---	---	---	---	13	17.92
MW-6	5/22/89	---	---	---	---	---	---	13	17.14
MW-7	5/22/89	---	---	---	---	---	---	8	16.90

TPHD = Total petroleum hydrocarbons as diesel
 TPHG = Total petroleum hydrocarbons as gasoline
 BDL = Below detection limit
 ND = Not detected
 ppb = Parts per billion
 --- = Analysis not requested

APPENDIX B

(Source: McLaren/Hart, January 1997)

Table 2
 Analytical Results for TPH and BTEX in Groundwater
 Owens Corning
 2001 Marina Boulevard
 San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)
MW-1	05/31/88		<30 ⁵	<30	<0.3	<0.3	<0.3	<0.3	NR
	05/22/89		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	11/27/90		<50	<50	1.9	3.6	2.4	5.9	NR
	03/06/91		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	05/29/91		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/14/92		NR ⁶	NR	NR	NR	NR	NR	NR
	04/08/92		NR	NR	NR	NR	NR	NR	NR
	08/03/92-A ⁷		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/03/92-F&B ⁸	<50	NA ⁹	<50	<0.5	<0.5	<0.5	<0.5	NR
	10/27/92	230	NR	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/92	<100	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	04/27/93	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	07/28/93	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	10/28/93	140	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	12/07/93	<50	NR	NR	NR	NR	NR	NR	NR
	01/24/94	<150	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	05/17/94	<50	NR	<50	<0.5	<0.5	<0.5	<1.0	NR
	08/25/94	<50	NR	<100	<2	<2	<2	<6	NR
	11/15/94	<50	NR	<50	<1	<1	<1	<3	NR
	02/09/95	280 ^{13,14}	NR	<50	<1	<1	<1	<3	NR
	05/12/95	200	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/18/95	80	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/18/95(Rep)	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	11/20/95	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	11/20/95 (Rep)	NR	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	02/22/96	60	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	2/22/96 (Rep)	NR	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	05/16/96	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	5/16/96 (Rep)	NR	NR	<50	<0.5	<0.5	<0.5	<0.5	NR

Table 2
Analytical Results for TPH and BTEX in Groundwater
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)
MW-1 (cont.)	8/22/96	90	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/22/96 (Rep)	NR	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	11/20/96	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	BRL ¹⁸
	11/20/96 (Rep)	NR	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
MW-2	05/31/88		<30	460	<0.3	<0.3	6.4	15	NR
	05/22/89		<50	50	<0.5	<0.5	<0.5	<0.5	NR
	11/27/90				(Abandoned)				
MW-3	05/31/88		<30	59	<0.3	<0.3	<0.3	<0.3	NR
	05/22/89		NR	NR	NR	NR	NR	NR	NR
	11/27/90		86	120	2.5	12	3.2	18	NR
	03/06/91		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	05/29/91		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/14/92		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	04/08/92		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/03/92-A		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/03/92-F&B	<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NR
	10/27/92	150	NR	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/92	<100	NR	NR	NR	NR	NR	NR	NR
	04/27/93	<50	NR	NR	NR	NR	NR	NR	NR
	07/28/93	<50	NR	NR	NR	NR	NR	NR	NR
	10/28/93	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/24/94	<150	NR	NR	NR	NR	NR	NR	NR
	05/17/94	50	NR	NR	NR	NR	NR	NR	NR
	08/25/94	<50	NR	NR	NR	NR	NR	NR	NR
	11/16/94	<50	NR	<50	<1	<1	<1	<3	NR
	02/09/95	130 ¹⁴	NR	NR	NR	NR	NR	NR	NR
	05/11/95	390	NR	NR	NR	NR	NR	NR	NR
08/17/95	120	NR	NR	NR	NR	NR	NR	NR	
11/20/95	110	NR	<50	<0.5	<0.5	<0.5	<0.5	NR	

Table 2
Analytical Results for TPH and BTEX in Groundwater
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)
MW-3 (cont.)	02/23/96	330	NR	NR	NR	NR	NR	NR	NR
	05/16/96	< 50	NR	NR	NR	NR	NR	NR	NR
	08/22/96	240	NR	NR	NR	NR	NR	NR	NR
	11/19/96	100	NR	<50	<0.5	<0.5	<0.5	<0.5	BRL
MW-4	05/31/88		<30	49	<0.3	<0.3	1.3	<0.3	NR
	05/22/89		NR	NR	NR	NR	NR	NR	NR
	11/27/90		440	110	2.5	12	3	19	NR
	03/06/91		340	<50	<0.5	<0.5	<0.5	<0.5	NR
	05/29/91		250	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/14/92		230	<50	<0.5	<0.5	<0.5	<0.5	NR
	04/08/92		120	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/03/92-A		620	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/03/92-F&B	200	NA	<50	<0.5	<0.5	<0.5	<0.5	NR
	10/27/92	600	NR	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/92	<100	NR	NR	NR	NR	NR	NR	NR
	04/27/93	<50	NR	NR	NR	NR	NR	NR	NR
	07/29/93	87	NR	NR	NR	NR	NR	NR	NR
	10/29/93	960	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	12/07/93	240	NR	NR	NR	NR	NR	NR	NR
	01/25/94	1100	NR	NR	NR	NR	NR	NR	NR
	05/17/94	1000	NR	NR	NR	NR	NR	NR	NR
	08/25/94	1200	NR	NR	NR	NR	NR	NR	NR
	11/16/94	980	NR	<50	<1	<1	<1	<3	NR
	11/16/94 (Rep)	860	NR	<50	<1	<1	<1	<3	NR
	02/10/95	2600 ¹⁴	NR	NR	NR	NR	NR	NR	NR
	05/12/95	3600	NR	NR	NR	NR	NR	NR	NR
	08/17/95	4100	NR	NR	NR	NR	NR	NR	NR
	11/20/95	4400	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	11/20/95 (Rep)	4200 ¹⁶	NR	NR	NR	NR	NR	NR	NR
	02/23/96	4900	NR	NR	NR	NR	NR	NR	NR
2/23/96 (Rep)	4900	NR	NR	NR	NR	NR	NR	NR	

Table 2
Analytical Results for TPHI and BTEX in Groundwater
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPHI-D ² (ppb)	TPHI-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)
MW-4 (cont.)	05/16/96	3500	NR	NR	NR	NR	NR	NR	NR
	5/16/96 (Rep)	3700	NR	NR	NR	NR	NR	NR	NR
	08/22/96	3800	NR	NR	NR	NR	NR	NR	NR
	11/20/96	2700	NR	<50	<0.5	<0.5	<0.5	<0.5	BRL
MW-5	05/31/88		<30	<030	<0.3	<0.3	<0.3	<0.3	NR
	05/22/89		NR	NR	NR	NR	NR	NR	NR
	11/27/90		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	03/06/91		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	05/29/91		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/14/92			Analysis temporarily discontinued					
	04/08/92								
	07/30/92								
	10/27/92	380	NR	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/93	<100	NR	NR	NR	NR	NR	NR	NR
	04/27/93	<50	NR	NR	NR	NR	NR	NR	NR
	07/28/93	<50	NR	NR	NR	NR	NR	NR	NR
	10/28/93	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/24/94	<150	NR	NR	NR	NR	NR	NR	NR
	05/17/94	<50	NR	NR	NR	NR	NR	NR	NR
	08/25/94	<50	NR	NR	NR	NR	NR	NR	NR
	11/15/94	<50	NR	<50	<1	<1	<1	<3	NR
	02/09/95	160 ¹⁴	NR	NR	NR	NR	NR	NR	NR
	05/11/95	170	NR	NR	NR	NR	NR	NR	NR
	08/17/95	100	NR	NR	NR	NR	NR	NR	NR
	11/20/95	80	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	11/20/95 (Rep)	80	NR	NR	NR	NR	NR	NR	NR
	02/23/96	270	NR	NR	NR	NR	NR	NR	NR
05/16/96	< 50	NR	NR	NR	NR	NR	NR	NR	
08/22/96	86	NR	NR	NR	NR	NR	NR	NR	
11/20/96	70	NR	<50	<0.5	<0.5	<0.5	<0.5	NR	

Table 2
Analytical Results for TPH and BTEX in Groundwater
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)
MW-6	05/31/88		<30	<50	<0.3	<0.3	1.2	<0.3	NR
	05/22/89		NR	NR	NR	NR	NR	NR	NR
	11/27/90		1200	86	1.4	6.2	0.6	12	NR
	03/06/91		1100	<50	<0.5	<0.5	<0.5	<0.5	NR
	05/30/91		550	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/14/92		570	<50	<0.5	<0.5	<0.5	<0.5	NR
	04/13/92		1300	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/05/92-A		950	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/05/92-F&B	500	NA	<50	<0.5	<0.5	<0.5	<0.5	NR
	10/27/92	530	NR	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/92	120	NR	NR	NR	NR	NR	NR	NR
	04/27/93	58	NR	NR	NR	NR	NR	NR	NR
	07/29/93	150	NR	NR	NR	NR	NR	NR	NR
	10/29/93	1600	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	12/07/93	260	NR	NR	NR	NR	NR	NR	NR
	01/25/94	<150	NR	NR	NR	NR	NR	NR	NR
	05/17/94	1100	NR	NR	NR	NR	NR	NR	NR
	08/25/94	1000	NR	NR	NR	NR	NR	NR	NR
	11/16/94	530	NR	<50	<1	<1	<1	<3	NR
	02/10/95	6500	NR	NR	NR	NR	NR	NR	NR
	05/12/95	2400	NR	NR	NR	NR	NR	NR	NR
	5/12/95 (Rep)	2500	NR	NR	NR	NR	NR	NR	NR
	08/18/95	3200	NR	NR	NR	NR	NR	NR	NR
	11/21/95	3500	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	11/21/95 (Rep)	3700 ¹⁶	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	02/23/96	4000	NR	NR	NR	NR	NR	NR	NR
	05/16/96	3200	NR	NR	NR	NR	NR	NR	NR
	08/22/96	3800	NR	NR	NR	NR	NR	NR	NR
	08/22/96 (Rep)	4200	NR	NR	NR	NR	NR	NR	NR
	11/20/96	3000	NR	<50	<0.5	<0.5	<0.5	<0.5	BRL
	11/20/96 (Rep)	2900	NR	NR	NR	NR	NR	NR	NR

Table 2
 Analytical Results for TPH and BTEX in Groundwater
 Owens Corning
 2001 Marina Boulevard
 San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)
MW-7	05/31/88		<30	<30	<0.3	<0.3	<0.3	<0.3	NR
	05/22/89		NR	NR	NR	NR	NR	NR	NR
	11/27/90		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	03/06/91		2300	<50	<0.5	<0.5	<0.5	<0.5	NR
	04/21/91		1200	NR	NR	NR	NR	NR	NR
	05/30/91		140	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/14/92		<50	NR	NR	NR	NR	NR	NR
	04/08/92		<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/03/92-A		65	NR	NR	NR	NR	NR	NR
	08/03/92-F&B	<50	NA	NR	NR	NR	NR	NR	NR
	10/27/92	230	NR	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/92	<100	NR	NR	NR	NR	NR	NR	NR
	04/27/93	<50	NR	NR	NR	NR	NR	NR	NR
	07/28/93	<50	NR	NR	NR	NR	NR	NR	NR
	10/28/93	61	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	12/07/93	<50	NR	NR	NR	NR	NR	NR	NR
	01/24/94	<150	NR	NR	NR	NR	NR	NR	NR
	05/17/94	<50	NR	NR	NR	NR	NR	NR	NR
	08/25/94	230	NR	NR	NR	NR	NR	NR	NR
	11/15/94	360	NR	<50	<1	<1	<1	<3	NR
	02/10/95	1500 ¹⁵	NR	NR	NR	NR	NR	NR	NR
	05/11/95	660	NR	NR	NR	NR	NR	NR	NR
	08/17/95	320	NR	NR	NR	NR	NR	NR	NR
11/20/95	220	NR	<50	<0.5	<0.5	<0.5	<0.5	NR	
02/23/96	290	NR	NR	NR	NR	NR	NR	NR	
05/16/96	70	NR	NR	NR	NR	NR	NR	NR	
08/22/96	200	NR	NR	NR	NR	NR	NR	NR	
11/19/96	110	NR	<50	<0.5	<0.5	<0.5	<0.5	NR	
MW-8	11/03/89		2300	80	<0.5	0.8	0.5	0.5	NR
	11/27/90				(Abandoned)				

Table 2
Analytical Results for TPH and BTEX in Groundwater
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)	
OCF-9	08/29/90		<30	<3	<1	<1	<1	<1	NR	
	11/28/90		2100	100	1.7	7.4	2	12	NR	
	03/06/91		2200	<50	<0.5	<0.5	<0.5	<0.5	NR	
	05/30/91		1200	<50	<0.5	<0.5	<0.5	<0.5	NR	
	01/14/92		1400	59	<0.5	<0.5	<0.5	<0.5	NR	
	04/09/92		<50	<50	<0.5	<0.5	<0.5	<0.5	NR	
	08/05/92-A			1500	<50	<0.5	<0.5	<0.5	NR	
	08/05/92-F&B		550	NA	<50	<0.5	<0.5	<0.5	<0.5	NR
	10/27/92		1200	NR	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/93		150	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	04/27/93		220	NR	NR	NR	NR	NR	NR	NR
	07/29/93		260	NR	NR	NR	NR	NR	NR	NR
	10/29/93		1800	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	12/07/93		420	NR	NR	NR	NR	NR	NR	NR
	01/25/94		<150	NR	NR	NR	NR	NR	NR	NR
	05/17/94		750	NR	NR	NR	NR	NR	NR	NR
	05/17/94 (Rep) ¹		560	NR	NR	NR	NR	NR	NR	NR
	08/25/94		240	NR	NR	NR	NR	NR	NR	NR
	08/25/94 (Rep)		500	NR	NR	NR	NR	NR	NR	NR
	11/15/94		770	NR	<50	<1	<1	<1	<3	NR
	02/10/95		1500	NR	NR	NR	NR	NR	NR	NR
	2/10/95 (Rep)		1700	NR	NR	NR	NR	NR	NR	NR
	05/11/95		1900	NR	NR	NR	NR	NR	NR	NR
	08/17/95		2000	NR	NR	NR	NR	NR	NR	NR
	11/21/95		2000	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	11/21/95 (Rep)		2200 ¹⁶	NR	NR	NR	NR	NR	NR	NR
	02/22/96		1800	NR	NR	NR	NR	NR	NR	NR
05/16/96		2200	NR	NR	NR	NR	NR	NR	NR	
08/21/96		1600	NR	NR	NR	NR	NR	NR	NR	
11/19/96		1200	NR	<50	<0.5	<0.5	<0.5	<0.5	BRL	

Table 2
 Analytical Results for TPH and BTEX in Groundwater
 Owens Corning
 2001 Marina Boulevard
 San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)
OCF-10	08/29/90		<30	<3	<1	<1	<1	<1	NR
	11/28/90		250	<50	0.6	3.6	1	5.6	NR
	03/06/91		170	<50	<0.5	<0.5	<0.5	<0.5	NR
	05/29/91		95	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/14/92		72	<50	<0.5	<0.5	<0.5	<0.5	NR
	04/09/92		120	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/05/92-A			190	<50	<0.5	<0.5	<0.5	NR
	08/05/92-F&B	60	NA	<50	<0.5	<0.5	<0.5	<0.5	NR
	10/27/92	380	NR	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/93	<100	NR	<50	NR	NR	NR	NR	NR
	04/27/93	<50	NR	<50	NR	NR	NR	NR	NR
	07/29/93	<50	NR	<50	NR	NR	NR	NR	NR
	10/28/93	100	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	12/07/93	<50	NR	NR	NR	NR	NR	NR	NR
	01/25/94	<150	NR	NR	NR	NR	NR	NR	NR
	05/17/94	100	NR	NR	NR	NR	NR	NR	NR
	08/25/94	<50	NR	NR	NR	NR	NR	NR	NR
	11/16/94	220	NR	<50	<1	<1	1	5	NR
	02/09/95	540	NR	NR	NR	NR	NR	NR	NR
	05/11/95	440	NR	NR	NR	NR	NR	NR	NR
	08/17/95	500	NR	NR	NR	NR	NR	NR	NR
	11/21/95	670	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	02/22/96	460	NR	NR	NR	NR	NR	NR	NR
05/16/96	730	NR	NR	NR	NR	NR	NR	NR	
08/21/96	950	NR	NR	NR	NR	NR	NR	NR	
11/19/96	730	NR	<50	<0.5	<0.5	<0.5	<0.5	BRL	

Table 2
Analytical Results for TPH and BTEX in Groundwater
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNAs ¹⁷ (ppb)
Adjacent Downgradient Terminal Commercial Site									
MW-1TC	08/05/92-R ¹¹	NR	<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/05/92-F&B	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	02/10/93	NR	NR	NR	NR	NR	NR	NR	NR
	04/27/93	NR	NR	NR	NR	NR	NR	NR	NR
	07/28/93	NR	NR	NR	NR	NR	NR	NR	NR
	10/28/93	NR	NR	NR	NR	NR	NR	NR	NR
	01/24/94	NR	NR	NR	NR	NR	NR	NR	NR
MW-2TC	08/05/92-R	NR	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/05/92-F&B	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	10/27/92	130	<50	<50	<0.1	<0.1	<0.1	<0.2	NR
	02/10/93	<100	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	04/27/93	<50	NR	NR	NR	NR	NR	NR	NR
	07/28/93	<50	NR	NR	NR	NR	NR	NR	NR
	10/28/93	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	01/24/94	<150	NR	NR	NR	NR	NR	NR	NR
	05/17/94	<50	NR	NR	NR	NR	NR	NR	NR
	08/25/94	<50	NR	NR	NR	NR	NR	NR	NR
	11/15/94	<50	NR	<50	<1	<1	<1	<3	NR
	02/09/95	240 ^{13,14,15}	NR	NR	NR	NR	NR	NR	NR
	05/11/95	<50	NR	NR	NR	NR	NR	NR	NR
	08/17/95	<50	NR	NR	NR	NR	NR	NR	NR
	11/21/95	<50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR
	02/22/96	<50	NR	NR	NR	NR	NR	NR	NR
	05/16/96	<50	NR	NR	NR	NR	NR	NR	NR
8/21/96	60	NR	NR	NR	NR	NR	NR	NR	
11/20/96	50	NR	<50	<0.5	<0.5	<0.5	<0.5	NR	

Table 2
Analytical Results for TPH and BTEX in Groundwater
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	TPH-BO ¹ (ppb) ⁴	TPH-D ² (ppb)	TPH-G ³ (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	PNA ^s ¹⁷ (ppb)
MW-3TC	08/05/92-R	NR	<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	08/05/92-F&B	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	NR
	02/10/93	NR	NR	NR	NR	NR	NR	NR	NR
	04/27/93	NR	NR	NR	NR	NR	NR	NR	NR
	07/28/93	NR	NR	NR	NR	NR	NR	NR	NR
	10/28/93	NR	NR	NR	NR	NR	NR	NR	NR
	01/24/94	NR	NR	NR	NR	NR	NR	NR	NR

Well Designation	Date	PCB ¹² (ppb)
MW-4	10/27/92	<2
MW-6	10/27/92	<2
OCF-9	10/27/92	<2
OCF-10	10/27/92	<2

¹TPH-BO = Total petroleum hydrocarbons as blowdown oil.

²TPH-D = Total petroleum hydrocarbons as diesel.

³TPH-G = Total petroleum hydrocarbons as gasoline.

⁴ppb = Parts per billion (µg/L).

⁵< = Not detected above listed detection limit for the method.

⁶NR = Analysis not requested.

⁷Date-A = Analysis performed by Anametrix, Inc. Environmental and Analytical Chemistry (Analysis prior to 08/03/92 performed by Anametrix).

⁸Date-F&B = Analysis performed by Friedman & Bruya, Inc., Environmental Chemists (Analysis after 08/03/92 performed by Friedman & Bruya).

⁹NA = Data not available.

¹⁰Rep = Replicate Sample.

¹¹Date-R = Analysis performed by RESNA Environmental Laboratories (one time analysis after 08/05/92 to be performed by Friedman & Bruya).

¹²PCB = Polychlorinated biphenyls.

¹³ = evaporated blowdown oil or a higher boiling residuum product.

¹⁴ = blowdown oil was found in the method blank at 80 ppb.

¹⁵ = significant sediment was found in the sample; for analysis, water was decanted.

¹⁶ = sample was filtered prior to extraction; sample extract passed through a Silica gel column prior to analysis.

¹⁷PNA^s = Polynuclear Aromatic Hydrocarbons; samples passed through a glass filter prior to analysis. All PNA results were below the laboratory reporting limit for samples collected on November 20, 1996 from wells MW-1, MW-3, MW-4, MW-6, OCF-9 and OCF-10.

¹⁸BRL = below laboratory reporting limit; see data sheets for analyte specific reporting limits.

APPENDIX C

(Source: McLaren/Hart, December 1995)

TABLE 2
ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS AS BLOWDOWN OIL
SOIL PILE SAMPLES
OCF SOIL REMEDIATION
SAN LEANDRO, CALIFORNIA

Ten Composite Soil Samples

<u>LOCATION</u>	<u>TPH-BO [ug/g]</u>
SB-17	2,800
SB-18	3,400
SB-19	3,200
SB-20	880
SB-21	1,600
SB-22	2,600
SB-23	6200 *
SB-24	410
SB-25	2,000
SB-26	1,100

* The value reported exceeded the calibration range established for the sample.

**TPH-BO Concentrations [ug/l] Associated with
Selected Soil Particle Size Ranges**

<u>Soil Particle Size Range:</u>	<u>Sample 1</u>	<u>Sample 2</u>
150 um to 850 um	3,200	470
53 um to 150 um	3,700	590
less than 53 um	2,600	150

TABLE 3
ANALYTICAL RESULTS FOR SEMI-VOLATILE ORGANIC COMPOUNDS [mg/kg]
SOIL PILE SAMPLES
OCF SOIL REMEDIATION
SAN LEANDRO, CALIFORNIA

<u>LOCATION</u>	SB-17	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23	SB-24	SB-25	SB-26
Benzoic Acid	<32	<8	<32	<32	<48	<80	<16	<8	<32	<32
3-Nitroaniline	<32	<8	<32	<32	<48	<80	<16	<8	<32	<32
2-Nitroaniline	<32	<8	<32	<32	<48	<80	<16	<8	<32	<32
2,4-Dinitrophenol	<32	<8	<32	<32	<48	<80	<16	<8	<32	<32
4-Nitrophenol	<32	<8	<32	<32	<48	<80	<16	<8	<32	<32
4-Nitroaniline	<32	<8	<32	<32	<48	<80	<16	<8	<32	<32
4,6-Dinitro-2-Methylphenol	<32	<8	<32	<32	<48	<80	<16	<8	<32	<32
Pentachlorophenol	<32	<8	<32	<32	<48	<80	<16	<8	<32	<32
3,3'-Dichlorobenzidine	<13	<3.3	<13	<13	<20	<33	<6.6	<3.3	<13	<13
All other 8270 compounds	<6.6	<1.6	<6.6	<6.6	<9.9	<16	<3.3	<1.6	<6.6	<6.6

TABLE 4
ANALYTICAL RESULTS FOR SEMI-VOLATILE ORGANIC COMPOUNDS USING EPA METHOD 8270 TCLP [mg/l]
SOIL PILE SAMPLES
OCF SOIL REMEDIATION
SAN LEANDRO, CALIFORNIA

<u>Analytes</u>	Composite Sample * Primary	Composite Sample * Duplicate
Pyridine	<10	<10
1,4-Dichlorobenzene	<10	<10
o-Creosol	<10	<10
m/p-Creosol	<10	<10
Hexachloroethane	<10	<10
Nitrobenzene	<10	<10
Hexachlorobutadiene	<10	<10
2,4,6-Trichlorophenol	<10	<10
2,4,5-Trichlorophenol	<10	<10
2,4-Dinitrotoluene	<10	<10
Hexachlorobenzene	<10	<10
Pentachlorophenol	<10	<10

* The sample was composited from soil collected at soil boring locations SB-27, SB-28, and SB-29

TABLE 5
ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS [ug/kg]
SOIL PILE SAMPLES
OCF SOIL REMEDIATION
SAN LEANDRO, CALIFORNIA

<u>LOCATION</u>	SB-17	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23	SB-24	SB-25	SB-26
Acetone	< 50	660	670	83	< 50	120	270	< 50	260	120
2-Butanone	< 50	100	80	< 50	< 50	< 50	< 50	< 50	< 50	< 50
Carbon Disulfide	< 5	< 5	9.6	< 5	< 5	< 5	< 5	< 5	< 5	< 5

No other 8240 compounds were detected

13

TABLE 6
ANALYTICAL RESULTS FOR CAM TITLE 22 METALS [mg/kg]
SOIL PILE SAMPLES
OCF SOIL REMEDIATION
SAN LEANDRO, CALIFORNIA

<u>LOCATION</u>	SB-17	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23	SB-24	SB-25	SB-26
Arsenic	1.9	2.9	1.9	3.8	2.7	1.9	4.6	5.6	1.8	3.6
Barium	150	220	110	130	140	120	130	170	140	240
Beryllium	0.45	0.6	0.34	0.41	0.41	0.37	0.42	0.4	0.43	0.43
Chromium	43	56	32	38	32	34	40	39	41	40
Cobalt	8.9	8.9	7.7	7.8	8.8	8.3	7.9	8.6	9.6	9.3
Copper	18	24	18	22	22	22	20	20	22	20
Lead	5.2	4.4	4.2	6.7	11	16	4	15	19	480
Molybdenum	1.3	1.6	< 1.0	1.1	1.4	1	1	1.1	1.4	1.3
Nickel	47	55	36	40	45	43	41	41	46	4.6
Selenium	< 0.25	0.38	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	0.26	< 0.25	< 0.25
Vanadium	36	42	25	31	28	29	30	30	36	35
Zinc	46	54	37	48	60	44	43	82	50	48

Antimony, cadmium, mercury, silver, and thallium were not detected above the respective detection limit.

TABLE 7
ANALYTICAL RESULTS FOR REACTIVITY, CORROSIVITY, AND IGNITABILITY
SOIL PILE SAMPLES
OCF SOIL REMEDIATION
SAN LEANDRO, CALIFORNIA

<u>LOCATION</u>	SB-17	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23	SB-24	SB-25	SB-26
Reactivity [mg/kg]										
reactive cyanide	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
reactive sulfide	80	< 50	< 50	80	120	< 50	80	< 50	< 50	< 50
Corrossivity [pH]	6.7	7.3	6.7	6.6	5.2	7	7.1	7.2	7.4	6
Ignitability	negative	negative	negative	negative	negative	negative	negative	negative	negative	negative

12

APPENDIX D

(Source: McLaren/Hart, January 1997)

Table 1
 Groundwater Surface Elevation Data
 Owens Corning
 2001 Marina Boulevard
 San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]
MW-1	05/31/88	22.55	12.16	10.39	
	05/22/89		13.57	8.98	-1.41
	11/27/90		14.90	7.65	-1.33
	03/06/91		13.55	9.00	1.35
	05/29/91		13.78	8.77	-0.23
	01/14/92		13.78	8.77	0.00
	04/08/92		12.70	9.85	1.08
	07/30/92		14.19	8.36	-1.49
	10/27/92		14.14	8.41	0.05
	02/10/92		12.34	10.21	1.80
	04/27/93		12.15	10.40	0.19
	07/28/93		13.62	8.93	-1.47
	10/28/93		14.03	8.52	-0.41
	12/07/93		13.74	8.81	0.29
	01/24/94		12.50	10.05	1.24
	05/17/94		12.98	9.57	-0.48
	08/24/94		13.92	8.63	-0.94
	11/15/94		12.72	9.83	1.20
	02/09/95		11.06	11.49	1.66
	05/11/95		12.05	10.50	-0.99
	08/17/95		13.44	9.11	-1.39
	11/20/95		13.91	8.64	-0.47
	1/3/1996 ¹		12.47	10.08	0.97
02/22/96	10.25	12.30	3.66		
05/16/96	11.81	10.74	-1.56		
08/21/96	13.53	9.02	-1.72		
11/19/96	12.92	9.63	1.11		
MW-2	05/31/88	21.34	13.13	8.21	
	05/22/89		12.48	8.86	0.65
	11/27/90		(Abandoned)		

Table 1
Groundwater Surface Elevation Data
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]
MW-3	05/31/88	26.79	17.21	9.58	
	05/22/89		18.85	7.94	-1.64
	11/27/90		19.81	6.98	-0.96
	03/06/91		18.88	7.91	0.93
	05/29/91		18.93	7.86	-0.05
	01/14/92		18.98	7.81	-0.05
	04/08/92		17.92	8.87	1.06
	07/30/92		19.15	7.64	-1.23
	10/27/92		19.16	7.63	-0.01
	02/10/92		16.77	10.02	2.39
	04/27/93		17.43	9.36	-0.66
	07/28/93		18.61	8.18	-1.18
	10/28/93		18.95	7.84	-0.34
	01/24/94		18.25	8.54	0.70
	05/17/94		18.04	8.75	0.21
	08/24/94		18.84	7.95	-0.80
	11/15/94		17.80	8.99	1.04
	02/09/95		16.26	10.53	1.54
	05/11/95		17.25	9.54	-0.99
	08/17/95		18.42	8.37	-1.17
	11/20/95		16.75	10.04	1.67
	1/3/1996 ¹		17.61	9.18	0.81
	02/22/96		14.35	12.44	2.40
05/16/96		17.00	9.79	-2.65	
08/21/96		18.46	8.33	-1.46	
11/19/96		18.11	8.68	1.11	

Table 1
 Groundwater Surface Elevation Data
 Owens Corning
 2001 Marina Boulevard
 San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]
MW-4	05/31/88	26.09	16.19	9.90	
	05/22/89		18.20	7.89	-2.01
	11/27/90		19.15	6.94	-0.95
	03/06/91		18.10	7.99	1.05
	05/29/91		18.16	7.93	-0.06
	01/14/92		18.20	7.89	-0.04
	04/08/92		17.02	9.07	1.18
	07/30/92		18.48	7.61	-1.46
	10/27/92		18.46	7.63	0.02
	02/10/92		15.70	10.39	2.76
	04/27/93		16.51	9.58	-0.81
	07/29/93		17.90	8.19	-1.39
	10/29/93		18.27	7.82	-0.37
	12/07/93		18.02	8.07	0.25
	01/25/94		17.84	8.25	0.18
	05/17/94		17.29	8.80	0.55
	08/24/94		18.18	7.91	-0.89
	11/15/94		17.10	8.99	1.08
	02/09/95		15.14	10.95	1.96
	05/11/95		16.35	9.74	-1.21
	08/17/95		17.74	8.35	-1.39
	11/20/95		18.11	7.98	-0.37
	1/3/1996 ¹		16.83	9.26	0.91
	02/22/96		14.67	11.42	3.44
	05/16/96		16.34	9.75	-1.67
	08/21/96		17.78	8.31	-1.44
	11/19/96		17.46	8.63	1.12

Table 1
Groundwater Surface Elevation Data
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]	
MW-5	05/31/88	25.40	16.63	8.77		
	05/22/89		17.92	7.48	-1.29	
	11/27/90		18.38	7.02	-0.46	
	03/06/91		17.36	8.04	1.02	
	05/29/91		17.40	8.00	-0.04	
	01/14/92		17.45	7.95	-0.05	
	04/08/92		16.33	9.07	1.12	
	07/30/92		17.70	7.70	-1.37	
	10/27/92		17.72	7.68	-0.02	
	02/10/93		15.06	10.34	2.66	
	04/27/93		15.22	10.18	-0.16	
	07/28/93		17.13	8.27	-1.91	
	10/28/93		17.50	7.90	-0.37	
	01/24/94		16.70	8.70	0.80	
	05/17/94		16.53	8.87	0.17	
	08/24/94		17.39	8.01	-0.86	
	11/15/94		16.32	9.08	1.07	
	02/09/95		14.60	10.80	1.72	
	05/11/95		15.67	9.73	-1.07	
	08/17/95		16.94	8.46	-1.27	
	11/20/95		17.33	8.07	-0.39	
	1/3/1996 ¹			16.08	9.32	0.86
	02/22/96			13.82	11.58	3.51
05/16/96			15.52	9.88	-1.70	
08/21/96			16.98	8.42	-1.46	
11/19/96			16.63	8.77	1.11	

Table 1
 Groundwater Surface Elevation Data
 Owens Corning
 2001 Marina Boulevard
 San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]
MW-6	05/31/88	24.85	16.68	8.17	
	05/22/89		17.14	7.71	-0.46
	11/27/90		18.40	6.45	-1.26
	03/06/91		17.32	7.53	1.08
	05/30/91		17.38	7.47	-0.06
	01/14/92		17.40	7.45	-0.02
	04/13/92		NA	NA	NA
	07/30/92		17.76	7.09	NA
	10/27/92		17.75	7.10	0.01
	02/10/92		14.80	10.05	2.95
	04/27/93		15.57	9.28	-0.77
	07/29/93		17.18	7.67	-1.61
	10/29/93		17.54	7.31	-0.36
	12/07/93		17.26	7.59	0.28
	01/25/94		16.95	7.90	0.31
	05/17/94		16.47	8.38	0.48
	08/24/94		17.46	7.39	-0.99
	11/15/94		16.39	8.46	1.07
	02/09/95		14.18	10.67	2.21
	05/11/95		15.43	9.42	-1.25
	08/17/95		16.95	7.90	-1.52
	11/20/95		17.38	7.47	-0.43
	1/3/1996 ¹		16.06	8.79	0.89
	02/22/96		14.11	10.74	3.27
	05/16/96		15.59	9.26	-1.48
	08/21/96		17.01	7.84	-1.42
	11/19/96		16.69	8.16	1.10

Table 1
Groundwater Surface Elevation Data
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]
MW-7	05/31/88	25.02	16.25	8.77	
	05/22/89		16.90	8.12	-0.65
	11/27/90		17.80	7.22	-0.90
	03/06/91		16.97	8.05	0.83
	04/21/91		15.86	9.16	1.11
	05/30/91		16.95	8.07	-1.09
	01/14/92		17.00	8.02	-0.05
	04/08/92		16.00	9.02	1.00
	07/30/92		17.11	7.91	-1.11
	10/27/92		17.16	7.86	-0.05
	02/10/92		18.60	6.42	-1.44
	04/27/93		15.52	9.50	3.08
	07/28/93		16.60	8.42	-1.08
	10/28/93		16.93	8.09	-0.33
	12/07/93		16.73	8.29	0.20
	01/24/94		16.48	8.54	0.25
	05/17/94		16.08	8.94	0.40
	08/24/94		16.83	8.19	-0.75
	11/15/94		15.82	9.20	1.01
	02/09/95		14.48	10.54	1.34
	05/11/95		15.36	9.66	-0.88
	08/17/95		16.38	8.64	-1.02
	11/20/95		17.49	7.53	-1.11
1/3/1996 ¹		15.70	9.32	0.68	
02/22/96		13.70	11.32	3.79	
05/16/96		15.29	9.73	-1.59	
08/21/96		16.43	8.59	-1.14	
	11/19/96		16.07	8.95	0.78
MW-8	11/03/89	NA	22.40	NA	
	11/27/90		(Abandoned)		

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 Owens Corning
 2001 Marina Boulevard
 San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]
OCF-9	11/28/90	NA**	20.38	NA	
(Adjacent downgradient	03/06/91	NA**	19.34	NA	1.04
Former Terminal	05/30/91	NA**	19.35	NA	-0.01
Commercial Site)	01/14/92	25.26	17.95	7.31	1.40
	04/09/92		16.20	9.06	1.75
	07/30/92		18.26	7.00	-2.06
	10/27/92		18.25	7.01	0.01
	02/10/93		15.34	9.92	2.91
	04/27/93		16.16	9.10	-0.82
	07/29/93		17.68	7.58	-1.52
	10/29/93		18.05	7.21	-0.37
	12/07/93		17.77	7.49	0.28
	01/25/94		17.34	7.92	0.43
	05/17/94		16.98	8.28	0.36
	08/24/94		17.97	7.29	-0.99
	11/15/94		16.89	8.37	1.08
	02/09/95		14.76	10.50	2.13
	05/11/95		15.98	9.28	-1.22
	08/17/95		17.48	7.78	-1.50
	11/20/95		17.85	7.41	-0.37
	1/3/1996 ¹		16.55	8.71	0.93
	02/22/96		14.48	10.78	3.37
	05/16/96		16.14	9.12	-1.66
	08/21/96		17.50	7.76	-1.36
	11/19/96		17.26	8.00	1.12

Table 1
Groundwater Surface Elevation Data
Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]
OCF-10 (Adjacent downgradient Former Terminal Commercial Site)	11/28/90	NA**	20.91	NA	
	03/06/91	NA**	19.81	NA	1.10
	05/29/91	NA**	19.95	NA	-0.14
	01/14/92	24.83	17.40	7.43	2.55
	04/09/92		16.70	8.13	0.70
	07/30/92		17.67	7.16	-0.97
	10/27/92		17.66	7.17	0.01
	02/10/93		15.04	9.79	2.62
	04/27/93		15.55	9.28	-0.51
	07/29/93		17.09	7.74	-1.54
	10/28/93		17.47	7.36	-0.38
	12/07/93		17.21	7.62	0.26
	01/25/94		16.84	7.99	0.37
	05/17/94		16.44	8.39	0.40
	08/24/94		17.35	7.48	-0.91
	11/16/94		16.28	8.55	1.07
	02/09/95		14.30	10.53	1.98
	05/11/95		15.52	9.31	-1.22
	08/17/95		16.91	7.92	-1.39
	11/20/95		17.26	7.57	-0.35
1/3/1996 ¹		16.03	8.80	-0.88	
02/22/96		13.96	10.87	3.30	
05/16/96		15.61	9.22	-1.65	
08/21/96		16.95	7.88	-1.34	
	11/19/96		16.69	8.14	1.08
MW-1TC (Adjacent downgradient Former Terminal Commercial Site)	08/05/92-R	24.79	17.27	7.52	
	02/10/93		15.20	9.59	2.07
	04/27/93		15.76	9.03	-0.56
	07/28/93		16.76	8.03	-1.00
	10/28/93		17.07	7.72	-0.31
	01/24/94		16.54	8.25	0.53

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Owens Corning
2001 Marina Boulevard
San Leandro, California

Well Designation	Date	Top of Casing Elevation [ft, msl] *	Depth to Water [ft]	Groundwater Surface Elevation [ft, msl] *	Change from Previous Quarter [ft]	
MW-2TC (Adjacent downgradient Former Terminal Commercial Site)	07/30/92	24.57	17.25	7.32		
	10/27/92		17.28	7.29	-0.03	
	02/10/93		14.80	9.77	2.48	
	04/27/93		15.68	8.89	-0.88	
	07/28/93		16.77	7.80	-1.09	
	10/28/93		17.08	7.49	-0.31	
	01/24/94		16.62	7.95	0.46	
	05/17/94		16.21	8.36	0.41	
	08/24/94		16.99	7.58	-0.78	
	11/15/95		16.00	8.57	0.99	
	02/09/95		14.60	9.97	1.40	
	05/11/95		15.52	9.05	-0.92	
	08/17/95		16.60	7.97	-1.08	
	11/20/95		15.92	8.65	0.68	
	1/3/1996 ¹			15.85	8.72	0.75
	02/22/96			13.87	10.70	2.05
	05/16/96			15.49	9.08	-1.62
08/21/96			16.62	7.95	-1.13	
11/19/96			16.49	8.08	1.00	
MW-3TC (Adjacent downgradient Former Terminal Commercial Site)	07/30/92	25.35	18.43	6.92		
	02/10/93		17.40	7.95	1.03	
	04/27/93		17.03	8.32	0.37	
	07/28/93		18.07	7.28	-1.04	
	10/28/93		18.03	7.32	0.04	
01/24/94			17.87	7.48	0.16	

* = Feet above mean sea level

** = Due to ongoing construction on the former Terminal Commercial site, wells OCF-9 and OCF-10 were not surveyed in for vertical control until the summer of 1991

NA = Data not available

¹ = Wells were re-sounded to confirm groundwater elevation data collected on November 20, 1995