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next week

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Applied Remedial Services, Inc.

September 4, 1998

SLC4882

Susan L. Hugo
Senior Hazardous Materials Specialist
Division of Environmental Protection
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Subject: Soil Backfill and Site Grading Activities Final Report
2001 Marina Blvd., San Leandro, California

Dear Susan:

Applied Remedial Services, Inc. is pleased to present the attached report which describes our remedial activities conducted at the former Owens Corning facility located on 2001 Marina Blvd. in the City of San Leandro, California.

Do not hesitate to call should you need any further clarifications.

Sincerely,

Michael Kara

Michael F. Kara
Manager, Remedial Services

Attachment

cc: Dr. Ravi Arulananthum, RWQCB - Staff Toxicologist
Mike Bakaldin, City of San Leandro Fire Department-Hazardous Materials Coordinator
Donald Bruzzone, Bigge Street Investors - General Managing Partner

**Final Report
Soil Backfill and Site Grading Activities**

**Former Owens Corning Facility
2001 Marina Blvd.
San Leandro, California**

September 4, 1998

Prepared by:

Applied Remedial Services, Inc.

Prepared for:

**Bigge Street Investors, LLC
1200 Snyder Lane
Walnut Creek, California**

CERTIFICATION STATEMENT

We, Michael F. Kara, Samir K. Abudayeh, and Elias A. Rashmawi, certify that this final report entitled "Soil Backfill and Site Grading Activities," and all attachments for the former Owens Corning Facility, located at 2001 Marina Blvd., San Leandro, California, were personally researched and prepared in accordance with a system designed to assure that the information submitted was properly gathered and evaluated. This information is, to the best of our knowledge and belief, true, accurate, complete and satisfy the scope of work prescribed by the client as approved by the Regional Water Quality Control Board and Alameda County Department of Environmental Health - Division of Environmental Protection. We are aware that there are significant penalties for submitting false information.

Michael F. Kara
Michael F. Kara
Manager, Remedial Services



9/4/98
Date

Samir K. Abudayeh
Samir K. Abudayeh, P.E.
Project Engineer



9/4/98
Date

Elias A. Rashmawi
Elias A. Rashmawi
Manager, Field Operations

9/4/98
Date

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Final Report
Soil Backfill and Site Grading Activities

Former Owens Corning Facility
2001 Marina Blvd., San Leandro, California

1.0 INTRODUCTION

At the request of Mr. Donald J. Bruzzone, General Managing Partner of Bigge Street Investors (BSI), Applied Remedial Services, Inc. (ARS) has prepared the following report in order to describe remedial activities that were conducted at the former Owens Corning Fiberglass (OC) facility located at 2001 Marina Boulevard in the City of San Leandro, California (the "Site", Figure 1). BSI intends to develop the Site as a storage warehouse facility. ✓

The activities described in this report were conducted in accordance with an approved document entitled "Workplan for Soil Backfill and Site Grading Activities" (Workplan). The subject Workplan was submitted by ARS to the Regional Water Quality Control Board (RWQCB) and the Alameda County Environmental Health Services - Environmental Protection (ACEHS) on June 3, 1998. At the request of OC's management, the Workplan was subsequently amended on June 17, 1998 in order to reflect appropriate description of the building at the Site and the main source for subsurface petroleum hydrocarbon contamination.

The subject Workplan fully incorporated provisions of a document entitled "Risk Evaluation and Management Plan" (REMP) completed by Geomatrix Consultants (Geomatrix), of San Francisco, California, in January 1997, and approved by the RWQCB and ACEHS. Geomatrix drafted the REMP for OC, the former Site owner. The REMP proposed a Long-Term Management Plan for the subject Site that addressed and included: procedures for soil handling, stockpiling, and disposal; procedures to minimize generation of dust & erosion during Site development activities; and long-term management of petroleum hydrocarbon affected soil at the Site. ✓

Upon consideration of the cumulative information presented for the subject Site, and based on recommendations in Geomatrix's REMP, ACEHS and RWQCB issued a site closure letter on January 7, 1998, entitled "Case Closure-Owens Corning Property (SLIC 4882)". The case closure letter stated that, the REMP was acceptable provided the following conditions were met:

- Assurances that the site management plan will be maintained in the future, including a letter outlining the process of deed notification. ✓
- A map indicating the area where the stockpiled soil will be reused and contained at the site. ✓
- Copies of the recorded deed notice should be submitted to this office and San Leandro Building and Planning Department.
- Appropriate measures must be taken to handle any contaminated soil or groundwater which is excavated during redevelopment of the site.

In May 1998, ARS attended a meeting at RWQCB to further clarify their requirements; a representative from ACEHS was also present. The issues addressed during the meeting included:

- Future Site use and development;
- The proposed soil backfill and Site grading activities;
- Construction activities and groundwater dewatering;
- Risk management procedures; and
- Contents of the deed notification documents.

2.0 SITE BACKGROUND

The subject Site is approximately 9.5 acres located on the southern portion of Marina Boulevard in the City of San Leandro, California. Businesses in the general vicinity of the Site are composed mostly of commercial and light industrial facilities. The Site formerly housed a roofing and asphalt manufacturing plant operated by OC. The plant was dismantled in 1988, and the Site has been vacant since. The OC manufacturing plant consisted of a large warehouse building utilized as a roofing shingle manufacturing line, paved and unpaved parking areas, and several above- and below-ground product storage tanks and vessels.

The underground storage tanks (USTs) consisted of two waste oil tanks formerly located in the paved parking area along Marina Blvd., gasoline and diesel USTs (one each) formerly located near the southeast corner of the building, and an underground cistern located west of the southwest portion of the warehouse. The two waste oil USTs, gasoline, and diesel USTs were removed by Zaccor Corporation in March 1988. The underground cistern, which reportedly contained wastewater and product from the asphalt processing plant, was located and removed during site remediation activities conducted in 1989.

The Site has undergone extensive characterization and remediation activities by several consultants and environmental contractors between 1990-1995. Approximately 20,000 cubic yards (cy) of petroleum hydrocarbon impacted soil were excavated from several locations at the site, Figure 2 presents the former locations of the excavated areas. The excavated soil was then stockpiled along the eastern and southeastern portion of the site.

Additional Site investigative activities were conducted by McLaren Hart (MH) on November 4, 1994 and February 10, 1995. MH documented their findings on December 21, 1995 in a report entitled "Final Letter Report Soil Characterization". MH's objectives were to investigate the following issues:

- Determine the physiochemical characteristics of the stockpiled soil.
- Verify that the stockpiled soil is not a hazardous waste (Federal RCRA and California Hazardous).
- Provide laboratory data for evaluation of treatment/disposal options for stockpiled soil.

MH concluded that analytical results of soil characterization activities indicated that the majority of the stockpiled excavated soil was affected by the blowing distillate ("Blowdown Oil") (BO) associated with former asphalt processing activities at the Site. Blowdown oil is a former process related chemical that is formed when air is blown through asphalt flux and the resulting vapors condense as a mixture of water and blow-down oil. Medium to high boiling point compounds with 12-33 carbons are contained in the blowdown oil. Blowdown oil concentrations were detected at levels between 410 to 6,200 mg/Kg in soil

samples collected from stockpiled soil at the southern portion of the property. The average concentration was calculated at 2,419 mg/kg.

Heavy metals were not detected at concentrations in excess of Total Threshold Limit Concentration set in the California Administrative Code, Title 26, Division 22, Section 66699. Semi-volatile organic compounds measurable via EPA Method 8270 TCLP were detected below their respective TCLP limits. Residual levels of three Volatile Organic Compounds (VOCs) measured via EPA Method 8240 were detected.

Reactive anions sulfide and cyanide were not detected at levels in excess of regulatory limits. Results from a bench-scale soil washing study were inconsistent, the study included the testing of several solvents at various acidic conditions in order to efficiently extract TPH-BO from the soil matrix. MH concluded that there was no reproducible correlation between the removal of TPH-BO from soil and the extractant used in the soil washing experiment.

In 1997 Geomatrix completed a REMP which provided an overall summary of all completed environmental activities including the advancement of soil borings and monitoring wells, the results of quarterly groundwater monitoring events, and site remediation. The following summary was provided by Geomatrix:

"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). 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.

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. 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, total petroleum hydrocarbons as blowdown oil, semivolatile organic compounds and reactivity, corrosivity, and ignitability.

With the exception of minimal levels of carbon disulfide, acetone, and 2-butanone, VOCs were not detected in the stockpile soil samples. The TPHbo 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 interference. TCLP tests were performed on two samples and analyzed for leachable 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. Results of the RCI testing indicated that the soil was nonreactive, noncorrosive, and not ignitable.

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. 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 TPH_{bo} 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."

3.0 POTENTIAL CHEMICALS OF CONCERN

3.1 Soil

Based on a review of available data, Geomatrix concluded that the primary source of chemical contamination at Site was due to the presence an underground fume line that contained the blowing distillate ("blowdown oil") which was associated with asphalt processing operations at the Site. Geomatrix reported that blowdown oil was detected by former consultants at the Site at levels between 410 to 6,200 mg/Kg in soil samples collected from soil stockpiled at the southern portion of the Site.

Blowdown oil represents a variable mixture of chemicals that do not have descriptive health criteria; therefore, it cannot be considered directly as a chemical of potential concern. Poly-Nuclear Aromatic compounds (PNAs) and the aromatic components in gasoline (BTEX) were not detected in the collected soil samples. Three Volatile Organic Compounds (VOCs) (acetone, methyl ethyl ketone, and carbon disulfide) were detected at residual levels below industrial Preliminary Remedial Goal levels set for an industrial scenario. Therefore, the concentrations of these VOCs were below levels associated with adverse health effects. Heavy metals were not detected at concentrations that would pose adverse health effects.

3.2 Groundwater

3.2.1 Findings of Previous Groundwater Monitoring Events

As previously indicated, 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 of the monitoring wells for chemical analysis, and collection of groundwater

level measurements to evaluate the groundwater gradient beneath the Site. Subsequently, 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. The locations of the monitoring wells are indicated on Figure 3.

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. On November 21, 1997, MH completed a final round of groundwater monitoring. The collected groundwater samples were analyzed for TPH-BO, TPH-G and BTEX.

During the November 1997 monitoring event, groundwater flow at the Site was in a southwesterly direction, which is consistent with historical groundwater flow directions observed at the Site. The groundwater flow gradient has increased from 0.0028 ft/ft in August 1997 to 0.0031 ft/ft in November 1997. Groundwater surface elevations have increased an average of 0.38 feet from the previous quarter (August 1997), most likely due to an increase in seasonal rainfall and subsequent groundwater recharge. MH reported that no sheen or evidence of free product was observed.

TPH-BO was detected in samples collected from all monitoring wells. TPH-BO concentrations detected in samples collected from monitoring wells MW-5 through MW-7, and OCF-10 in November 1997 were lower than TPH-BO concentrations detected at these wells in August 1997. TPH-BO concentrations detected in wells MW-1, MW-3, MW-4, and OCF-9, are higher than TPH-BO concentrations detected at these wells in August 1997. Fluctuations in TPH-BO concentrations observed in November 1997 are similar to those observed historically at the Site.

Components of BTEX were not detected in groundwater post 1990, and PNAs were not detected at the Site. Lead was the only inorganic chemical monitored in groundwater. Samples collected in 1988 indicated the presence of lead concentrations above California MCL, whereas samples collected in 1989 indicated the presence of lead concentrations below California MCL. Geomatrix concluded that since lead concentrations in soil were within background concentrations and the 1989 sampling indicated groundwater lead concentrations below MCLs, potential exposure to lead in groundwater should not be associated with adverse health effects.

3.2.2 *Monitoring Well Destruction*

On March 13, 1998, MH supervised the sealing and destruction of all on-site and off-site monitoring wells. Well destruction activities were completed by Gregg Drilling of Martinez, California, a licensed C-57 drilling contractor. Copies of the well completion report are attached in the Appendix.

3.3 *Conclusions by Previous Consultants at the Site*

Geomatrix concluded that the only potential concern at the Site is related to the potential effect on groundwater from petroleum hydrocarbon-affected soil that will be placed in the existing excavation at the Site. Accordingly, Geomatrix recommended isolating the petroleum hydrocarbon-affected soil from the groundwater by implementation of appropriate long-term management procedures.

The recommended procedures involved the following activities:

Soil Containment:

Petroleum hydrocarbon (PHC) affected soil stockpiled at the site should be placed at least two feet above the highest recorded depth to groundwater measured at 12 feet above Mean Sea Level (MSL), in order to prevent impacted soil from contacting the groundwater in the future.

Soil Management Procedures During Construction:

Soil Handling: PHC-affected soil should be lightly sprayed with water to minimize fugitive dust emissions during soil containment and site construction activities.

Soil Stockpiling: Temporary stockpiles on-site should be lightly sprayed with water to minimize dust during "dry" season, or covered with plastic sheeting or other similar material during "rainy" season to control run-off and erosion.

Soil Disposal:

If blowdown oil-containing soil is excavated during site construction that cannot be replaced into the containment area due to site development constraints, and the affected soil requires off-site disposal, the soil should be characterized and transported to an appropriate off-site landfill or recycling facility.

Site Access: Site access should continue to be limited by the presence of the surrounding fence until completion of future site construction.

Long Term Management: Long-Term Soil Management Procedures, including appropriate isolation of contaminated soil and appropriate care must be exercised, if additional trenching or excavation in the affected areas occur.

Upon consideration of the cumulative information presented for the subject Site, and based on recommendations presented in Geomatrix's REMP, ACEHS and RWQCB issued a site closure letter on January 7, 1998, entitled "Case Closure-Owens Corning Property (SLIC 4882)". The case closure letter stated that the REMP was acceptable provided the following conditions were met:

- Assurances that the site management plan will be maintained in the future, including a letter outlining the process of deed notification.
- A map indicating the area where the stockpiled soil will be reused and contained at the site.
- Copies of the recorded deed notice should be submitted to this office and San Leandro Building and Planning Department.

In May 1998, ARS completed a limited subsurface investigation of the Site. Based on the cumulative information for the Site, including ARS' independent findings, ARS prepared a workplan entitled "Workplan for Soil Backfill and Site Grading Activities" (Workplan), which fully incorporated Geomatrix's recommendations as presented in the REMP, and the mandates of RWQCB and ACEHS.

The subject Workplan was submitted to RWQCB and ACEHS on June 3, 1998. At the request of OC's management, the Workplan was amended on June 17, 1998 in order to reflect appropriate description of the building at the Site and the main source for subsurface petroleum hydrocarbon contamination. The

subject Workplan was approved by RWQCB and ACEHS in a letter dated June 22, 1998. A copy of the Workplan approval letter is attached in the Appendix.

4.0 ARS RECENT SUBSURFACE INVESTIGATION

In May 1998, ARS completed a limited Site investigation. ARS' activities were performed in accordance with the Purchase and Sale Agreement between ARS' client Bigge Street Investors (BSI) and the Site owner OC. The subject agreement allowed BSI to perform an environmental assessment of the Site in order to investigate the presence of hazardous substances prior to finalizing sale of the property. Construction activities associated with future Site development may involve handling of soil and groundwater that may be impacted with hazardous substances as a result of previous industrial activities. As such, ARS completed the investigative activities in order to:

- Satisfy the performance of due diligence by BSI;
- Research past industrial activities, and review available records & reports for the Site;
- Investigate the potential presence of accessible hazardous substances & waste at the Site;
- Investigate regulatory agencies requirements for the proposed future development; and
- Assist in quantifying the approximate costs associated with Site remedial activities.

4.1 Completed Scope of Work

The activities completed by ARS were performed in order to provide additional investigation and characterization of areas at the Site that were previously identified by former consultants and environmental remediation companies as "Areas of Concern (AOC)". The AOC at the Site included the following locations which are described in Figure 4:

- Previously excavated area of the former underground cistern;
- Former locations of fuel underground storage tanks (USTs);
- Former locations of waste oil underground storage tanks (USTs);
- Overhead wires area;
- Asphalt shingle debris area;
- "Transported soil area" located in the south western corner of the Site;
- Contaminated stockpiled soil areas; and
- railroad spur area

ARS utilized an excavator operated by P.M. Morrill, a licensed contractor with a Class A Engineering license and a Hazardous substance Removal Action Certification, for field investigative activities. As the investigation proceeded, ARS' field engineer examined excavated spoils in order to identify the potential presence of contaminants. As soil samples were collected in the field, spoils were examined for type, texture, structure, odor and color. In addition, a portable set of instruments equipped with a flame and photo ionization detectors (FID and PID), designed for the detection of volatile organic compounds (solvents) and petroleum hydrocarbon related hydrocarbon fuels, were utilized to identify the potential presence of petroleum hydrocarbon related material.

Soil samples were collected from each of the previously identified locations for visual and field inspection. Where necessary, samples for laboratory analysis were collected. Samples to be analyzed for

petroleum hydrocarbon related compounds were placed in brass tubes, sealed with pre-cut teflon tape, capped with plastic end caps, and sealed with duct tape at each end. These soil samples were placed on ice pending delivery to Chromalab of Pleasanton, California, a state-certified laboratory, for analysis. Samples to be analyzed for heavy metals were collected in plastic zip-lock bags, marked and delivered to Micro Analytical of Emeryville, California, a state-certified laboratory, for analysis. All samples were handled under strict chain of custody procedures.

All explored areas were appropriately backfilled to the pre-existing ground surface. The locations were surveyed appropriately by ARS personnel and marked on site maps.

4.2 ARS Findings and Areas of Concern

ARS findings and area descriptions are summarized below. The locations of these areas (A to J) are depicted on Figure 5.

Area	Description
------	-------------

- | | |
|----|---|
| A. | <i>Asphalt Processing Area (APA) - Stock Pile (SP):</i> A soil layer approximately 3 feet deep affected with petroleum hydrocarbons was found at the base of a stockpile located 450 feet to the south of Marina Blvd. and 300 feet to the west of Cal Trans (Caltrans constitutes the eastern property boundary of the subject Site). |
| B. | <i>APA surficial tar affected soil:</i> A surficial soil layer was found to be affected with tar-like substance. The area was located approximately 500 feet south of Marina Blvd. and 350 feet west of Caltrans. |
| C. | <i>APA deep Petroleum Hydrocarbon (PHC) soil:</i> ARS encountered a deep layer (4'-12' bgs) of soil affected with petroleum hydrocarbon in the former asphalt processing area approximately 510 feet south of Marina Blvd. and 400 feet west of Caltrans. Soil sample S-6 collected at 18 ft. bgs indicated the presence of diesel at 3,100 mg/kg, motor oil at 2,200 mg/kg, oil & grease at 420 mg/kg. Kerosene was not detected above the Method Detection limit (MDL). |
| D. | <i>Tar layer west of excavated ground:</i> A surficial layer of tar-affected soil was encountered at an area approximately 750 feet south of Marina Blvd. and 375 feet west of Caltrans. |
| E. | <i>PHC-affected soil in the south westerly wall of the excavation pit:</i> An oval shaped area of deeper PHC soil (approximately 4 feet) was encountered 800 feet to the south of Marina Blvd. and 325 feet to the West of Caltrans. |
| F. | <i>Base of main SP:</i> The base of the main SP located along the southern portion of the Site was found to be affected with elevated levels of PHCs between 7 and 11 feet from the top of the SP. |
| G. | <i>Area beneath main soil stockpile:</i> Roofing shingle waste (RSW) and asphaltic debris were detected in the southern portion of the Site in the area located within 10 feet from the former building pad, the southern property line, the eastern property line. The east to west extent of the RSW was measured at 315 feet. |
| H. | <i>PHC-affected area in southeast corner of building within the former UST areas:</i> Petroleum hydrocarbon affected soil was found approximately 725 feet from Marina Blvd. and 75 feet to the |

west of Caltrans at the southeastern corner of the former building. Laboratory analytical results of soil sample S-1 collected at 16 ft. bgs indicated the presence of diesel at 130 mg/kg, gasoline and its aromatic components BTEX were not detected above their respective MDLs.

- I. *Tar pit in building:* A 7'x13' concrete pit lined with a steel vault was found in the building pad approximately 580 feet to the south of Marina Blvd. and 50 feet from the eastern boundary of the building pad. The pit contained a viscous tar like substance.
- J. *Roofing shingles granules pit in building:* A 5'x5' concrete pit was detected approximately 520 feet to the south of Marina Blvd. and 50 feet from the eastern boundary of the building pad. The pit contained multi-colored granules that were probably utilized in past manufacturing processes. A composite sample of the granules was analyzed for Title 22 California Assessment Manual (CAM) 17 heavy metals. Laboratory analytical results indicated the presence of slightly elevated lead levels at 105 mg/kg, subsequent CAL-Wet extraction of the sample (STLC) indicated the presence of soluble lead at 7.1 mg/l. Laboratory certificates of analyses are attached in the Appendix at the end of report.

Selected soil samples were also analyzed for PCBs (sample S-5), and the LUFT metals Cadmium, Chromium, Lead, Nickel and Zinc (sample S-6). Laboratory analytical results did not indicate the presence of PCBs above their respective MDLs. Residual background concentrations of the previously identified heavy metals were detected.

Additional soil samples were collected from test pits and the aeration pads located along the eastern portion of the Site. The samples were analyzed for lead. Lead levels ranged from below MDL of 9 mg/kg to a maximum of 94 mg/kg. The average lead concentration in the collected soil samples was calculated by ARS at 17 mg/kg. Average lead concentration in collected soil samples is significantly lower than background concentration for the San Francisco Bay Area measured at 47 mg/Kg by ARS from data presented in the United States Geological Survey Professional Paper 1270, entitled "Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States." Figure 5 identifies the location of soil samples analyzed for lead that were collected from excavation pits at the Site.

5.0 ARS' REMEDIAL ACTIVITIES

The scope of work conducted by ARS and outlined in this report was based on several factors. The activities were designed to meet site construction development requirements, and regulatory agency mandates as presented in the ACEHS' Case Closure-Owens Corning Property (SLIC 4882) letter. ARS also relied on recent investigative findings and information gathered from the following reports:

- Risk Evaluation and Management Plan, Geomatrix Consultants (GC), January 1997.
- Draft Quarterly Groundwater Monitoring Report, 4th Quarter 1997, McLaren Hart, January 15, 1998.
- Alameda County Environmental Health services, Case Closure Letter, January 7, 1998.

The scope of work conducted by ARS included the following specific tasks:

- Task 1: Regulatory Agency Permits
- Task 2: Health and Safety Plan
- Task 3: Groundwater De-Watering and Discharge

- Task 4: Site Preparation
- Task 5: Soil Excavation, Segregation and Backfilling
- Task 6: Off-site Disposal
- Task 7: Site Grading Activities

These tasks are described in more detail below:

5.1 Regulatory Agency Permits

A Special Environmental Compliance Permit application was filed with the San Leandro Water Pollution Control Plant (WPCP) in preparation for groundwater dewatering activities and discharge into the sanitary sewer system. The dewatering activity was necessary for geotechnical requirements in order to stabilize the base of the excavation pit and lower the water table so as to achieve appropriate compaction prior to commencement of soil backfill activities. In accordance with Regulation 8, Rule 40 of the Bay Area Air Quality Management District (BAAQMD), a Notification Form for Excavation and handling of petroleum hydrocarbon affected soil was filed. All construction-related permit applications were filed by the general contractor with the appropriate City, County, and State agencies. Copies of all Site permits are enclosed in the appendix at the end of the report.

5.2 Development of a Site Health and Safety Plan

In accordance with Occupational Safety and Health Administration (OSHA) and ACEHS guidelines, ARS developed a Site-specific Health and Safety Plan (HSP). The HSP included an analysis of hazards that may be encountered by on-site workers conducting the proposed work and precautions to mitigate the identified hazards. Site activities were completed without any incidents.

5.3 Groundwater Extraction and Discharge

The dewatering activities described in this section were conducted in order to stabilize the floor of the excavation pit and to comply with geotechnical requirements for excavation base compaction prior to backfilling activities.

5.3.1 Groundwater Discharge Permit

Pursuant to regulations by the City of San Leandro Water Pollution Control Plant, as set forth in Title 12, Chapter 5 of the City of San Leandro Administrative Code, ARS submitted a Special Environmental Compliance application on May 28, 1998, requesting the discharge of ponded water into the City of San Leandro's sanitary sewer system. On June 4, 1998, permit number SD-028 was granted to Bigge Street Investors allowing for discharge of the subject water in accordance with wastewater discharge limitations and requirements.

On June 4, 1998, a representative of WPCP collected several representative samples from the ponded water for independent laboratory analysis to assess whether the subject water meets sanitary sewer discharge criteria. A letter from WPCP dated August 6, 1998, stated: "As expected, all items analyzed were found to be in compliance with discharge standards". A copy of the WPCP application, approval letter, and laboratory certificates of analyses is attached in the appendix.

5.3.2 Dewatering System Installation

A groundwater de-watering sump was installed in the northwestern corner of the former excavation pit. The sump was composed of a 12-inch perforated PVC drainage pipe that was installed in the center of a gravel pit extended to a depth of 4 feet below the excavation's floor to allow the accumulation of water.

A self-priming centrifugal diesel-operated suction pump was utilized for water extraction. The pump's intake hose was installed in the perforated extraction pipe and adjusted to deliver approximately 10 to 15 gallons per minute. The total daily discharge rate was estimated at 10,000 to 12,000 gallons. Prior to commencement of discharge, the location of the sanitary sewer hookup was verified by a representative from WPCP and by P.M. Morrill of Hayward, California, a licensed general engineering contractor (license # 672704). P.M. Morrill completed the layout and connection of all discharge piping and associated pump setup. Water from the excavation pit was only discharged to City of San Leandro sanitary sewers for treatment at the WPCP. Discharge activities were conducted between June 5 and June 15, 1998. There were no incidents of overflow.

5.4 Site Preparation

Prior to commencement of soil excavation, backfill, and grading activities, the majority of concrete foundation and slabs present at the Site were removed and crushed into small pieces. The concrete was then placed and compacted in the floor of the excavation to solidify the base portion of the excavation pit and achieve geotechnical stability prior to placement of soils. The placement and compaction of concrete was completed under the observation, supervision, and testing of Jensen-Van Lienden Associates, Inc., the geotechnical engineering consultant. All shrubs, bushes, trees, vegetative roots, and miscellaneous organic debris were removed from the excavation pit prior to the addition of concrete and soil. The debris was stockpiled on visqueen for subsequent off-site transport and disposal at BFI-Vascoe Road Landfill, a Modified Class II facility.

5.5 Soil Excavation, Segregation and Backfilling

All soil excavation, trenching, loading, backfill and other subsurface related activities were completed by P.M. Morrill, of Hayward, California, a State-licensed engineering contractor with a Hazardous Substance Removal Action Certification under the direct supervision of ARS. All backfilled areas at the Site were tested for compaction densities by Jensen-Van Lienden Associates, Inc., a geotechnical engineering firm.

5.5.1 Segregation of Petroleum-Affected Soils

Based on existing and available data collected from previous investigative activities completed at the Site by ARS and former environmental consultants and remediation contractors (Zaccor, Ensco, Exeltech, Resna, McLaren Hart, and Geomatrix) the approximate spatial extent and location of soils affected with elevated petroleum hydrocarbon related compounds were identified (Figure 4). The historical "Areas of Concern" were identified as follows:

- former UST location in the southeastern corner of the building;
- former cistern area;
- an area located to the southwest of the former excavation; and

- the lower 3 feet of two stockpiles located at the southern edge of the property and to the north of the former excavation area.

The clean overburden soils from all the above listed areas were excavated and segregated in preparation for backfill activities. A Photo Ionization Detector (PID) and a Flame Ionization Detector (FID) were used to screen the excavated soils for short and medium chain petroleum hydrocarbon related compounds (C1-C12). Samples of the excavated soils to be screened were collected and placed in zip-lock bags and probed using the field detectors. ARS also inspected the excavated soils for evidence of petroleum hydrocarbon contamination that may be detected from field observations, odors, discoloration, and stratigraphy. Site preparation prior to excavation activities included the removal of all surficial vegetation and debris, and wetting the surface of the soil to be excavated as necessary to control dust emissions.

5.5.2 Soil Excavation & Backfill Activities

Soil backfill activities were conducted in the following sequential steps:

- Step 1: The dewatering activities were completed to the satisfaction of the geotechnical engineering firm as previously detailed.
- Step 2: All organic material, soft soils and loose silts were removed from the base of the excavation pit in order to establish an acceptable geotechnical foundation.
- Step 3: A layer of approximately 1.5 feet of clean crushed concrete was placed and compacted in the floor of the excavation pit.
- Step 4: Clean overburden soils from the top of the existing stockpiles and from the eastern unaffected portion of the Site were placed immediately above the crushed concrete layer to an elevation of 2 feet above the historical groundwater level (14 feet MSL).
- Step 5: Petroleum hydrocarbon-affected soils were placed above the clean overburden to an elevation of 20 feet MSL.
- Step 6: An additional layer of clean un-affected overburden soils was excavated from:
 - the upper most surficial portion of the stockpile;
 - former building pad area;
 - eastern portion of the Site; and
 - clean soil located beneath the roofing shingle waste area at the southern portion of Site

This layer was then placed above the petroleum hydrocarbon-affected soils to the final top of soil grade elevation of 24.3 feet MSL. The placement of the clean soil layer (between 20-24 ft MSL) was conducted in order to isolate future on-site construction workers from contact with contaminated soil, and to decrease the likelihood for handling, and off-site transport & disposal of contaminated soil during foundation and utility construction activities.

All soil layers were placed in 6" lifts and were compacted to the required density as required by the geotechnical engineer on-site. The dimensions and location of the area where the PHC affected soil was placed is depicted on Figure 6. The northern boundary of the original excavation pit was enlarged approximately 40 feet in a south to north direction in order to accommodate the additional volume of PHC-affected soils to be placed between 14 feet MSL and 20 feet MSL.

5.6 Excavation and Backfill of Roofing Shingles

Approximately 3,000 cubic yards of roofing shingle waste (RSW) and asphaltic debris were encountered in the southern portion of the Site between the edge of the former building pad and the rear fence immediately below the PHC affected stockpiled soil. The east to west extent of the RSW was previously measured at 315 feet. The waste appeared to have been stockpiled and scattered during previous roofing shingle manufacturing operations, the layer ranged from few inches to approximately 2 feet in thickness. Photos of the subject material are enclosed in the appendix at the end of the report.

The objectives of ARS' sampling activities was to determine through laboratory confirmation whether the roofing shingle waste contained asbestos. Prior to handling the RSW, ARS collected 6 representative samples in plastic zip-lock bags. RSW samples to be submitted for testing were identified by visual appearance, color, consistency and location. The samples were submitted to Micro Analytical Laboratories, Inc. of Emeryville, California, a State-certified analytical testing laboratory. The samples were analyzed via Polarized Light Microscopy (PLM), EPA Method 600/R-93/116 "Method for the determination of Asbestos in Bulk Building Materials". The laboratory analytical results did not indicate the presence of any asbestos fibers in the collected samples. Laboratory analytical certificates are attached at the end of this report.

Subsequently, ARS attempted to dispose of the RSW at an appropriate Class II/III non-hazardous waste landfill. The costs associated with the transport and disposal activities were significant, and un-acceptable to the Site owner. As such, and in an effort to find a fiscally acceptable solution for the RSW issue, ARS in consultation with the geotechnical engineer, structural engineer, and upon final approval of the Site's owner and regulatory agency representatives, supervised the excavation of an engineered trench and placement of the RSW beneath the parking area in back of the new building. The dimensions, and spatial extent of the subject trench are depicted in Figure 7.

The RSW layer was initially excavated and stockpiled. The trench was subsequently excavated in an area between the southern property fence and rear of the proposed new building. The trench was gradually extended to 394 feet in a west to east direction and 45 feet in a north to south direction. The RSW layer, co-mingled with soil, was placed between 14 and 20 feet MSL.

The clean underlying soil from the trench excavation area was stockpiled and gradually utilized in the upper 2 feet of surficial soils beneath the floor of the proposed building between 22-24 feet MSL. In conformity with the remainder of the Site, a layer of clean overburden soil was placed over the RSW/soil layer from 20 feet MSL to the proposed final grade (approximately 23.5 feet MSL).

All soil and RSW layers were placed in 6" lifts and were appropriately compacted to the required density. A representative from Jensen-Van Lienden, the geotechnical firm for the subject development, observed all RSW backfill and compaction activities. The subject field remedial activities were finalized on August 10, 1998.

5.7 Transport and Disposal of Contaminated Waste

Previous Site investigative activities conducted by ARS in May 1998, were completed in order to provide additional investigation and characterization of areas at the Site that had been previously identified by former consultants and remediation companies as "Areas of Concern (AOC)" (Figure 4). ARS reported

several additional findings that were summarized in Section 4.2, the locations of these areas are shown on Figure 5.

In addition, two areas at the Site were detected by ARS to contain waste and soil affected with hazardous substances during final soil excavation and backfill activities which were completed during the past 3 months. The recently discovered contaminated areas contained waste debris (WD) that was significantly affected with asphaltic tar related material. The subject areas were located in the southwestern and middle west portions of the Site beneath soil stockpiles and concrete foundation structures.

The following sections describe in detail the location of these areas, type of waste detected, and the field remedial activities conducted by ARS in order to appropriately manage the waste. The affected areas are shown on Figure 8, photographs of the subject waste from each distinct area are enclosed in the appendix.

5.7.1 Handling of Waste Debris

Several areas at the site contained waste debris (WD) that was significantly affected with asphaltic tar related material. The debris was visibly affected with tar, and petroleum hydrocarbon related compounds; significant quantities of soil was co-mingled with the WD. The WD could not be used as backfill at the Site due to the presence of material unsuitable for geotechnical purposes.

The WD was comprised of former production waste, discarded surplus precursor production chemical material (*petroleum hydrocarbon roofing tar*), trash, storage containers, structural and mechanical component members of what appeared to be remnants of old manufacturing plant(s), such as: steel pipes, cistern top, mangled 1 & 5-gallon containers, 55-gallon drums, wood, plastic, glass bottles, bricks and metallic debris were detected at the following locations:

- 25 feet from the western property fence & 800 feet south of Marina Blvd. along southwest portion of Site in a large pit 4 feet below the floor of the former stockpile; and
- at 450-500 feet south of Marina Blvd. to the west of former building pad area in a 100 cubic feet concrete vault.

Figure 8 depicts the locations of the detected waste related material. The material was excavated, stockpiled on 10-mil visqueen, characterized and transported off-site for disposal at Laidlaw Environmental Services in Buttonwillow, California.

In order to minimize off-site transport and disposal costs, significant effort in labor and equipment was exhausted in order to segregate soil from the waste debris, the activity was performed in the following manner:

- Excavation of the WD/soil material, stockpiling, and segregation of soil from the WD
- Stockpiling of the WD on visqueen, sample collection, analyses & characterization, off-site disposal
- Soil backfill and compaction.

Approximately 120 tons of contaminated WD was removed from the site. Copies of the waste characterization sheets, land disposal restriction forms and transport manifests are attached in the Appendix.

5.7.2 Asbestos Containing Material

A 6"-pipe affected with asbestos containing material (ACM), approximately 60 feet in length, was found at a depth of approximately 3 feet bgs, at 350 feet to the south of Marina Blvd. and 300 feet west of the eastern boundary of the property. The pipe and all surrounding ACM material were initially sprayed with amended water, carefully removed from the ground, double wrapped in 6-mil visqueen layers, and bagged in ACM 6-mil 50 gallon plastic bags in preparation for disposal at a permitted facility. The material was appropriately profiled and transported to B&J Landfill in Vacaville, California, a modified Class II permitted landfill facility. All measures were instituted during the removal, packaging, and transportation of the ACM material to ensure the absence of ACM fugitive emissions in the form of dust, flaking substance, and debris.

5.7.3 Colored Granules

As previously discussed in the report, a 5'x5' concrete lined pit was detected approximately 520 feet to the south of Marina Blvd. and 50 feet from the eastern boundary of the building pad. The pit contained colored granules that may have been used in the past in the manufacturing process. A composite sample of the granules was analyzed for Title 22 CAM 17 heavy metals. The laboratory analytical results indicated the presence of slightly elevated lead levels at 105 mg/kg. Subsequent CAL-Wet extraction of the sample (STLC) indicated the presence of soluble lead at 7.1 mg/l. At the request of the disposal facility with Laidlaw Environmental Services(Laidlaw), a TCLP Wet extraction was performed on a representative sample, the results did not indicate the presence of soluble lead above the method detection limit. Laboratory certificates of analyses are attached in the Appendix.

The granule material was profiled, and characterized as a State of California regulated hazardous waste. The granules were packaged by ARS personnel in 20 55-gallon 17-H DOT approved steel drums. The drums were subsequently transported by Sturgeon & Sons, a Licensed hazardous waste hauler, to Laidlaw Environmental Services Landfill in Buttonwillow, California, a permitted Class-I Hazardous Waste disposal facility. Copies of the waste characterization sheet, land disposal restriction forms and the transportation manifests are attached in the Appendix.

5.7.4 Tar Vault

A 7'x13' steel vault located in the former building pad filled midway with roofing tar, asphalt, and petroleum hydrocarbon related compounds was excavated from the Site. A 40 cubic yard DOT-approved bin was loaded with the subject vault and transported by Denbeste Transportation, a licensed hazardous waste hauler, to Laidlaw Environmental Services. Copies of the waste characterization sheet, land disposal restriction forms and the transportation manifests are attached in the Appendix.

5.8 Final Site Grading

Following completion of all environmental activities, final Site grading was conducted by a licensed contractor to achieve the desired construction elevation requirements.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on the cumulative Site data, and present conditions including ARS' Site investigations, laboratory analytical results, and previous activities by former consultants:

- Future Site activities that will include handling of contaminated soil as a result of excavation and trenching activities should be avoided below the elevation of 20 feet above mean sea level in the areas presented on Figures 6 and 7 of this report. In the event subsurface soils below 20 feet MSL are infringed upon, appropriate soil handling procedures should be implemented to insure that protective measures for the health and safety of on-site construction workers are in effect, and to comply with OSHA requirements. Should offsite disposal of contaminated soils be required, appropriate characterization, profiling, transport and disposal of the affected soil to a permitted facility must be implemented in accordance with Geomatrix's REMP as required by RWQCB and ACEHS. A copy of the relevant sections of the REMP is attached in the Appendix.
- Currently, PHC-affected soils are present in two distinct areas within the western, and southern portion of the Site (Figures 6 and 7) up to a depth of 20 feet MSL, which is approximately 5 feet below the proposed final ground surface in the western portion of the Site beneath the concrete floor of the proposed building, and at up to approximately 3.5 feet from the asphaltic cap in the southern parking lot area in the back of building. The subject PHC-affected soil located at the western portion of the Site will be further encapsulated by the building's concrete floor. The presence of the building's roof and concrete cap in this area will further prevent any future direct surface water infiltration. All surface rainwater should be directed through the drainage system away from the building and surrounding areas into catch basins that deliver water into the storm drainage system in accordance with an approved surface drainage plan (Figure 9).
 - Direct surface water precipitation into the petroleum hydrocarbon affected soil, and roofing shingle waste trench area will be drained away as sheet flow over the ground surface that will slope towards the catch basins indicated on the drainage schematic diagram (Figure 9). In addition, the AC cap will be routinely inspected before the beginning of the rainy season of each year; and any visible cracks should be sealed. In the event the cap is breached for any reason, such as a natural disaster, weathering, or changes in site use, appropriate remedial measures discussed in the Long-Term Management Plan for the subject Site (Section 1.0) should be adhered to.
- The final version of the draft deed restriction is attached in the Appendix. Upon final approval by RWQCB's legal department, the recorded deed notice will be submitted to ACEHS, RWQCB, the City of San Leandro-HMD, and the San Leandro Building and Planning Department. In addition a letter from the Site owner, Bigge Street Investors, which assures ACEHS that the Site Management plan will be maintained in the future is enclosed in the appendix.

PHC-affected soils at the site under current site conditions and use, do not pose a threat to groundwater or to the health of workers and future occupants of the site. Accordingly, upon consideration of the cumulative information presented in this report, referenced documents of record for the subject Site, and given the written assurances by the current Site owners to comply with RWQCB & ACEHS mandates, ARS recommends that no further action be warranted at this Site and a closure letter should be issued to Site owners.

7.0 LIMITATIONS

The Site assessment and subsequent remedial measures were based primarily upon information gathered from other sources and reflects conditions at the subject property at the time of ARS' environmental assessment and cleanup activities. In developing this report, ARS relied on the accuracy of written documents, oral information and other information provided by regulatory agency personnel and others knowledgeable about the Site.

This report represents our professional experience and judgement, and a good-faith effort to obtain all available information, publicly available documents and data from regulatory agency files, and documents provided to ARS by former and current owners of the Site. Although ARS has reviewed and referenced herein such reports and findings, it should be understood that we assume no responsibility or liability for the accuracy of these reports or for the withholding by any involved parties of any reports or other information that could have had a bearing on our investigation or subsequent remedial activities.

There are no guarantees nor are there any warranties, expressed or implied, that non-permitted subsurface containers such as drums, or non-observed hazardous materials, do not exist on or beneath the subject property. The services that ARS has performed in connection with the Limited Subsurface Investigation and Final Remedial activities at the Site, are in accordance with generally accepted principles and practices applicable to the profession at this time. The data presented were obtained from qualified State certified analytical testing laboratories. We make no other warranty or representation, expressed or implied, for the work described in this report.

8.0 REFERENCES

Alameda County Environmental Health Services (ACEHS) and Regional Water Quality Control Board (RWQCB), 1998, Case Closure-Owens Corning Property (SLIC 4882), January 7.

ACEHS & RWQCB, 1998, Approval Letter for Workplan for Soil Backfill and Site Grading Activities, June 22.

Applied Remedial Services, Inc. (ARS), 1998, Workplan for Soil Backfill and Site Grading Activities, prepared on behalf of Bigge Street Investors, 2001 Marina Boulevard, San Leandro, California, June 3.

ARS, 1998, Work Plan for Site Investigative Activities, prepared for Bigge Street Investors, 2001 Marina Boulevard, San Leandro, California, May 7.

California Code of Regulations, Title 22, Section 66261.24.

City of San Leandro Administrative Code, Title 12, Chapter 5.

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.

Geomatrix Consultants, 1997, Risk Evaluation and Management Plan, Prepared for Owens-Corning World Headquarters, Fiberglass Tower, Toledo, Ohio, 1997

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, Fiberglass Tower, Toledo, Ohio 43659, January 9.

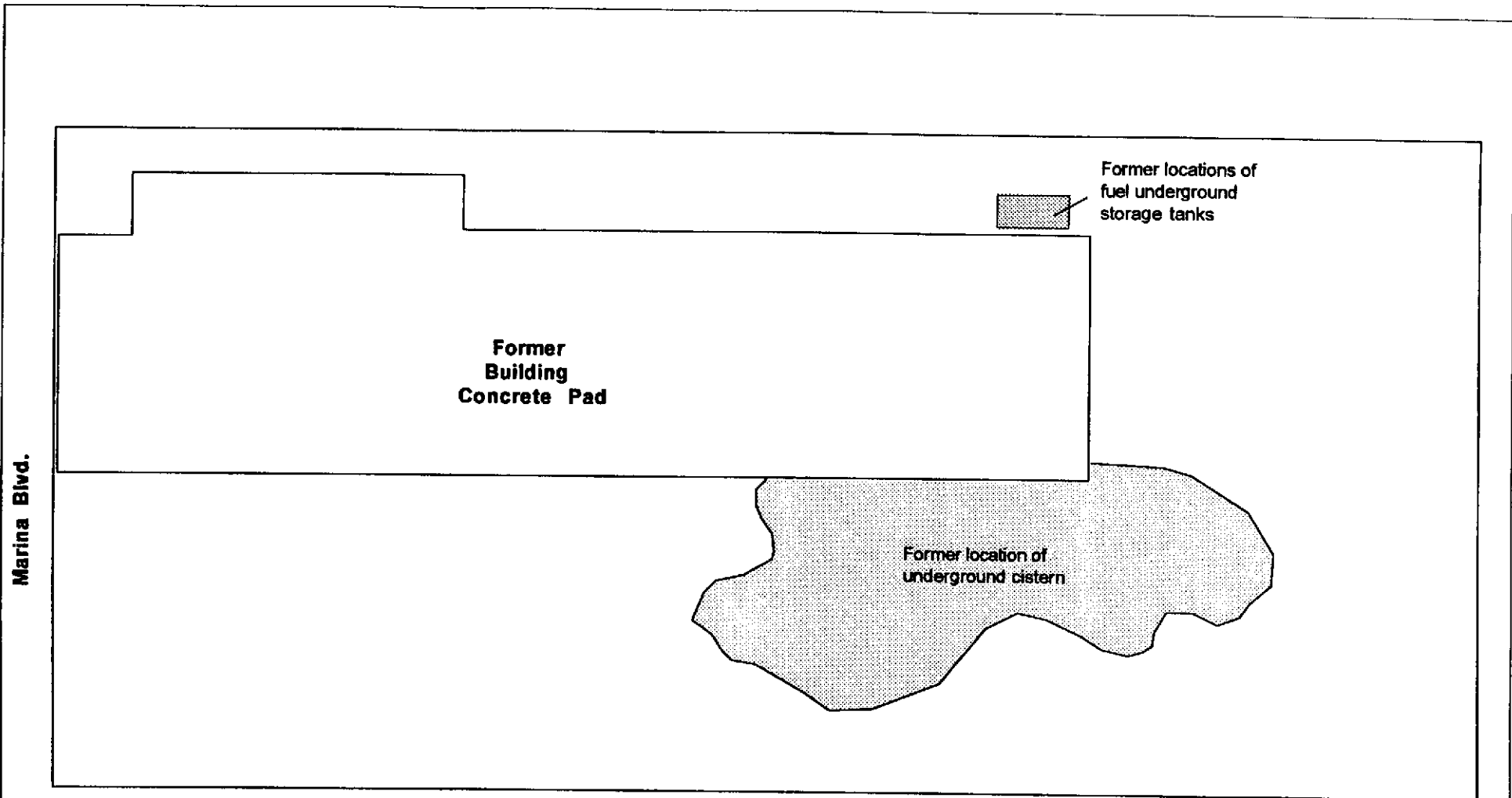
United States Geological Survey, 1984, Professional Paper 1270, "Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States.

United States Environmental Protection Agency, Region IX, 1996, Preliminary Remediation Goals (PRGs), August 1.

Figures



Scale: as depicted	September 1998	Site Location 2001 Marina Blvd. San Leandro, California	Figure 1
Applied Remedial Services, Inc.			Project # ARS-98-238



Not to scale - schematic



Figure 2	Former Location of Petroleum Hydrocarbon Excavation Areas	September 1998
Applied Remedial Services, Inc.	Former Owens-Corning Facility 2001 Marina Blvd., San Leandro, California	ARS Project No. 98-238

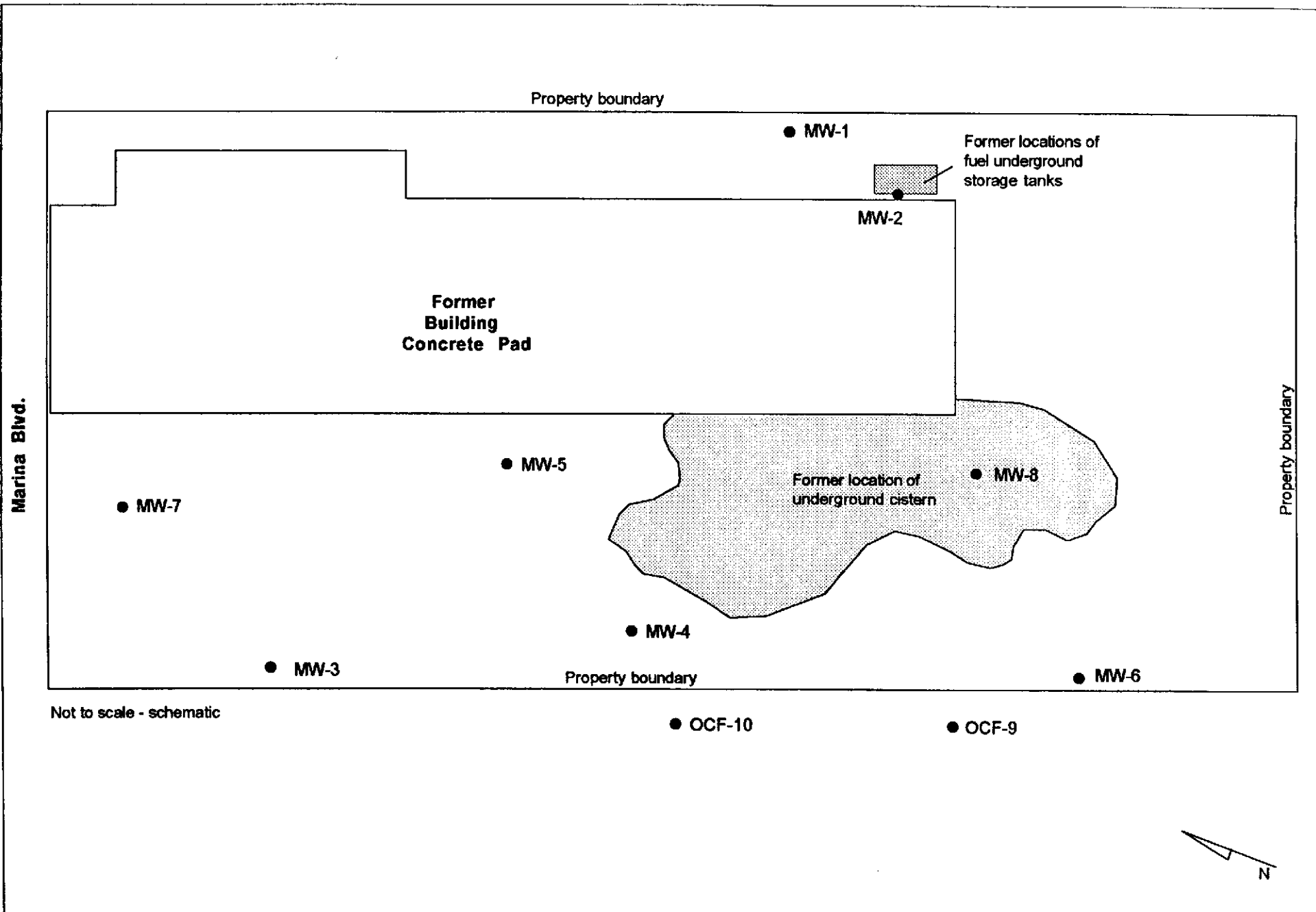
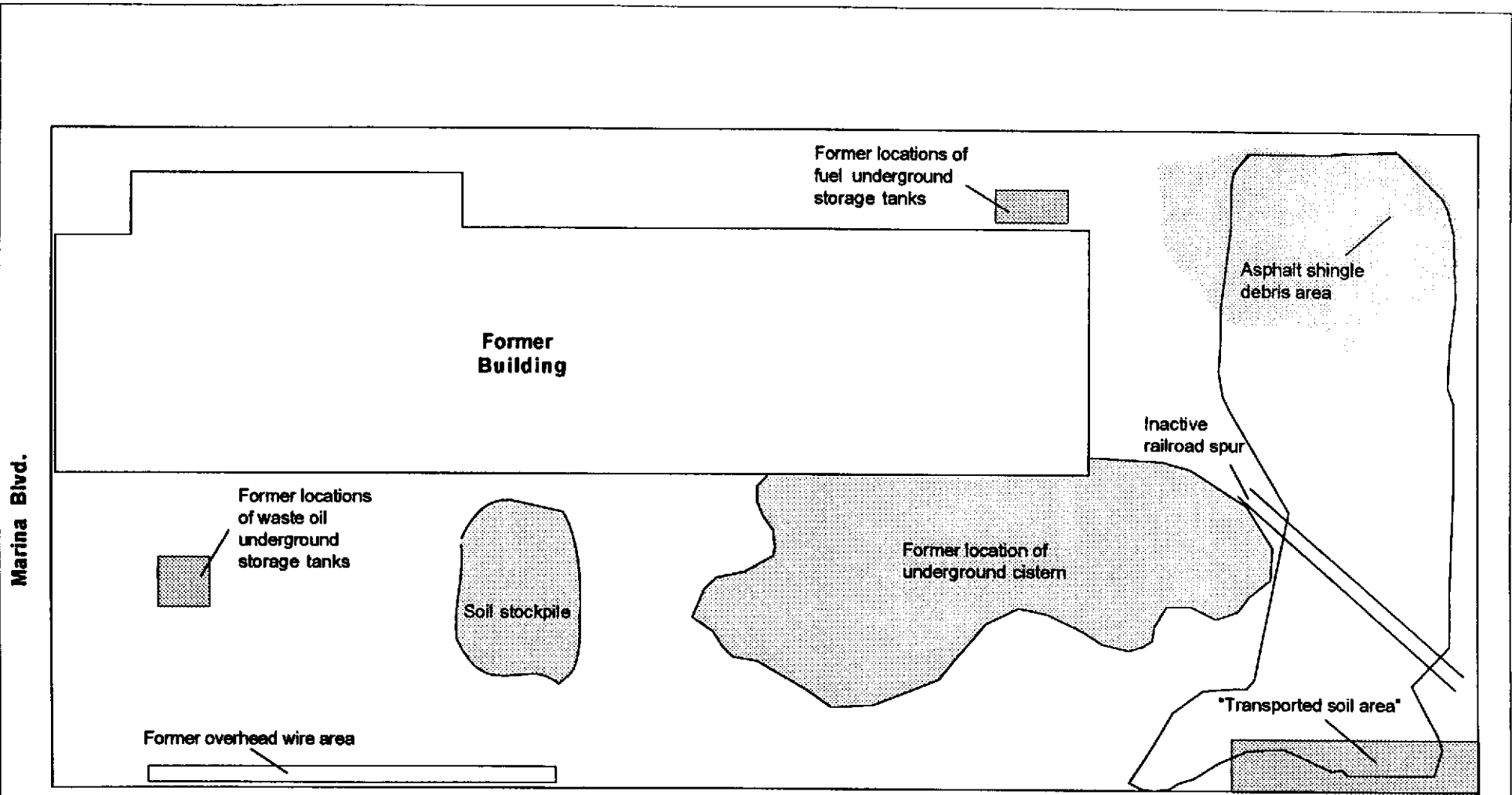
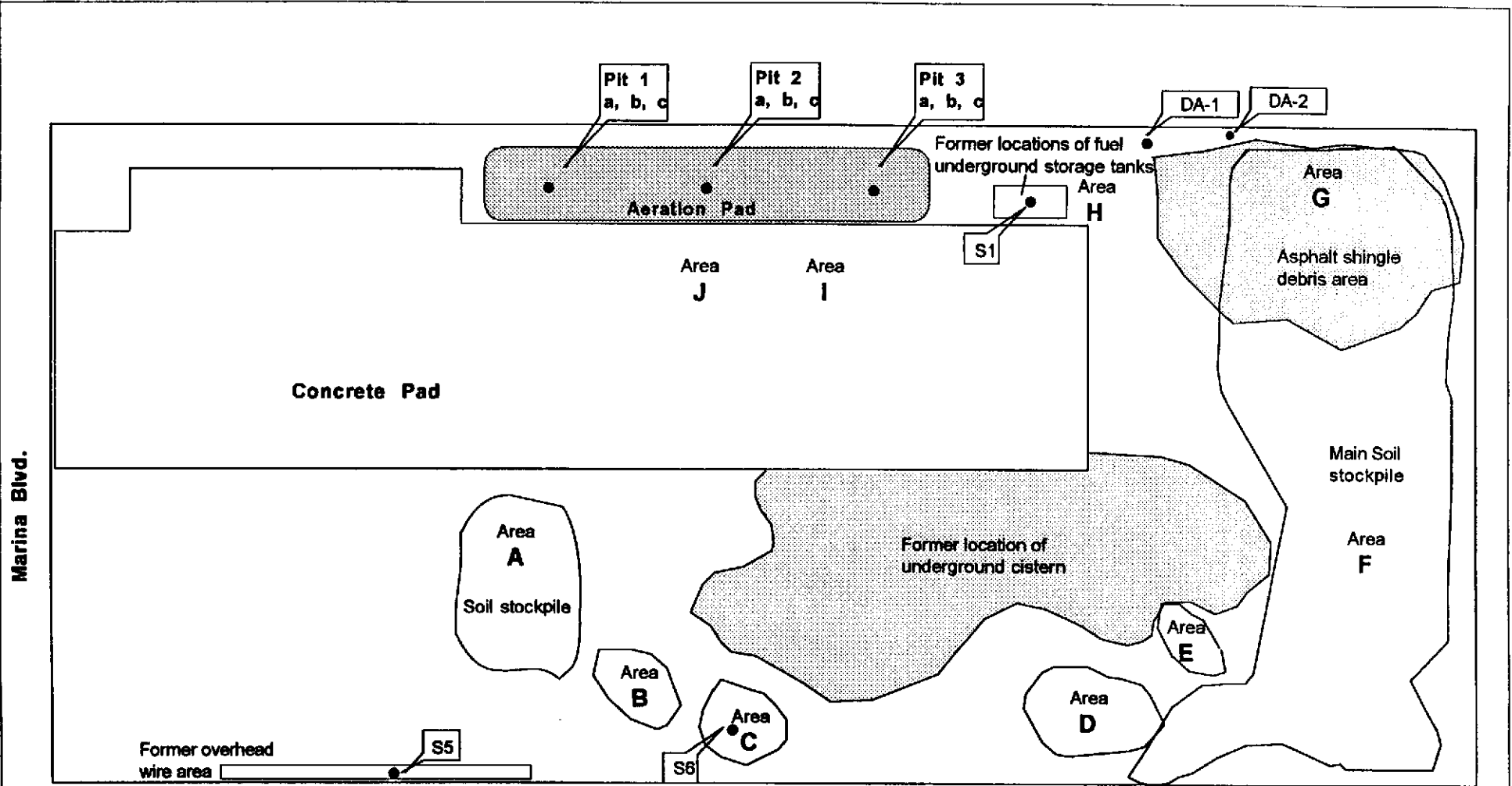


Figure 3	Locations of Former On-Site and Off-Site Monitoring Wells	September 1998
Applied Remedial Services, Inc.	Former Owens-Corning Facility 2001 Marina Blvd., San Leandro, California	ARS Project No. 98-238



Not to scale - schematic

<p>Figure 4</p>	<p>Site Layout and Historical "Areas of Concern" (Identified by former consultants)</p>	<p>September 1998</p>
<p>Applied Remedial Services, Inc.</p>	<p>Former Owens-Corning Facility, 2001 Marina Blvd., San Leandro, California</p>	<p>ARS Project No. 98-238</p>



Not to scale - schematic

Legend

- A "Area A", Location of Area A investigated by ARS
- S1 Location of soil sample S1

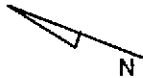
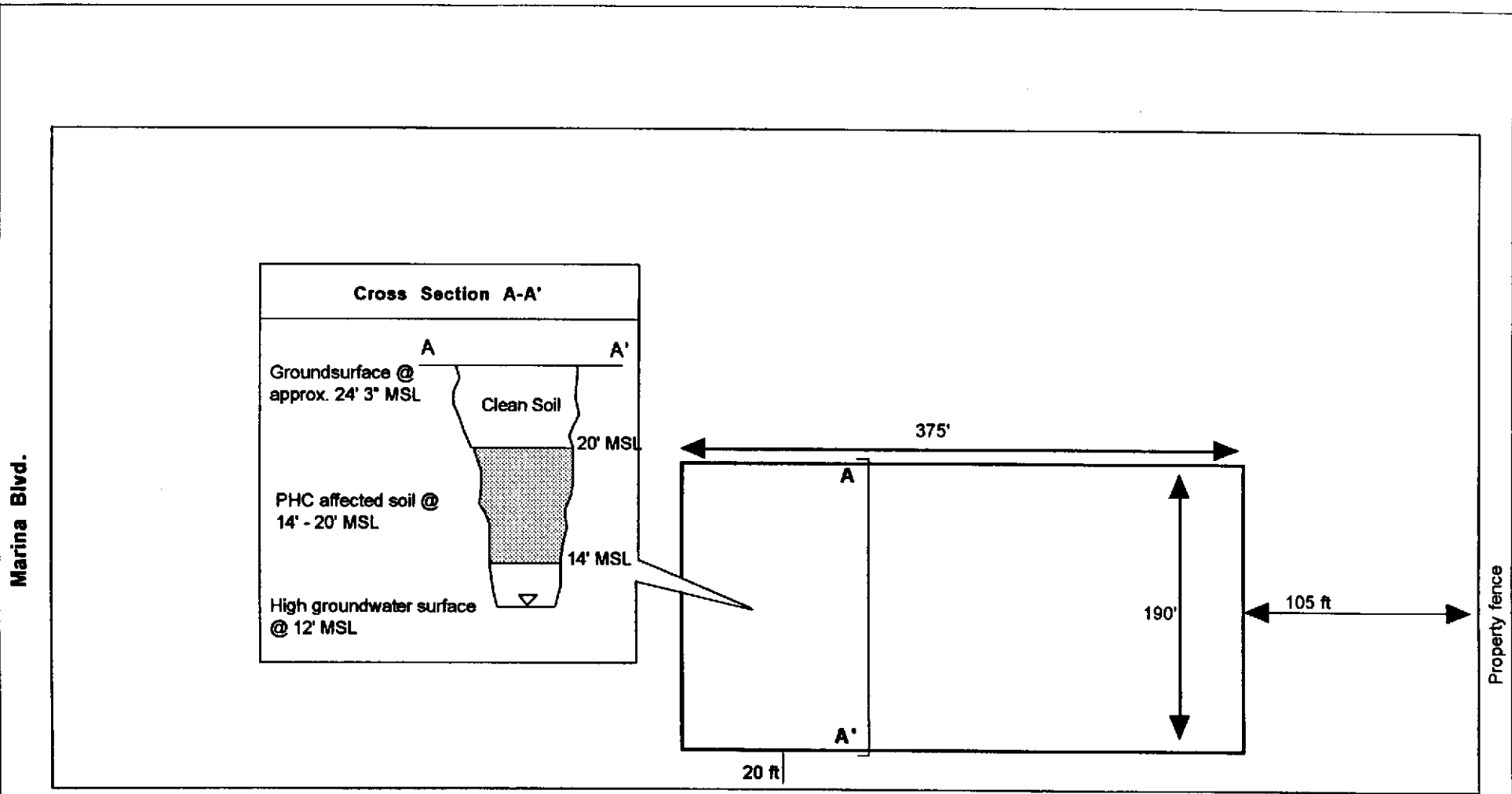
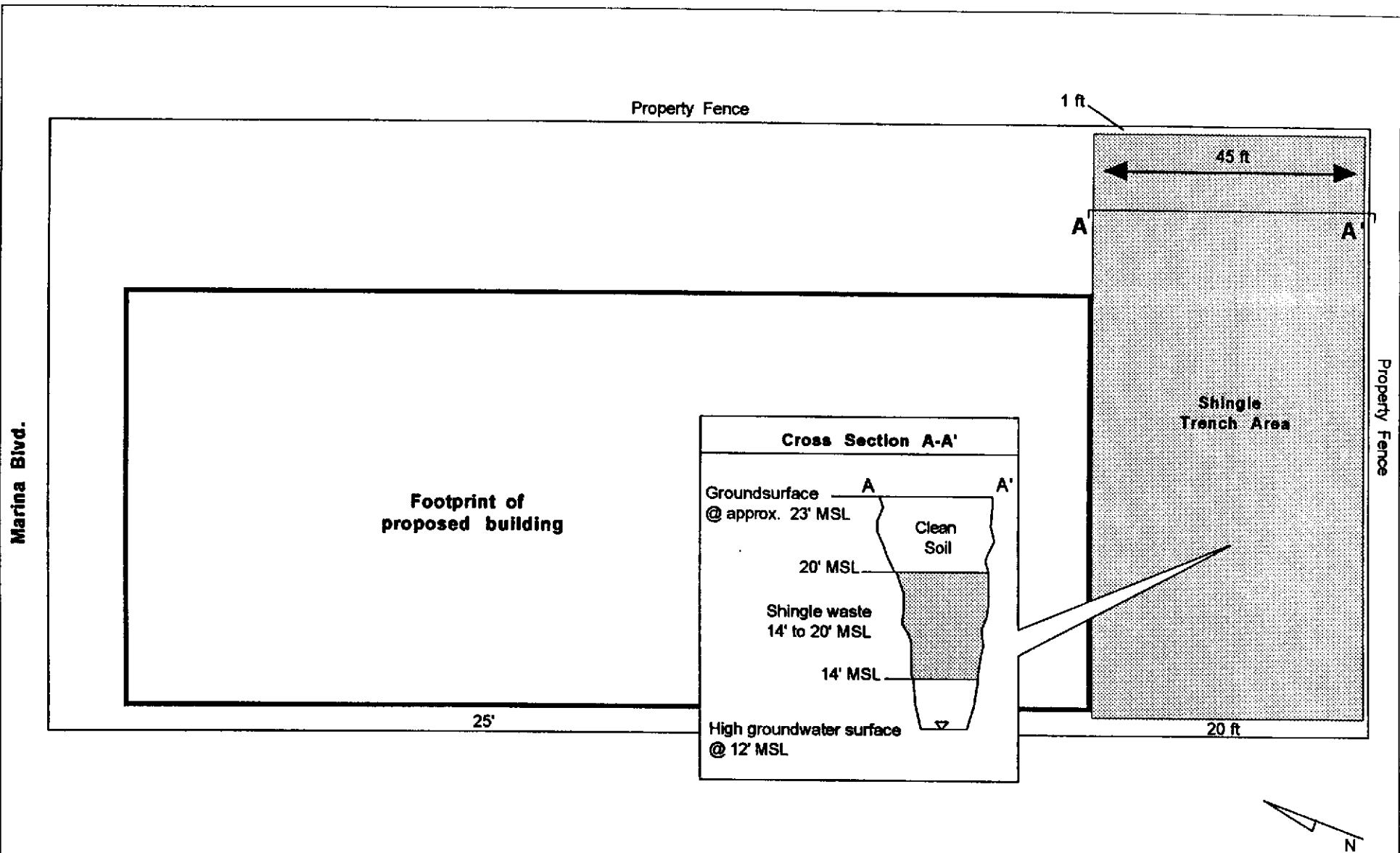


Figure 5	Site Areas of Concern Investigated by ARS	August 1998
Applied Remedial Services, Inc.	Former Owens-Corning Facility 2001 Marina Blvd., San Leandro, California	ARS Project No. 98-238



Not to scale - schematic
 Distances indicated are actual

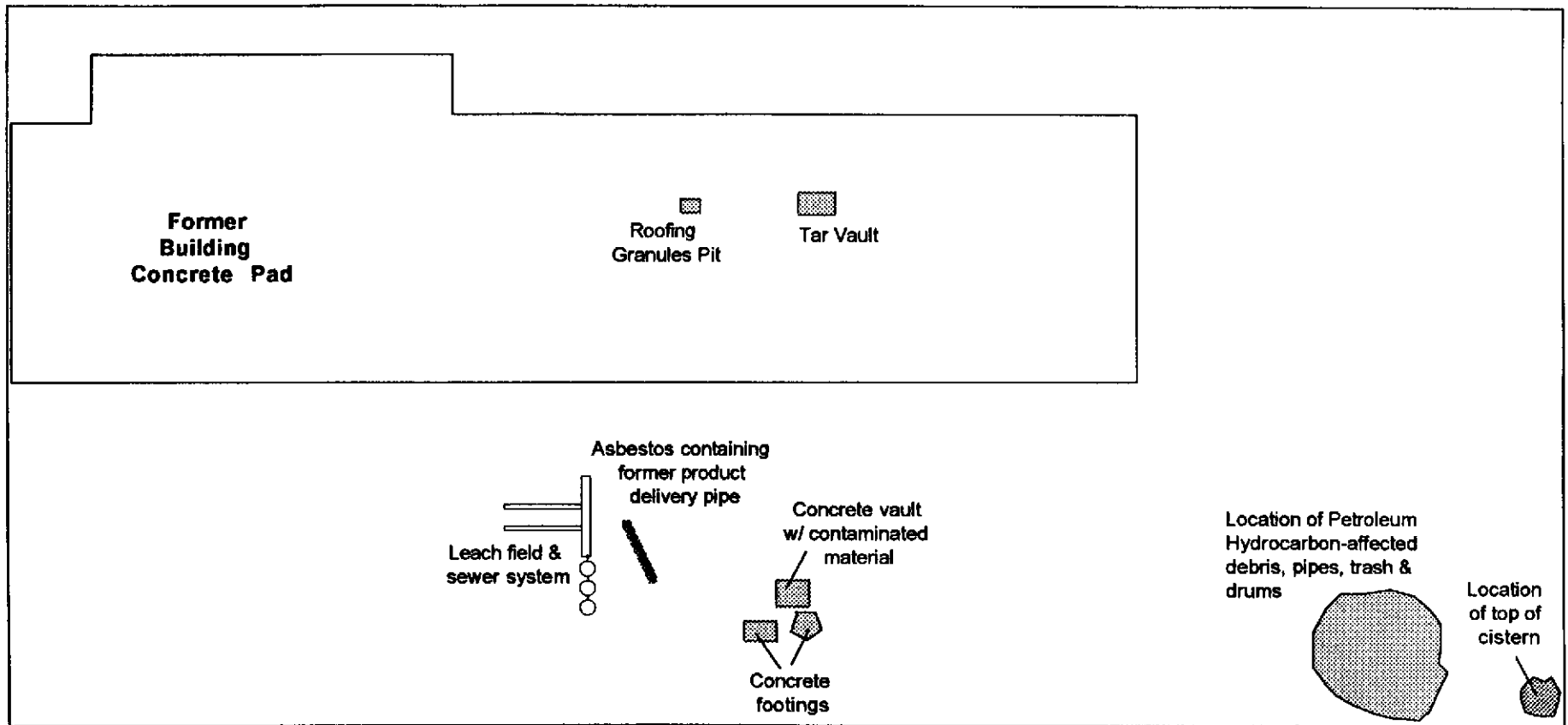
Figure 6	Spatial Extent of Area Backfilled with Petroleum Hydrocarbon Affected Soil	September 1998
Applied Remedial Services, Inc.	Former Owens-Corning Facility 2001 Marina Blvd., San Leandro, California	ARS Project No. 98-238



Not to scale - schematic.
Distances indicated are actual.

Figure 7	Location of Roofing Shingle Waste Trench Area	September 1998
Applied Remedial Services, Inc.	Former Owens-Corning Facility 2001 Marina Blvd., San Leandro, California	ARS Project No. 98-238

Marina Blvd.



Not to scale - schematic

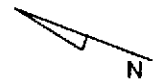


Figure 8

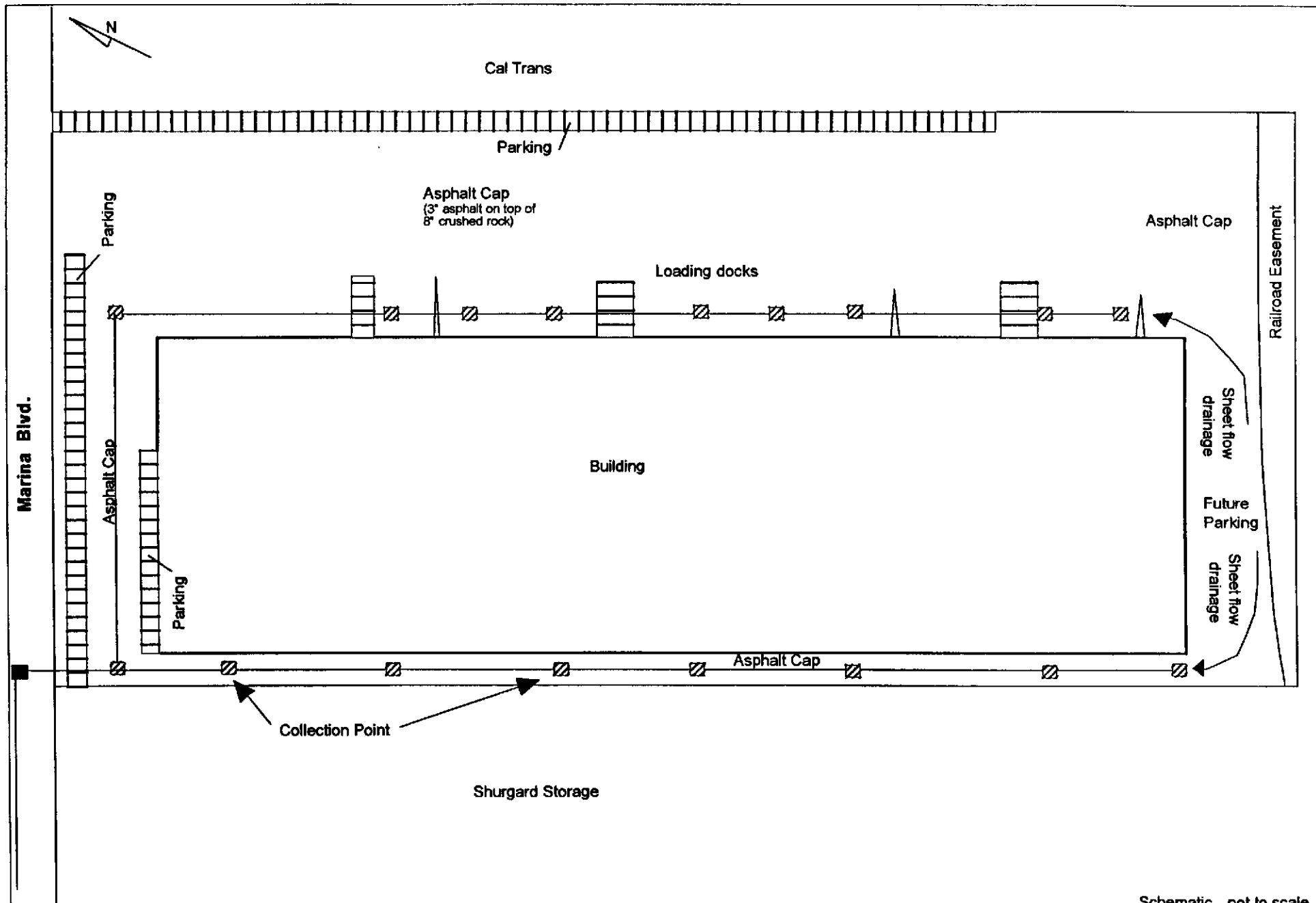
Location of Contaminated Debris and Waste Removed from Site

September 1998

Applied Remedial Services, Inc.

Former Owens-Corning Facility
2001 Marina Blvd., San Leandro, California

ARS Project No. 98-238



Schematic - not to scale

Figure 9

Site Drainage System

2001 Marina Blvd., San Leandro, California

September 1998

Applied Remedial Services, Inc.

ARS Project No. 98-238

Appendix

Appendix - Section I

McLaren Hart Well Completion Report



April 28, 1998

Sherri Zeller
Owens Corning World Headquarters
One Owens Corning Parkway
Toledo, Ohio 43659

**RE: WELL COMPLETION REPORT FOR THE WELL ABANDONMENT
ACTIVITIES LOCATED AT OWENS CORNING PROPERTY, 2001 MARINA
BOULEVARD, SAN LEANDRO, CA 94577**

Ms. Sherri Zeller:

Included are copies of the Owner Well Completion Reports. Copies of the Well Completion Reports were previously mailed to the State, Alameda County Public Works Agency, and Gregg Drilling.

Please contact me if you have any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'S.D. Carson'.

Steven Carson
Associate Geoscientist

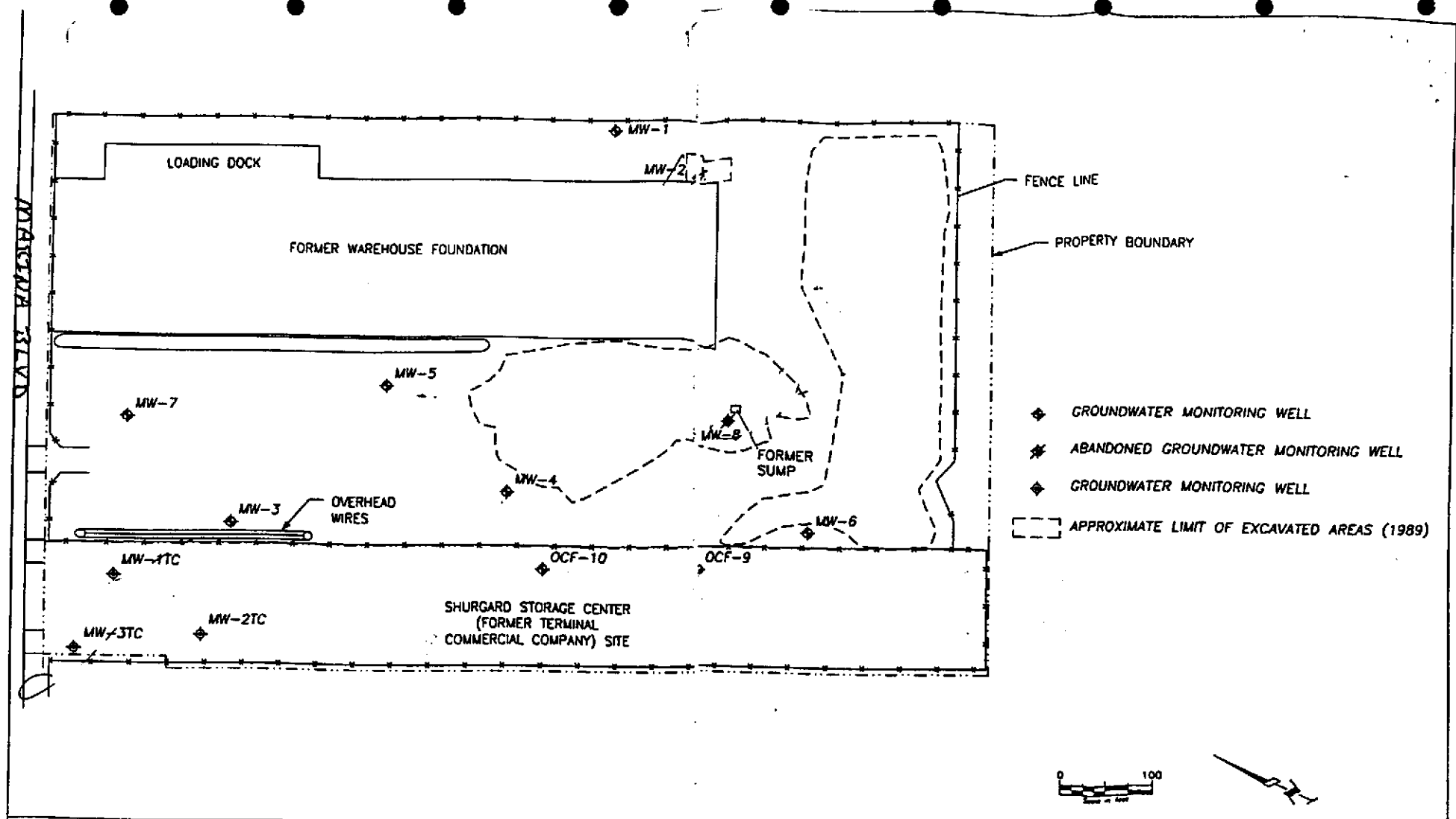


FIGURE 2
SITE MAP

OWENS CORNING
2001 MARINA BOULEVARD
SAN LEANDRO, CALIFORNIA
04.0602649.001.001\ecr0697.dwg: 06/03/97

Appendix - Section II
Laboratory Certificates of Analysis

MICRO ANALYTICAL LABORATORIES, INC.
FLAME AA - TTLC LEAD - EPA SW-846

1116
 ARS, Inc.
 701 Southampton, Suite 105
 Benicia, CA 94510

PROJECT:
 2001 MARINA BLVD
 SAN LEANDRO, CA

Micro Log In **55771**
 Total Samples 12
 Date Sampled 5/12/98
 Date Received 5/13/98
 Date Analyzed 5/13/98

Sample ID	Lead Concentration mg/kg (ppm)	Detection Limit (mg/kg)	Comments
Client AREA 2-ABOVE AC Micro 55771-01	16	10	
Client DA-1(DRUM AREA) Micro 55771-02	94	11	
Client DA-2 Micro 55771-03	13	9	
Client PIT 1-A Micro 55771-04	9	8	
Client PIT 1-B Micro 55771-05	< 9	9	

Technical Supervisor: Farid Ramezanzadeh

Farid Ramezanzadeh, M.S.

5/13/98

Analyst: _____

HC

AIHA ELLAP Accredited Laboratory, ID #11150. California Department of Health Services, Environmental Laboratory Accreditation Program (ELAP), Certificate #1037. Samples are analyzed by Flame Atomic Absorption Spectrometry in accordance with EPA Methods 3050A for Acid Digestion (SW 846, 1992 edition) and 7420 for AAS Analysis (SW-846, 1986 edition). This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million.

MICRO ANALYTICAL LABORATORIES, INC.
FLAME AA - TTLC LEAD - EPA SW-846

1116
 ARS, Inc.
 701 Southampton, Suite 105
 Benicia, CA 94510

PROJECT:
 2001 MARINA BLVD
 SAN LEANDRO, CA

Micro Log In **55771**
 Total Samples 12
 Date Sampled 5/12/98
 Date Received 5/13/98
 Date Analyzed 5/13/98

Sample ID	Lead Concentration mg/kg (ppm)	Detection Limit (mg/kg)	Comments
Client <u> </u> PIT 1-C Micro 55771-06	< 8	8	
Client <u> </u> PIT 2-A Micro 55771-07	< 10	10	
Client <u> </u> PIT 2-B Micro 55771-08	< 9	9	
Client <u> </u> PIT 2-D Micro 55771-09	< 9	9	
Client <u> </u> PIT 3-A Micro 55771-10	11	9	

Technical Supervisor: _____

Farid Farnazadeh, M.S.

5/13/98

Analyst: _____

HC

AIHA ELLAP Accredited Laboratory, ID #11150. California Department of Health Services, Environmental Laboratory Accreditation Program (ELAP), Certificate #1037. Samples are analyzed by Flame Atomic Absorption Spectrometry in accordance with EPA Methods 3050A for Acid Digestion (SW 846, 1992 edition) and 7420 for AAS Analysis (SW-846, 1986 edition). This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million.


MICRO ANALYTICAL LABORATORIES, INC.
FLAME AA - TTLC LEAD - EPA SW-846

1116
 ARS, Inc.
 701 Southampton, Suite 105
 Benicia, CA 94510

PROJECT:
 2001 MARINA BLVD
 SAN LEANDRO, CA

Micro Log In 55771
 Total Samples 12
 Date Sampled 5/12/98
 Date Received 5/13/98
 Date Analyzed 5/13/98

Sample ID	Lead Concentration mg/kg (ppm)	Detection Limit (mg/kg)	Comments
Client PIT 3-B Micro 55771-11	< 10	10	
Client PIT 3-C Micro 55771-12	< 10	10	
Client PIT 3-C Micro 55771-12	< 10	10	

Technical Supervisor:  5/13/98 Analyst: HC
 Farid Ramezanzadeh, M.S.

AIHA ELLAP Accredited Laboratory, ID #11150. California Department of Health Services, Environmental Laboratory Accreditation Program (ELAP), Certificate #1037. Samples are analyzed by Flame Atomic Absorption Spectrometry in accordance with EPA Methods 3050A for Acid Digestion (SW 846, 1992 edition) and 7420 for AAS Analysis (SW-846, 1986 edition). This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million.

Name / Client / Address:
ARS, Inc.
701 Southampton Rd.
Suite 105
Berkeley, CA 94510
Tel. 707-748-4205
Fax 707-748-4207

Project
2001 Marina Blvd.
San Leandro, CA
 P.O. No. _____

55770 ~~55753~~
 Asbestos _____
 TEM _____ PLM _____ PCM _____
 Lead Only _____
 TTLC (Total) STLC TCLP _____
 Metals (Specify) _____
 TTLC (Total) STLC TCLP _____
 Other _____
 Number of Samples _____
 Turn Around Time _____

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Sampled Start / Stop / Total Minutes	Average LPM	Air Sample Data Total Liters	Filter Pore Size
1/2/98	NOG	RUSH - Immediate Shingle composite (CAM 17 TTLC, start extraction for STLC and hold for results of TTLC)		:	:		4H
		Area 2 - above AC		:	:		
		Drum sample		:	:		CAM-17C
		DA-1 (Down Area)		:	:		
		DA-2		:	:		
		Pit 1-a		:	:		
		Pit 1-b		:	:		
		Pit 1-C		:	:		
		Pit 2-a		:	:		
		Pit 2-b		:	:		

Instructions: Analyze shingle composite for TTLC CAM 17, start STLC extraction for sample and hold for analyte Id following TTLC results. ANY METAL that exceeds 10x STLC, DO STLC analysis immediately.

Elias Rashmawi - *[Signature]*
 Sampler's Signature / Name

[Signature] 5/12/98 - 3:40 PM Drop Box / Courier
 Relinquished By Date / Time Received By Date / Time
 Received By *Joan Vaelee* 5/12/98 @ 3:40 PM
 Relinquished By Date / Time Received By Date / Time

Page 2/2
55753

Name / Client / Address:

Project

ARS, Inc.
Benicia CA
~~San~~

2001 Marina Blvd.
San Leandro, CA

Asbestos TEM PLM PCM

Lead Only TTL (Total) STLC TCLP

Metals (Specify) TTL (Total) STLC TCLP

Other

Tel. 707-748-4205

P.O. No.

Fax 707 748-4203

Number of Samples

Turn Around Time

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Micro ID#	Client ID#	Location / Description	Date Sampled	Time Sampled		Air Sample Data		
				Start / Stop / Total Minutes	Average LPM	Total Liters	Filter Pore Size	
	P: +2-d	↑ Hold ↓	5/12/98	:	:			
	P: +3-a		↑	:	:			
	P: +3-b		:	:				
	P: +3-c		:	:				
	ACM		↓					Hold
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			

Instructions: see page 1.

Elias Paslunani [Signature]
Sampler's Signature / Name

Relinquished By [Signature] Date/Time 5/12/98 - 3:40pm Drop Box / Courier Received By [Signature] Date/Time 5/12/98 @ 3:40pm

Relinquished By Date/Time Received By Date/Time

CHROMALAB, INC.

Environmental Services (SDB)

May 19, 1998

Submission #: 9805210

APPLIED REMEDIAL SERVICES

Atten: Elias Rashmawi

Project: 2001 MARINA BLVD
Received: May 13, 1998

Project#: SAN LEANDRO


re: 1 sample for TPH - Diesel analysis.
Method: EPA 8015M

Sampled: May 13, 1998 Matrix: SOIL Extracted: May 15, 1998
Run#: 12770 Analyzed: May 18, 1998

Spl#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
185684	S1	130	10	N.D.	90.5	10

Note: Hydrocarbon reported is in the late Diesel range and does not match our Diesel standard. High surrogate do to matrix interference.


Carolyn House
Chemist


Bruce Havlik
Chemist

CHROMALAB, INC.

Environmental Services (SDB)

May 19, 1998

Submission #: 9805210

APPLIED REMEDIAL SERVICES

Atten: Elias Rashmawi

Project: 2001 MARINA BLVD
Received: May 13, 1998

Project#: SAN LEANDRO

re: 1 sample for TEPH analysis.
Method: EPA 8015M

Sampled: May 13, 1998


Matrix: SOIL
Run#: 12770


Extracted: May 15, 1998
Analyzed: May 18, 1998

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
185687	S4	N.D.	1.3	N.D.

Note: Hydrocarbon reported is in the late Diesel range and does not match our Diesel standard.

Reporting Limits	1.0	1.0	50
Blank Result		N.D.	
Blank Spike Result (%)	--	90.5	--


Carolyn House
Chemist


Bruce Havlik
Chemist

CHROMALAB, INC.

Environmental Services (SDB)

May 19, 1998

Submission #: 9805210

APPLIED REMEDIAL SERVICES

Atten: Elias Rashmawi

Project: 2001 MARINA BLVD
Received: May 13, 1998

Project#: SAN LEANDRO

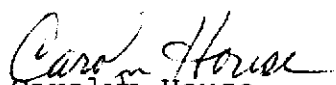
re: 1 sample for TEPH analysis.
Method: EPA 8015M


Sampled: May 13, 1998 Matrix: SOIL Run#: 12770 Extracted: May 15, 1998
Analyzed: May 18, 1998

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
185689	S6	N.D.	3100	2200

Note: Hydrocarbon reported has characteristics of weathered/aged Diesel.
Hydrocarbon reported does not match the pattern of our Motor oil standard.
Surrogate was diluted out.

Reporting Limits	50	50	1000
Blank Result		N.D.	
Blank Spike Result (%)	--	90.5	--


Carolyn House
Chemist


Bruce Havlik
Chemist

CHROMALAB, INC.

Environmental Services (SDB)

May 15, 1998

Submission #: 9805210

APPLIED REMEDIAL SERVICES

Atten: Elias Rashmawi

Project: 2001 MARINA BLVD
Received: May 13, 1998

Project#: SAN LEANDRO

re: One sample for Gasoline BTEX analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: S1

Spl#: 185684

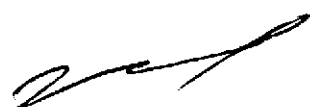
Matrix: SOIL

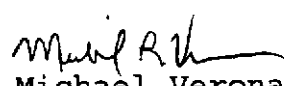
Sampled: May 13, 1998

Run#:12749

Analyzed: May 14, 1998

<u>ANALYTE</u>	<u>RESULT</u> (mg/Kg)	<u>REPORTING</u> <u>LIMIT</u> (mg/Kg)	<u>BLANK</u> <u>RESULT</u> (mg/Kg)	<u>BLANK</u> <u>SPIKE</u> (%)	<u>DILUTION</u> <u>FACTOR</u>
GASOLINE	N.D.	1.0	N.D.	93	1
BENZENE	N.D.	0.0050	N.D.	82	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	N.D.	0.0050	N.D.	95	1
XYLENES	N.D.	0.0050	N.D.	100	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

707-748-4207

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

PM V132 O:BTEXQC022
VINCE 08:3

CHROMALAB, INC.

Environmental Services (SDB)

May 20, 1998

Submission #: 9805210

APPLIED REMEDIAL SERVICES

Atten: Elias Rashmawi

Project: 2001 MARINA BLVD
Received: May 13, 1998

Project#: SAN LEANDRO

re: One sample for Miscellaneous Metals analysis.
Method: EPA 3010A/3050A/6010A Nov 1990

Client Sample ID: S6

Spl#: 185689

Sampled: May 13, 1998


Matrix: SOIL

Run#: 12783

Extracted: May 15, 1998

Analyzed: May 16, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CADMIUM	0.58	0.50	N.D.	106	1
CHROMIUM	27	1.0	N.D.	106	1
LEAD	8.1	1.0	N.D.	108	1
NICKEL	38	1.0	N.D.	106	1
ZINC	59	1.0	N.D.	106	1


Shafi Barekzai
Analyst


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

May 20, 1998

Submission #: 9805210

APPLIED REMEDIAL SERVICES

Atten: Elias Rashmawi

Project: 2001 MARINA BLVD
Received: May 13, 1998

Project#: SAN LEANDRO

re: 2 samples for Oil and Grease analysis.
Method: 5520 E&F

Sampled: May 13, 1998 Matrix: SOIL Run#: 12816 Extracted: May 19, 1998
 Analyzed: May 19, 1998

Spl#	CLIENT SPL ID	OIL & GREASE (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
185687	S4	N.D.	50	N.D.	93.8	1
185689	S6	420	50	N.D.	93.8	1

for Reference
Lulu Frazier
Analyst

Michael Verona
Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

May 27, 1998

Submission #: 9805210

APPLIED REMEDIAL SERVICES

Atten: Elias Rashmawi

Project: 2001 MARINA BLVD
Received: May 13, 1998

Project#: SAN LEANDRO

re: One sample for Polychlorinated Biphenyls (PCBs) analysis.
Method: SW846 Method 8080A Sept 1994

Client Sample ID: S5

Spl#: 185688

Sampled: May 13, 1998

Matrix: SOIL

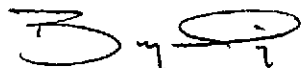
Run#: 12789

Extracted: May 18, 1998

Analyzed: May 23, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
AROCLOR 1016	N.D.	0.10	N.D.	105	1
AROCLOR 1221	N.D.	0.10	N.D.	--	1
AROCLOR 1232	N.D.	0.10	N.D.	--	1
AROCLOR 1242	N.D.	0.10	N.D.	--	1
AROCLOR 1248	N.D.	0.10	N.D.	--	1
AROCLOR 1254	N.D.	0.10	N.D.	--	1
AROCLOR 1260	N.D.	0.10	N.D.	88.6	1

Note: Surrogate recoveries were outside of QC limits due to matrix interference.



Rene Boongaling
Analyst



Michael Verona
Laboratory Operations Manager

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

DATE OF ANALYSIS REPORT
CLIENT: ERG
DUE: 05/20/98
REF #: 29827

27821

Chain of Custody

DATE 5/13/98 PAGE 1 OF 1

PROJECT INFORMATION				ANALYSIS REPORT																	NUMBER OF CONTAINERS			
PROJECT NAME	PROJECT NUMBER	P.O. #	TAT	TPH - Gasoline (EPA 5030, 8015)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	8015 M	Keystone, diesel, Motor Oil	LUFT	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD		EXTRACTION (TCLP, STIC)		
2001 Marina Blvd.	San Leandro		STANDARD 5-DAY	X	X																			
				Hold																				
				Hold																				
										X					X									
											X													
										X					X		X							
				Hold																				

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY 1			RELINQUISHED BY 2			RELINQUISHED BY 3		
PROJECT NAME	2001 Marina Blvd.	TOTAL NO. OF CONTAINERS		(SIGNATURE)	E.R.	(TIME)		(SIGNATURE)		(TIME)		(SIGNATURE)		(TIME)		
PROJECT NUMBER	San Leandro	HEAD SPACE		(PRINTED NAME)	Elias Rashmani	(DATE)	2:30 pm	(PRINTED NAME)		(DATE)		(PRINTED NAME)		(DATE)		
P.O. #		REC'D GOOD CONDITION/COLD		(COMPANY)	Chromalab	(COMPANY)		(COMPANY)		(COMPANY)		(COMPANY)		(COMPANY)		
TAT	STANDARD 5-DAY	CONFORMS TO RECORD	24 48 72 OTHER	RECEIVED BY 1		RECEIVED BY 2		RECEIVED BY (LABORATORY) 3								
SPECIAL INSTRUCTIONS/COMMENTS:				(SIGNATURE)		(SIGNATURE)		(SIGNATURE)		(TIME)		(SIGNATURE)		(TIME)		
				(PRINTED NAME)		(PRINTED NAME)		(PRINTED NAME)		(DATE)		(PRINTED NAME)		(DATE)		
				(COMPANY)		(COMPANY)		(COMPANY)		(DATE)		(COMPANY)		(DATE)		
				(LAB)		(LAB)		(LAB)				(LAB)				

MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS BY PLM

1116

PROJECT:
OCF - SAN LEANDRO

ARS, Inc.
701 Southampton, Suite 105
Benicia, CA 94510

Date Sampled 7/8/98
Date Received 7/8/98
Date Analyzed 7/9/98
Total Samples 2
Micro Log In 57616

SAMPLE INFORMATION		ASBESTOS QUANTITY	MINERALS TYPE	NON ASBESTOS FIBERS QUANTITY	NON ASBESTOS FIBERS TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: SHINGLE NEW Micro: 57616-01A Analyst: MO		See Descriptions		20 %	CELLULOSE	TAR ROCK FRAGMENTS MICA
		SHINGLE WITH GREEN GRAVEL TAR: ND FELT: ND				
Client: SHINGLE NEW Micro: 57616-01B Analyst: MO		See Descriptions		20 %	CELLULOSE	TAR ROCK FRAGMENTS MICA
		SHINGLE WITH RED GRAVEL TAR: ND FELT: ND				
Client: SHINGLE NEW Micro: 57616-01C Analyst: MO		See Descriptions		20 %	CELLULOSE	TAR ROCK FRAGMENTS MICA
		SHINGLE WITH MULTI-COLORED GRAVEL TAR: ND FELT: ND				
Client: SHINGLE OLD Micro: 57616-02A Analyst: MO		See Descriptions		20 %	CELLULOSE	TAR ROCK FRAGMENTS MICA
		SHINGLE WITH BLUE GRAVEL TAR: ND FELT: ND				
Client: SHINGLE OLD Micro: 57616-02B Analyst: MO		See Descriptions		20 %	CELLULOSE	TAR ROCK FRAGMENTS MICA
		SHINGLE WITH TAN GRAVEL TAR: ND FELT: ND				

Technical Supervisor: *Mark Oliver* 7/9/98

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples, and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (sheetrock, joint compound, and related materials). Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1876 Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872. This report must not be used to claim product endorsement by NIST or any agency of the U.S. Government. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc.

5900 HOLLIS STREET, SUITE M - EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS BY PLM

1116

PROJECT:
OCF - SAN LEANDRO

ARS, Inc.
701 Southampton, Suite 105
Benicia, CA 94510

Date Sampled 7/8/98
Date Received 7/9/98
Date Analyzed 7/9/98
Total Samples 2
Micro Log In 57616

SAMPLE INFORMATION		ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: SHINGLE OLD	Analyst: MO	See Descriptions	20 % CELLULOSE	TAR ROCK FRAGMENTS MICA
Micro: 57616-02C		SHINGLE WITH MULTI-COLORED GRAVEL TAR: ND FELT: ND		

Technical Supervisor: Mark Olivares 7/9/98

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples, and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-friable materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantification limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (sheetrock, joint compound, and related materials). Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1876 Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872. This report must not be used to claim product endorsement by NIST or any agency of the U.S. Government. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc.

5900 HOLLIS STREET, SUITE M - EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

57016

Name / Client / Address:

ARS, Inc.

Project

701 South Hampton Road

OCF - San Leandro

Benicia, CA 94510

Asbestos TEM PLM PCM

Lead Only TTLC (Total) STLC TCLP

Metals (Specify) TTLC (Total) STLC TCLP

Other

Tel. 707-748-4205

P.O. No.

Fax 707-748-4207

Number of Samples 2

Turn Around Time ~~24hrs~~ 24hrs

Matrix Type Bulk Dust Paint Soil Wipe Air Water Other

Micro ID#	Client ID#	Location / Description	Date Sampled	Time Sampled		Air Sample Data		
				Start / Stop / Total Minutes	Average LPM	Total Liters	Filter Pore Si	
		Shingle New	7/8	:	:			
		Shingle old	7/8	:	:			
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			

Instructions:

Sampler's Signature / Name: Michael Kaler Date / Time: July 8, 1998
 Relinquished By: [Signature] Date / Time: 7/8/98 Drop Box / Courier: /
 Received By: [Signature] Date / Time: 7/8/98
 Relinquished By: _____ Date / Time: _____ Received By: _____ Date / Time: _____

Appendix - Section III

Site Permits

City of San Leandro
Civic Center, 835 E. 14th Street
San Leandro, California 94577



August 6, 1998

MICHAEL F. KARA, MANAGER REMEDIAL SERVICES
APPLIED REMEDIAL SERVICES, INC.
701 SOUTHAMPTON ROAD, STE 105
BENICIA, CA 94510

Dear Mr. Kara,

Enclosed is a copy of the laboratory results from the compliance monitoring sample for the Bigge Steet Investors project at 2001 Marina Blvd. As expected all items analyzed were found to be in compliance with discharge standards.

If you have any questions, please call the Water Pollution Control Plant, Environmental Compliance Section at 510/ 577-3434.

John A. Camp
Acting Environmental Compliance Coordinator
City of San Leandro
3000 Davis Street
San Leandro, CA 94577

Enc:

WFL1.doc

Shelia Young, Mayor

City Council:

Gordon A. Galvan;
Joanne M. Lothrop;

Bob Glaze;
Glenda Nardine

Garry A. Loeffler;

CITY OF SAN LEANDRO
WATER POLLUTION CONTROL PLANT

PERMIT NO. SD-028

SPECIAL ENVIRONMENTAL COMPLIANCE PERMIT

COMPANY NAME: Bigge Street Investors administered by ARS, Inc.

MAILING ADDRESS: 1200 Snyder Lane 701 Southampton Rd, Ste 105
Street or P.O. Box

Walnut Creek, CA 94598 Benicia, CA 94510
City, State, Zip Code

FACILITY ADDRESS: 2001 Marina Blvd
Street Address

San Leandro, CA 94577
City, State, Zip Code

The above Industrial User is authorized to discharge industrial wastewater to the San Leandro Water Pollution Control Plant in compliance with the City's Ordinance titled, "Uniform Wastewater Discharge Regulations", and in compliance with any Federal or State regulations that apply, and in accordance with effluent limitations, monitoring requirements and any other conditions set forth in this permit.

This permit is granted in accordance with the application filed on May 27, 1998 in the office of the Environmental Compliance Section, and in conformity with specifications and information submitted to the City in support of the above application.

Michael Kater
Signature of Responsible Company Official

Michael Kater
Print name of Official

Manager, Remedial Services
Title

Effective Date: June 08, 1998

Expiration Date: June 08, 1999

John A. Carrizo For Paul Zoffarelli
Water Pollution Control Manager



**BAY AREA AIR QUALITY
MANAGEMENT DISTRICT**

939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

REGULATION 8, RULE 40
Aeration of Contaminated Soil and
Removal of Underground Storage Tanks

NOTIFICATION FORM

- Removal or Replacement of Tanks.
- Excavation of Contaminated Soil

SITE INFORMATION

SITE ADDRESS 2001 Marina Blvd.
 CITY, STATE, ZIP San Leandro, California
 OWNER NAME Bigge Street Investors
 SPECIFIC LOCATION OF PROJECT Same as above

<p><u>TANK REMOVAL</u></p> <p>SCHEDULED STARTUP DATE _____</p> <p>VAPORS REMOVED BY:</p> <p>[] WATER WASH</p> <p>[] VAPOR FREEING (CO²)</p> <p>[] VENTILATION</p>	<p><u>CONTAMINATED SOIL EXCAVATION</u></p> <p>SCHEDULED STARTUP DATE <u>June 15, 1998</u></p> <p>STOCKPILES WILL BE COVERED? YES _____ NO <input checked="" type="checkbox"/></p> <p>ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):</p> <p style="text-align: center;"><u>N/A</u></p> <p style="text-align: center;">(MAY REQUIRE PERMIT)</p>
---	---

CONTRACTOR INFORMATION

NAME P.M. Morrill CONTACT Pete Morrill
 ADDRESS 22938 Atherton St. PHONE (510) 886-9215
 CITY, STATE, ZIP Hayward, CA 94541

**CONSULTANT INFORMATION
(IF APPLICABLE)**

NAME Applied Remedial Services, Inc. CONTACT Elias A. Rashmawi
 ADDRESS 701 Southampton Rd., Ste. 105 PHONE (707) 748-4205
 CITY, STATE, ZIP Benicia, CA 94510

FOR OFFICE USE ONLY

DATE RECEIVED _____ BY _____ (INIT.) _____

CC: INSPECTOR NO. _____ DATE _____ BY _____ (INIT.) _____

TELEPHONE UPDATE: CALLER _____ CHANGE MADE _____

BAAQMD H # _____

CITY OF SAN LEANDRO
ENGINEERING AND TRANSPORTATION DEPARTMENT
835 EAST 14th STREET
SAN LEANDRO, CA 94577
(510) 577-3428

EXCAVATION/GRADING PERMIT

Permit Num.: EAG97051

Project Address: 2001 MARINA BL
Assess. Parcel #: 077A064600600

Issued: 06/23/98
To Expire: 10/15/98
CN: 11714

Job Description: BACKFILL EXCAVATION PIT AND
REMOVE EXISTING CONCRETE FOUNDATION

Applicant: BIGGE STREET INVESTORS
Address : 1200 SNYDER LANE
WALNUT CREEK, CALIFORNIA 94598
Phone : (925) 943-1313

Owner : OWENS CORNING FIBERGLAS
Address: FIBERGLAS TOWER
TOLEDO OH 43659
Phone : (925) 943-1313

ENGINEER : BILL BERRIEN
1485 PARK AVENUE
EMERYVILLE, CA 94608

Lic. E 20003
BILL BERRIEN

ENGINEER : VINCENT H. CUNHA
1690 SAN PABLO AVB., STE. C
PINOLE, CA 94564

Lic. E 36321 510 741-8290
CUNHA ENGINEERING, INC.

ENGINEER : GEOFFREY VAN LIENDEN
1840 C ALCATRAZ AVENUE
BERKELEY, CA 94703

Lic. E GE853
JENSEN-VAN LIENDEN ASSOC. INC.

CONTRACTOR : P.M. MORRILL
22938 ATHERTON STREET
HAYWARD, CALIFORNIA 94541

Lic. C 136587-01 510 886-9215
P.M. MORRILL CO.

List of Resp'ble Engr's:

DESIGN ENGINEER (A): BILL BERRIEN
ENG'R FOR GRADING (B): VINCENT CUNHA
ENG'R FOR INSP/TEST (C): JENSEN-VAN LIENDEN ASSOC

Anticipated Start Date : 06-22-98
Anticipated Compl. Date: 07-26-98

RECEIVED
CITY OF SAN LEANDRO

Engineering Inspector : KRN HAMNER
Inspector's Phone No. : (510) 577-3304

JUL 01 1998

ENG'G / TRANS.

Applicant Signature:

Donald J. Bigge

Issued for City by :

[Signature]

Total Payed: 950.00
Credits : .00
Adjustments: .00
BALANCE DUE: .00

Date: 7-1-98

Date: 7-1-98

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES

1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

June 22, 1998

Mr. Donald J. Bruzzone
Managing Partner
Bigge Street Investors, LLC
1200 Snyder Lane
Walnut Creek, California 94598

**Subject: Workplan for Soil Backfill and Site Grading Activities at the
Former Owens Corning Facility (SLIC 4882)
2001 Marina Blvd., San Leandro, CA 94577**

Dear Mr. Bruzzone:

This agency and the Cal-EPA / San Francisco Bay Regional Water Quality Control Board (RWQCB) have reviewed the **Workplan for Soil Backfill and Site Grading Activities (June 3, 1998)** and the **Workplan Amendment (June 17, 1998)**, prepared and submitted by Applied Remedial Services (ARS) for the above referenced site. It is our understanding that Bigge Street Investors (BSI) has entered a contract negotiation with Owens Corning for the purchase of the subject site. Additionally, BSI intends to develop the site as a storage warehouse.

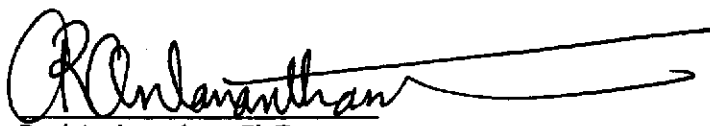
The workplan incorporates the approved Risk Evaluation and Management Plan (January 1997) prepared by Geomatrix Consultants for the site. This agency and the Cal-EPA / San Francisco Bay RWQCB concur with the general scope of the proposed workplan. Based on the information provided to this office and the RWQCB, the workplan is approved and you may proceed with the soil backfill and site grading activities. A report should be submitted to this agency and the RWQCB following completion of the site activities.

If you have any questions regarding this letter or the subject site, please contact me at (510) 567-6780 or Ravi Arulanantham at (510) 286-1331.

Sincerely,


Susan L. Hugo
Hazardous Materials Specialist

Concur:


Ravi Arulanantham, Ph.D.
Staff Toxicologist, S.F. Bay RWQCB

c: Stephen Morse, San Francisco Bay RWQCB
Mike Bakaldin, City of San Leandro Fire Department
David Palochko, Owens Corning, One Owens Corning Parkway, Toledo, Ohio 43659
Michael Kara, ARS, 701 Southhampton Road, Suite 105, Benicia, California 94510
William Wick, Crosby, Heafey, Roach & May, 1999 Harrison St., Oakland, California 94604
SH / RA / files

Appendix - Section IV

Site Photographs



Photo 1: The subject Site on April 30, 1998



Photo 2: Former excavation pit on April 30, 1998



Photo 3: Northern portion of the excavation pit



Photo 4: Concrete footings located at the northern boundary of the former excavation



Photo 5: Concrete vault located at the northern boundary of the former excavation



Photo 6: Contents of concrete vault located at the northern boundary of the former excavation



Photo 7: Concrete footings located at the northern boundary of the former excavation



Photo 8: Concrete footings located at the northern boundary of the former excavation



Photo 9: Sewer system leach field located to the west of the former concrete building pad



Photo 10: Metallic debris



Photo 11: Top of former cistern located in the southwestern corner of Site



Photo 12: Tar material and product delivery pipes excavated from the subsurface



Photo 13: Buried drums and debris



Photo 14: Contaminated waste and debris stockpiled in preparation for off-site disposal



Photo 15: Colored granules



Photo 16: Tar vault



Photo 17: Pipes affected with asbestos containing material



Photo 18: Roofing shingles located in the southern portion of the Site



Photo 19: Roofing shingles trench in the southern portion of the Site



Photo 20: Compaction of the roofing shingles trench in the southern portion of the Site

Appendix - Section V
Waste Disposal Documentation

92718873
 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CALC0014951440000	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address Bigge Street Investors, LLC 3001 Marina Blvd San Leandro, CA					
4. Generator's Phone ()					
5. Transporter 1 Company Name SURGEON'S SONS		6. US EPA ID Number CA1A99741781742			
7. Transporter 2 Company Name		8. US EPA ID Number			
9. Designated Facility Name and Site Address Laidlaw Environmental Services 2500 W. Lokern Rd. Butterwillow, CA 93206		10. US EPA ID Number CA1D198061715121761			
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers			
a. Non- RCRA Hazardous Waste Solid		No. Type		14. Unit Wt/Vol	
		0,20 DM		0,0,00 5 Y	
b.					
c.					
d.					
15. Special Handling Instructions and Additional Information 24 HOUR EMERGENCY PHONE 800-328-6644					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name ARS, Inc. a agent for Bigge Street Investors		Signature Michael Kalk		Month Day Year 08/10/95	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name JERRY BARFIELD		Signature Jerry Barfield	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature		Month Day Year	



ROOFING GRANULES

New Amendment

A. GENERATOR INFORMATION

Generator Name Bigge Street Investors, L.L.C Technical Contact Michael Kara
 Facility Address 2001 Marina Blvd. Telephone (707) 748-4205 EXT. _____
San Leandro, CA Fax (707) 748-4207
 Billing Name ARS, Inc.
 Billing Address 701 Southampton Road, Suite 105
 City/County _____ City Benicia State CA Zip Code 94500
 State _____ Zip Code _____ Attention Michael Kara
 USEPA ID# CAC 001 495 144 Telephone (707) 748-4205/510-304-3257 EXT. _____
 State ID# _____

B. DOT Shipping Name Non RCRA Hazardous Waste
Solid
 Hazard Class N/A
 UN/NA No. _____ Packing Group _____ RQ _____

D. ANNUAL REPORT CODES

SIC Code: _____
 Source Code: A
 Form Code: B
 Origin Code: _____
 System Type: M

E. OTHER COMPONENTS

	No	Yes	Total ppm
PCB's	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cyanides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sulfides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Pesticides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Phenolics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Dioxins	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Halogens	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____ %

C. RCRA RCRA Non Hazardous/Exempt? Yes No Process Generating: _____
Site Cleanup
 State Waste Codes: 611 EPA Waste Codes: Non RCRA

F. PHYSICAL CHARACTERISTICS AT 70° F

1. Infectious or Biological Waste? Yes No
 2. NRC Regulated Radioactive? Yes No
 3. Reactivity None Water Reactive
 Pyrophoric Shock Sensitive
 Cyanides DOT Explosive
 Sulfides Other _____

Gas (Cylinder) Solid 100 %
 Aerosol Sludges _____ %
 Lab-Pack Free Liquids _____ %
 100%

Layers
 Single Layered Bi-layered Multi-layered

Viscosity
 Low Medium High

Odor
 None Mild Strong Describe: _____

Color/Appearance: soil with coloreds pebbles

Weight
 Density _____ lbs./gal. (US, liq) 90 lbs./cu. foot
 Dry Weight <1.0% 5-20%
 1-5% 20-100%

pH N/A
 0-2 4.1-10 ≥ 12.5
 2.1-4 10.1-12.4 Exact _____

Flash Point (liquid only)
 <73°F (23°C) **Boiling Point**
 73-140°F (23-60°C) <95°F (35°C)
 142-200°F (61-93°C) >95°F (35°C)
 >200°F (93°C) N/A

BTU/Lb. N/A

Dermal Toxicity LD₅₀ (Mg/Kg)
 ≤40 >200, ≤1000
 >40, ≤200 >1000

4. Material poisonous by inhalation? Yes No

Oral Toxicity LD₅₀ (Mg/Kg)
 ≤5 >5, ≤50
 >50, ≤200 >200
 Solids: _____
 Liquids: >50, ≤500 >500

5. Is this waste stored in vented drums? Yes No
 6. Is this waste pumpable? Yes No
 7. Is this waste polymerizable? Yes No
 8. Is waste stream subject to the National Emission Standards for Benzene Waste Operations (40 CFR 61 Subpart FF)? Yes No
 9. Is this waste regulated as an ozone depleting substance (40 CFR part 82)? Yes No
 10. Does this waste contain scrap metal pieces greater than 2 inches in size? Yes No

H. PHYSICAL/CHEMICAL CONSTITUENTS

Soil 5-10 %
Roofing Granules: 90-95 %
 ① potassium Feldspar (35-45%)
 ② Quartz (25-35%)
 ③ plagioclase Feldspar (10-20%)
 ④ Sodium Silicate 5 %
 ⑤ Kaolin 5 %
 ⑥ pigment (see attached MSDS)
 _____ %
 _____ %
100 %
 100 %

(Attach All MSDS, Sample Analysis and Additional Info.)

G. METALS
 NONE TCLP (MGL) TOTAL (PPM)

	Reg. Limit	Below	Above	Range
Arsenic	5 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u><2.3</u>
Barium	100 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>4.7</u>
Cadmium	1 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>1.1</u>
Chromium	5 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>4.9</u>
Copper		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>3.7</u>
Lead	5 mg/L	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>10.5</u>
Mercury	0.2 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u><.25</u>
Nickel	134 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>3.9</u>
Selenium	1 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u><.5</u>
Silver	5 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u><.3</u>
Zinc		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>5.8</u>
Others:				

I. ANTICIPATED VOLUME

Qty.	Container	Qty.	Container
<input type="checkbox"/>	5 gal. pail	<input type="checkbox"/>	Cubic Yard Box*
<input type="checkbox"/>	15 gal. carboy	<input type="checkbox"/>	Super Sack*
<input type="checkbox"/>	30 gal. drum	<input type="checkbox"/>	Rolloff/Dump Trailer*
<input checked="" type="checkbox"/>	55 gal. drum	<input type="checkbox"/>	Tanker*
<input type="checkbox"/>	85 gal. drum	<input type="checkbox"/>	Other _____

Per Day Week Month
 Year Other _____

(* Is this waste regulated as a Marine Pollutant (49 CFR 171.8)? Yes No

Generator's Certification:
 I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all material described by this profile.

INSTRUCTIONS

The following information is required for all waste to be considered for transportation, storage, treatment or disposal. Answers must not be abbreviated, must be printed in ink, and will be maintained in confidence. Responses of "none" or "not applicable" should be made when appropriate. Material Safety Data Sheets for all components of the waste should accompany this form, if available. A copy of this form should be retained by the customer.

ALL QUESTIONS MUST BE ANSWERED

- Part A** GENERAL INFORMATION
- Part B** DOT — Choose the most appropriate DOT shipping information by referring to 49 CFR 172.101.
- Part C** RCRA — Select applicable EPA waste codes by referencing 40 CFR 261.
- Part D** ANNUAL REPORT CODES — Obtain these codes from the EPA Hazardous Waste Report Booklet.
- Part E** OTHER COMPONENTS — Check the appropriate boxes and list the total parts per million. If data was obtained from laboratory analysis, attach a copy of the analysis.
- Part F** PHYSICAL CHARACTERISTICS AT 70 DEGREES F — Complete all sections. The flash point is a value attained using the appropriate test method referenced in 40 CFR 261.21. Dermal and oral toxicity can be found in chemical dictionaries or by referring to the Material Safety Data Sheet.
- Part G** METALS — Indicate if the metal concentrations are represented as total or leachable metals, and whether they are above or below the regulatory limit as defined by the Extraction Procedure contained in 40 CFR, Appendix II.
- Part H** PHYSICAL/CHEMICAL CONSTITUENTS — List all components of the waste using specific chemical names, including water, earth, or forms of debris. For each component, indicate the expected percent or other unit of measure in which the component is present. The constituents must total 100%.
- Part I** ANTICIPATED VOLUME — Enter the total volume to be treated, stored, or disposed.

Generator Certification: Must be signed by an authorized management representative of the company generating the waste stream described on this form.

#	Questions Specific Only to Waste Managed at LES Facilities in California	Yes	No
1	Is this waste derived from or is it contaminated with a petroleum derived fuel or lubricant?		X
2	Does the waste contain any organic chemicals (e.g. solvents, herbicides, pesticides) above the TCLP "characteristic" threshold values specified in 40 CFR §261.24? (If yes, analysis required)		X
3	Does the waste contain any organic chemicals (e.g. solvents, herbicides, pesticides) above the STLC/TTLC "characteristic" threshold values specified in 22 CCR §66261.24? (If yes, analysis required)		X
4	Does the waste contain any toxic metals (e.g. lead, chrome, cadmium, etc.) above the TCLP "characteristic" threshold values specified in 40 CFR §261.24? (If yes, analysis required)		X
5	Does the waste contain any toxic metals (e.g. lead, chrome, cadmium, etc.) above the STLC/TTLC "characteristic" threshold values specified in 22 CCR §66261.24? (If yes, analysis required)	X	
6	Does this waste contain Organic Lead (e.g. tetraethyl lead) at a concentration greater than 100 ppm?		X
7	Is this waste toxic to fish as defined by the Title 22 CCR §66261.24(a)(6) "96-hour Aquatic Toxicity test"?		X
8	Is the waste considered "Extremely Hazardous" (EH) in California under 22 CCR §66261.110?		X
9	Does this waste contain any of the carcinogenic compounds (singularly or combined) at a concentration above 1,000.0 ppm making it a California regulated hazardous waste under 22 CCR §66261.24(a)(7)?		X
10	Has this waste been specifically classified by the State of California DTSC as a hazardous waste because it "... has been shown through experience or testing to pose a hazard to human health or the environment because of its carcinogenicity, acute toxicity, bioaccumulative properties or persistence in the environment" as per 22 CCR §66261.24(a)(8) (e.g. ash high in silica from rice hull burning)?	X	X
11	Is (was) the waste a wastewater that is not in itself a listed RCRA waste (F or K), but by treating the wastewater would create a sludge that is a RCRA listed waste (e.g. F037, K048, etc.)?		X
12	Does this waste contain any biodegradable sorbents as described in 40 CFR 264.312?		X
13	If this waste is classified as a D001 or D002 RCRA waste or if this waste was a D001 or D002 RCRA waste that was treated by deactivation, does it contain any of the chemical constituents above the regulatory thresholds specified for F039 in 40 CFR 268.37?		X

FOR LAIDLAW ENVIRONMENTAL SERVICES USE ONLY

Sample Submitted Yes No No. of Samples _____ Chain of Custody Yes No Sample No. _____

Laidlaw Approval

Approved Disapproved Approval # _____ Annual Analysis Date _____

Operations _____ Date _____

Comments _____

Land Disposal Restrictions

Unrestricted Restricted Category _____ Sub Category _____

Variance Date _____ Treatability Group: WW NWW Treatment Technology _____

Legend No. _____ 40 CFR Ref.: 268.41 CCWE 268.42 Table 2 263.43 CCW

Routing

TSD #1 _____ TSD #2 _____

Outgoing Approval # _____ Outgoing Approval # _____

Handling Codes _____ Handling Codes _____

Cost Codes _____ Cost Codes _____

Health and Safety

Special Handling Instructions _____

MICRO ANALYTICAL LABORATORIES, INC.

MICRO ANALYTICAL LABORATORIES, INC. SOIL ANALYSIS - METALS

Page 1

1116

ARS, Inc.
701 Southampton, Suite 105
Benicia, CA 94510

PROJECT:
2001 MARINA BLVD
SAN LEANDRO, CA

Micro Log In 55752
Total Samples 1
Date Sampled 5/12/98
Date Received 5/12/98
Date Analyzed 5/12/98

SAMPLE ID / DESCRIPTION

Micro Sample No. Client Sample No.
55752-01 **SHINGLE**

ANALYTE	Analysis Results mg/kg(ppm)	Detection Limit mg/kg(ppm)	Comments
Aluminum (Al)			
Antimony (Sb)	6.4	1.4	
Arsenic (As)	< 2.3	2.3	
Barium (Ba)	47	0.1	
Beryllium (Be)	< 0.01	0.01	
Cadmium (Cd)	1.1	0.2	
Chromium (Cr)	49	0.3	
Cobalt (Co)	5.2	0.3	
Copper (Cu)	37	0.3	
Iron (Fe)			
Lead (Pb)	105	1.1	
Magnesium (Mg)			
Mercury (Hg)	< 0.25	0.25	
Molybdenum (Mo)	1.0	0.4	
Nickel (Ni)	39	0.5	
Selenium (Se)	< 0.5	0.5	
Silver (Ag)	< 0.3	0.3	
Thallium (Tl)	< 1.8	1.8	
Vanadium (V)	78	0.4	
Zinc (Zn)	58	0.1	

Technical Supervisor:



5/12/98

Analyst:

FR

MICRO ANALYTICAL LABORATORIES, INC.
CALIFORNIA WASTE EXTRACTION TEST - LEAD

1116
 ARS, Inc.
 701 Southampton, Suite 105
 Benicia, CA 94510

PROJECT:
2001 MARINA BLVD
SAN LEANDRO, CA

Micro Log In **55753**
 Total Samples **1**
 Date Sampled **5/12/98**
 Date Received **5/12/98**
 Date Reported **5/15/98**

STLC LEAD CONCENTRATION

SAMPLE ID / DESCRIPTION

**Regulatory
 Limit
 (mg/L)**

**Result
 (mg/L)**

**Detection
 Limit
 (mg/L)**

SAMPLE ID / DESCRIPTION	Regulatory Limit (mg/L)	Result (mg/L)	Detection Limit (mg/L)
Client SHINGLE Micro 55753-01	5.0	7.1	0.1

Technical Supervisor: _____

F. Ramezanzadeh
 Farid Ramezanzadeh, M.S.

5/15/98

Analyst: _____

FR

Explanation: STLC = Soluble Threshold Limit Concentration; TLLC = Total Threshold Limit Concentration; mg = milligrams; kg = kilograms; ND = None Detected (below detection limit); NA = Not Applicable. Extraction Test: California Waste Extraction Test (WET), CCR Title 22, 66261.126, Appendix II. Analytical reference (SW-846, 3rd Edition): EPA 7420 (Flame AA Analysis). This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed.

MICRO ANALYTICAL LABORATORIES, INC.

TCLP EXTRACTION - LEAD IN HAZARDOUS WASTE

1116
ARS, Inc.
701 Southampton, Suite 105
Benicia, CA 94510

PROJECT:
2001 MARINA BLVD.
SAN LEANDRO, CA

Micro Log In 58186
Total Samples 1
Date Sampled 7/2/98
Date Received 7/23/98
Date Analyzed 7/24/98

TCLP LEAD CONCENTRATION

SAMPLE ID / DESCRIPTION	Regulatory Limit (mg/L)	Analysis Result (mg/L)	Detection Limit (mg/L)	Comments
Client SHINGLE GRANULES Micro 58196-01 BUILDING PAD MID-SECTION	5.0	<0.5	0.5	

Technical Supervisor: Farid Ramazanzadeh, M.S. 7/24/98 Analyst: JS/HC

Explanation: TCLP = Toxicity Characteristic Leaching Procedure; mg/L = milligrams per liter (ppm); ND = None Detected (below detection limit); NA = Not Applicable. Method references (SW-846, 3rd Edition): EPA 1311 (TCLP), EPA 7420 (Flame AA Analysis). This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed.

LIDLAW ENVIRONMENTAL SERVICES, INC

**California Land Disposal/Restriction Information
Notification/Certification Form**

This form is submitted in accordance with the requirements of 22 CCR 66268.7(a) Chapter 18 which restricts land disposal of certain hazardous wastes. The appropriate California waste code(s) and applicable non-RCRA hazardous waste listings from CCR 66268.29 are noted below. Complete all portions of Part I. If the waste is non-hazardous or not restricted then complete only the applicable portions in Part I and sign / date the Form at the bottom of page. Otherwise complete Part I, II and III, and sign / date the Form at the bottom of page. (For RCRA wastes, use Laidlaw RCRA FORM)

I. GENERAL INFORMATION REGARDING GENERATOR & WASTE STREAM

GENERATOR'S NAME Bigge Street Investors, L.L.C. PHONE: 510-943-1313
 SITE LOCATION: 2001 Marina Blvd., San Leandro PROFILE NUMBER: _____
 IS THIS WASTE NON-HAZARDOUS? NO, YES (if YES, stop here and sign/date form at the bottom of page)
 GENERATOR'S EPA ID#: CAC001495144 MANIFEST #: _____ CA WASTE CODE(S): 611
 IS THIS WASTE RESTRICTED? YES, NO (if NO, stop here and sign/date form at the bottom of page)
 THIS NOTIFICATION & CERTIFICATION IS BASED ON THE FOLLOWING WASTE STREAM INFORMATION:
 (A) CHEMICAL/PHYSICAL ANALYSIS OF THE WASTE; (B) GENERATOR KNOWLEDGE OF THE WASTE; OR (C) BOTH

Check the appropriate boxes in Parts II and III. If only one notification applies, then III(A) is not required. For multiple certifications / notifications, the appropriate choices from Part II (1-3) may be marked in Part III(A) to indicate how waste is to be managed to conform with Land Disposal Restrictions. By selecting an item in Part III(A), 1-3, you are making the certification / notification noted in Part II.

II. TYPE OF LDR NOTIFICATION / CERTIFICATION

1. ◀ NOTIFICATION ONLY: WASTE THAT CURRENTLY REQUIRE TREATMENT TO MEET THE 22 CCR ARTICLE 11 TREATMENT STANDARDS: = 22 CCR 66268.7(a)(1) 1

2. ◀ NOTIFICATION & CERTIFICATION: WASTE THAT MEETS THE 22 CCR ARTICLE 11 TREATMENT STANDARDS, NO ADDITIONAL TREATMENT REQUIRED: = 22 CCR 66268.7(a)(2)
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing through knowledge of the waste to support this certification, that the waste complies with the treatment standards specified in CCR Title 22, Division 4.5, Chapter 18, Articles 4 and 11 and all applicable prohibitions set forth in CCR Title 22, Section 66268.32 or RCRA Section 3004(d)(42 U.S.C. Section 6924(d)). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine or imprisonment. 2

3. ◀ NOTIFICATION & CERTIFICATION: NON-RCRA WASTE THAT HAS BEEN TREATED AT AN OFF-SITE TREATMENT FACILITY SO AS TO MEET ALL APPLICABLE 22 CCR ARTICLE 11 TREATMENT STANDARDS: = 22 CCR 66268.7(b)(5)
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing through knowledge of the waste to support this certification, that the waste complies with the treatment standards specified in CCR Title 22, Division 4.5, Chapter 18, Articles 4 and 11 and all applicable prohibitions set forth in CCR Title 22, Section 66268.32 or RCRA Section 3004(d)(42 U.S.C. Section 6924(d)). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine or imprisonment. 4

III. LDR NOTIFICATION / CERTIFICATION INFORMATION REQUIRED BY 22CCR

Check appropriate boxes	(A) Check 1, 2, or 3 from handling information (Part II)	(B) Prohibition Effective Date	(C) Subcategory of Restricted Waste (22 CCR 66268.29 a-m) and Treatability Group(s) 66268.100(a)(1-14)	(D) Corresponding Treatment Standard (From 22 CCR)
1. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	1 / 26 / 90	Aqueous wastes containing metals [66268.29(a) & 66268.100(a)(1)]	1 66268.107 Table II CCW
2. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	5 / 8 / 91	Auto shredder waste [66268.29(c) & 66268.100(a)(3)]	2 66268.106 Table 1-A CCWE
3. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	1 / 1 / 91	Hazardous waste foundry sand [66268(e) & 66268.100(a)(5)]	4 66268.106 Table 1-B CCWE
4. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	1 / 1 / 91	Fly ash, bottom ash, retort ash or baghouse waste [66268.29(h) & 66268.100(a)(8)]	7 66268.106 Table I-D CCWE
5. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	1 / 1 / 91	Baghouse waste from foundries [66268.29(i) & 66268.100(a)(9)]	8 66268.106 Table I-E CCWE
6. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	3 / 1 / 93	Asbestos containing waste identified in section [66268.29(m) & 66268.100(a)(13)]	12 66268.114
7. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		Other (Specify):	13

Copies of applicable treatment standards and waste analysis data (where available) are maintained at the facility identified on the manifest referenced above.

IV. GENERATOR AUTHORIZATION / CERTIFICATION

I hereby certify that all information submitted in this and all associated documents is true, complete, and accurate to the best of my knowledge and information, and that no omissions or errors exist. I warrant that I am an authorized representative of the generator.

Michael Kala Michael Kala as agent for Bigge Management
 Authorized Signature Printed Name Title
 Date 3/20/98

ASPHALT / SOIL

New Amendment

A. GENERATOR INFORMATION

Generator Name Bigge Street Investors, L.L.C Telephone 707 748-4205 EXT. _____
 Facility Address 2001 Marina Blvd. Fax (707 748-4207)
San Leandro, CA
 Billing Name ARS, Inc.
 Billing Address 701 Southampton Road, Suite 105
 City/Country _____
 State _____ Zip Code _____ City Benicia State CA Zip Code 94500
 USEPA ID# CAC 001 495 144 Attention Michael Kara
 State ID# _____ Telephone 707 748-4205/510-304-3257 EXT. _____

Technical Contact Michael Kara

B. DOT Shipping Name Non Hazardous Waste
 Hazard Class _____
 UN/NA No. _____ Packing Group _____ RO _____

D. ANNUAL REPORT CODES

SIC Code: _____
 Source Code: A _____
 Form Code: B _____
 Origin Code: _____
 System Type: M _____

E. OTHER COMPONENTS

	No	Yes	Total ppm
PCB's	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cyanides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Sulfides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Pesticides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Phenolics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Dioxins	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Halogens	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____ %

C. RCRA RCRA Non Hazardous/Exempt? Yes No Process Generating: SITE CLEANUP
 State Waste Codes: N/A EPA Waste Codes: N/A

F. PHYSICAL CHARACTERISTICS AT 70° F

- Infectious or Biological Waste? Yes No
- NRC Regulated Radioactive? Yes No
- Reactivity None Water Reactive
 Pyrophoric Shock Sensitive
 Cyanides DOT Explosive
 Sulfides Other _____

Weight Density _____ lbs./gal. (US, liq) 90 lbs./cu. foot
 Dry Weight <1.0% 5-20%
 1-5% 20-100%
 pH N/A 0-2 4.1-10 ≥ 12.5
 2.1-4 10.1-12.4 Exact _____

Dermal Toxicity LD₅₀ (Mg/Kg)
 ≤40 >200, ≤1000
 >40, ≤200 >1000
 4. Material poisonous by inhalation? Yes No
 Oral Toxicity LD₅₀ (Mg/Kg)
 ≤5 >5, ≤50
 >50, ≤200 >200
 Solids: _____
 Liquids: >50, ≤500 >500

Gas (Cylinder) Solid 100 %
 Aerosol Sludges _____ %
 Lab-Pack Free Liquids _____ %
 100%

Flash Point (liquid only)
 <73°F (23°C) Boiling Point
 73-140°F (23-60°C) <95°F (35°C)
 142-200°F (61-93°C) >95°F (35°C)
 >200°F (93°C) N/A
 N/A

- Is this waste stored in vented drums? Yes No
- Is this waste pumpable? Yes No
- Is this waste polymerizable? Yes No
- Is waste stream subject to the National Emission Standards for Benzene Waste Operations (40 CFR 61 Subpart FF)? Yes No
- Is this waste regulated as an ozone depleting substance (40 CFR part 82)? Yes No
- Does this waste contain scrap metal pieces greater than 2 inches in size? Yes No

Layers Single Layered Bi-layered Multi-layered
 Viscosity Low Medium High
 Odor None Mild Strong Describe: Tar roofing
 Color/Appearance: Soil with Tar debris

BTU/Lb. <5,000

H. PHYSICAL/CHEMICAL CONSTITUENTS

Soil 50-70 %
steel pipes, fragment 10-20 %
Roofing Tar 30-50 %
Diesel < 1 %

G. METALS
 NONE TCLP (MGL) TOTAL (PPM)

	Reg. Limit	Below	Above	Range
Arsenic	5 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Barium	100 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cadmium	1 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Chromium	5 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Copper		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lead	5 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Mercury	0.2 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Nickel	134 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Selenium	1 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Silver	5 mg/L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Zinc		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Others:				

I. ANTICIPATED VOLUME

Qty.	Container	Qty.	Container
<input type="checkbox"/>	5 gal. pail	<input type="checkbox"/>	Cubic Yard Box*
<input type="checkbox"/>	15 gal. carboy	<input type="checkbox"/>	Super Sack*
<input type="checkbox"/>	30 gal. drum	<input checked="" type="checkbox"/> <u>10</u>	Rolloff/Dump Trailer*
<input type="checkbox"/>	55 gal. drum	<input type="checkbox"/>	Tanker*
<input type="checkbox"/>	85 gal. drum	<input type="checkbox"/>	Other _____

Per Time Week Month
 Year Other _____

(*) Is this waste regulated as a Marine Pollutant (49 CFR 171.8)? Yes No

(Attach All MSDS, Sample Analysis and Additional Info.)

Generator's Certification:
 I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the materials tested are representative of all material described by this profile.

INSTRUCTIONS

The following information is required for all waste to be considered for transportation, storage, treatment or disposal. Answers must not be abbreviated, must be printed in ink, and will be maintained in confidence. Responses of "none" or "not applicable" should be made when appropriate. Material Safety Data Sheets for a components of the waste should accompany this form, if available. A copy of this form should be retained by the customer.

ALL QUESTIONS MUST BE ANSWERED

Part A GENERAL INFORMATION

Part B DOT — Choose the most appropriate DOT shipping information by referring to 49 CFR 172.101.

Part C RCRA — Select applicable EPA waste codes by referencing 40 CFR 261.

Part D ANNUAL REPORT CODES — Obtain these codes from the EPA Hazardous Waste Report Booklet.

Part E OTHER COMPONENTS — Check the appropriate boxes and list the total parts per million. If data was obtained from laboratory analysis, attach a copy of the analysis.

Part F PHYSICAL CHARACTERISTICS AT 70 DEGREES F — Complete all sections. The flash point is a value attained using the appropriate test method referenced in 40 CFR 261.21. Dermal and oral toxicity can be found in chemical dictionaries or by referring to the Material Safety Data Sheet.

Part G METALS — Indicate if the metal concentrations are represented as total or leachable metals, and whether they are above or below the regulatory limit as defined by the Extraction Procedure contained in 40 CFR, Appendix II.

Part H PHYSICAL/CHEMICAL CONSTITUENTS — List all components of the waste using specific chemical names, including water, earth, or forms of debris. For each component, indicate the expected percent or other unit of measure in which the component is present. The constituents must total 100%.

Part I ANTICIPATED VOLUME — Enter the total volume to be treated, stored, or disposed.

Generator Certification: Must be signed by an authorized management representative of the company generating the waste stream described on this form.

#	Questions Specific Only to Waste Managed at LES Facilities in California	Yes	No
1	Is this waste derived from or is it contaminated with a petroleum derived fuel or lubricant?	<input checked="" type="checkbox"/>	
2	Does the waste contain any organic chemicals (e.g. solvents, herbicides, pesticides) above the TCLP "characteristic" threshold values specified in 40 CFR §261.24? (If yes, analysis required)		<input checked="" type="checkbox"/>
3	Does the waste contain any organic chemicals (e.g. solvents, herbicides, pesticides) above the STLC/TTLT "characteristic" threshold values specified in 22 CCR §66261.24? (If yes, analysis required)		<input checked="" type="checkbox"/>
4	Does the waste contain any toxic metals (e.g. lead, chrome, cadmium, etc.) above the TCLP "characteristic" threshold values specified in 40 CFR §261.24? (If yes, analysis required)		<input checked="" type="checkbox"/>
5	Does the waste contain any toxic metals (e.g. lead, chrome, cadmium, etc.) above the STLC/TTLT "characteristic" threshold values specified in 22 CCR §66261.24? (If yes, analysis required)		<input checked="" type="checkbox"/>
6	Does this waste contain Organic Lead (e.g. tetraethyl lead) at a concentration greater than 100 ppm?		<input checked="" type="checkbox"/>
7	Is this waste toxic to fish as defined by the Title 22 CCR §66261.24(a)(6) "96-hour Aquatic Toxicity test"?		<input checked="" type="checkbox"/>
8	Is the waste considered "Extremely Hazardous" (EH) in California under 22 CCR §66261.110?		<input checked="" type="checkbox"/>
9	Does this waste contain any of the carcinogenic compounds (singularly or combined) at a concentration above 1,000.0 ppm making it a California regulated hazardous waste under 22 CCR §66261.24(a)(7)?		<input checked="" type="checkbox"/>
10	Has this waste been specifically classified by the State of California DTSC as a hazardous waste because it "... has been shown through experience or testing to pose a hazard to human health or the environment because of its carcinogenicity, acute toxicity, bioaccumulative properties or persistence in the environment" as per 22 CCR §66261.24(a)(8) (e.g. ash high in silica from rice hull burning)?		<input checked="" type="checkbox"/>
11	Is (was) the waste a wastewater that is not in itself a listed RCRA waste (F or K), but by treating the wastewater would create a sludge that is a RCRA listed waste (e.g. F037, K048, etc.)?		<input checked="" type="checkbox"/>
12	Does this waste contain any biodegradable sorbents as described in 40 CFR 264.312?		<input checked="" type="checkbox"/>
13	If this waste is classified as a D001 or D002 RCRA waste or if this waste was a D001 or D002 RCRA waste that was treated by deactivation, does it contain any of the chemical constituents above the regulatory thresholds specified for F039 in 40 CFR 268.37?		<input checked="" type="checkbox"/>

FOR LAIDLAW ENVIRONMENTAL SERVICES USE ONLY

Sample Submitted Yes No No. of Samples _____ Chain of Custody Yes No Sample No. _____

Laidlaw Approval

Approved Disapproved Approval # _____ Annual Analysis Date _____

Operations _____ Date _____

Comments _____

Land Disposal Restrictions

Unrestricted Restricted Category _____ Sub Category _____

Variance Date _____ Treatability Group: WW NWW Treatment Technology _____

Legend No. _____ 40 CFR Ref.: 268.41 CCWE 268.42 Table 2 263.43 CCW

Routing

TSD #1 _____ TSD #2 _____

Outgoing Approval # _____ Outgoing Approval # _____

Handling Codes _____ Handling Codes _____

Cost Codes _____ Cost Codes _____

Health and Safety

Special Handling Instructions _____

LIDLAW ENVIRONMENTAL SERVICES, INC

California Land Disposal/Restriction Information Notification/Certification Form

This form is submitted in accordance with the requirements of 22 CCR 66268.7(a) Chapter 18 which restricts land disposal of certain hazardous wastes. The appropriate California waste code(s) and applicable non-RCRA hazardous waste listings from CCR 66268.29 are noted below. Complete all portions of Part I. If the waste is non-hazardous or not restricted then complete only the applicable portions in Part I and sign / date the Form at the bottom of page. Otherwise complete Part I, II and III, and sign / date the Form at the bottom of page. (For RCRA wastes, use Laidlaw RCRA FORM)

I. GENERAL INFORMATION REGARDING GENERATOR & WASTE STREAM

GENERATOR'S NAME Bigge Streets Investors PHONE: 510-943-1313
 SITE LOCATION: 2001 Marine Blvd. PROFILE NUMBER: _____
 IS THIS WASTE NON-HAZARDOUS? NO, YES (if YES, stop here and sign/date form at the bottom of page)
 GENERATOR'S EPA ID#: CA MANIFEST #: _____ CA WASTE CODE(S): _____
 IS THIS WASTE RESTRICTED? YES, NO (if NO, stop here and sign/date form at the bottom of page)
 THIS NOTIFICATION & CERTIFICATION IS BASED ON THE FOLLOWING WASTE STREAM INFORMATION:
 (A) CHEMICAL/PHYSICAL ANALYSIS OF THE WASTE; (B) GENERATOR KNOWLEDGE OF THE WASTE; OR (C) BOTH

Check the appropriate boxes in Parts II and III. If only one notification applies, then III(A) is not required. For multiple certifications / notifications, the appropriate choices from Part II (1-3) may be marked in Part III(A) to indicate how waste is to be managed to conform with Land Disposal Restrictions. By selecting an item in Part III(A), 1-3, you are making the certification / notification noted in Part II.

II. TYPE OF LDR NOTIFICATION / CERTIFICATION

1. ◀ NOTIFICATION ONLY: WASTE THAT CURRENTLY REQUIRE TREATMENT TO MEET THE 22 CCR ARTICLE 11 TREATMENT STANDARDS: - 22 CCR §66268.7(a)(1) 1

2. ◀ NOTIFICATION & CERTIFICATION: WASTE THAT MEETS THE 22 CCR ARTICLE 11 TREATMENT STANDARDS, NO ADDITIONAL TREATMENT REQUIRED: - 22 CCR §66268.7(a)(2) 2
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing through knowledge of the waste to support this certification, that the waste complies with the treatment standards specified in CCR Title 22, Division 4.5, Chapter 18, Articles 4 and 11 and all applicable prohibitions set forth in CCR Title 22, Section 66268.32 or RCRA Section 3004(d)(42 U.S.C. Section 6924(d)). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine or imprisonment.

3. ◀ NOTIFICATION & CERTIFICATION: NON-RCRA WASTE THAT HAS BEEN TREATED AT AN OFF-SITE TREATMENT FACILITY SO AS TO MEET ALL APPLICABLE 22 CCR ARTICLE 11 TREATMENT STANDARDS: - 22 CCR §66268.7(b)(5) 4
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing through knowledge of the waste to support this certification, that the waste complies with the treatment standards specified in CCR Title 22, Division 4.5, Chapter 18, Articles 4 and 11 and all applicable prohibitions set forth in CCR Title 22, Section 66268.32 or RCRA Section 3004(d)(42 U.S.C. Section 6924(d)). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine or imprisonment.

III. LDR NOTIFICATION / CERTIFICATION INFORMATION REQUIRED BY 22CCR

Check appropriate boxes	(A) Check 1,2, or 3 from handling information (Part II)	(B) Prohibition Effective Date	(C) Subcategory of Restricted Waste (22 CCR 66268.29 a-m) and Treatability Group(s) 66268.100(a)(1-14)	(D) Corresponding Treatment Standard (From 22 CCR)
1. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	1/26/90	Aqueous wastes containing metals [66268.29(a) & 66268.100(a)(1)]	1 66268.107 Table II CCW
2. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	5/8/91	Auto shredder waste [66268.29(c) & 66268.100(a)(3)]	2 66268.106 Table 1-A CCWE
3. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	1/1/91	Hazardous waste foundry sand [66268(e) & 66268.100(a)(5)]	4 66268.106 Table 1-B CCWE
4. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	1/1/91	Fly ash, bottom ash, retort ash or baghouse waste [66268.29(h) 66268.100(a)(8)]	7 66268.106 Table 1-D CCWE
5. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	1/1/91	Baghouse waste from foundries [66268.29(i) & 66268.100(a)(9)]	8 66268.106 Table 1-E CCWE
6. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	3/1/93	Asbestos containing waste identified in section [66268.29(m) & 66268.100(a)(13)]	12 66268.114
7. <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		Other (Specify):	13

Copies of applicable treatment standards and waste analysis data (where available) are maintained at the facility identified on the manifest referenced above.

IV. GENERATOR AUTHORIZATION / CERTIFICATION

I hereby certify that all information submitted in this and all associated documents is true, complete, and accurate to the best of my knowledge and information, and that no omissions or errors exist. I warrant that I am an authorized representative of the generator.

Michael Kala Michael Kala Manager 7/20/98
 Authorized Signature Printed Name Title Date

THIS DOCUMENT, WITH AN ORIGINAL SIGNATURE, MUST ACCOMPANY EACH WASTE SHIPMENT. A COPY OF THIS CERTIFICATION, AND ALL

19691-BDN-0898*

01292

NON-HAZARDOUS SPECIAL WASTE MANIFEST

*per Elias Rushmawi, agent for generator, 8/10/98 (K185114)

GENERATOR

Generator Name Bigge St. Investors, LLC Generating Location Bigge St. Investors, LLC
 Address 1200 Snyder Ln Address 1200 Snyder Ln
Walnut Creek, Ca. 94598 Walnut Creek, Ca. 94598
 Phone No. 510 9431313 Phone No. 510 9431313

LUL/Waste Code	Description of Waste	Quantity	Units	Containers		Type	
				No.	Type	C-Drum	C-Drum
19691BDN0898	CALC0014951144 Soil & Debris	00018	Y			<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

ARS, INC. as agent for Bigge Street Investors Michael F. Kala 081098
 Generator Authorized Agent Name Signature Shipment Date

TRANSPORTER

Truck No. C-10 Driver Name (Print) Ken H T Thompson
Jim Chism
 Transporter Name DenBeste Transportation Phone No. 707-838-1407
 Address 930 Shiloh Rd #44 Vehicle License No./State 9A00319
Windsor, Ca. 95492 Vehicle Certification _____

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Ken Thompson 081098 Ken Thompson 081098
 Driver Signature Date Driver Signature Date

DESTINATION

Site Name Laidlaw Environmental Phone No. _____
 Address 2500 W. Lokern Rd. Butteville, Ca. 93206

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

[Signature] [Signature] 081098
 Name of Authorized Agent Signature Receipt Date

C-9 9A19292 1476464 9808939 01293

NON-HAZARDOUS SPECIAL WASTE MANIFEST

19691- BDN- 0899 *Per Calif. Resource, 8-10-92 P1355 through Cathy Reomine, LES*
By Cheryl Jey, LES

GENERATOR

Generator Name Bigge St. Investors, LLC Generating Location Bigge St. Investors, L.L.C
 Address 1200 Snyder Ln Address 1200 Snyder Ln
walnut creek, CA 94598 walnut Creek, CA 94598
 Phone No. 510 9431313 Phone No. 510 9431313

Lot/Waste Code	Description of Waste	Quantity	Units	Containers		Type								
				No.	Type	D-Drum	C-Can	B-Bag	T-Truck	P-Pallet	Y-Yard	O-Other		
19691BDN0893	CAC 001495144 Soil + Debris	00018	<input checked="" type="checkbox"/>											

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

ARS, Inc. as agent for Bigge Street Investors Michael Kaler 081098
 Generator Authorized Agent Name Signature Shipment Date

TRANSPORTER

Truck No. Chysm Trucking Driver Name (Print) 209 867 4854
 Transporter Name Denbost Transport Phone No. (707) - 838-1407
 Address 930 Shiloh Rd #44 Vehicle License No./State _____
windsor, ca. 95492 Vehicle Certification _____

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Jal Sawlmi 0811098 _____
 Driver Signature Date Driver Signature Date

DESTINATION

Site Name Laidlaw Environmental Phone No. _____
 Address 2500 W. Lobern Rd. Buttonwillow, Ca. 93206

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Ney Barber [Signature] 081198
 Name of Authorized Agent Signature Receipt Date

17691-BDN-0898 per Chris Raskman agent for generator, 8-10-98 @ 1355 through City, Riverside, CA, 01294 by City, LES

NON-HAZARDOUS SPECIAL WASTE MANIFEST

4805400

GENERATOR

Generator Name Bigge St Investors LLC Generating Location Bigge St Investors, LLC
 Address 1200 Snyder Ln Address 1200 Snyder Ln
walnut creek, CA 94598 walnut creek, CA, 94598
 Phone No. 516 9431313 Phone No. 516 9431313

Lot/Waste Code	19691BDNO898	Quantity	Units	No.	Type
Description of Waste	CAC001495144	00018	Y		C-Drum
	Soil + Debris + Tax Vault				B-Bag
					T-Truck
					P-Pounds
					Y-Yards
					O-Other

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

ARS, Inc. as agent for Bigge Street Investors. Michael F. Kater 080398
 Generator Authorized Agent Name Signature Shipment Date

TRANSPORTER

Truck No. _____ Driver Name (Print) _____
 Transporter Name DenBeste Transportation Phone No. 707-838-1407
 Address 930 Shiloh Rd #44 Vehicle License No./State _____
windsor CA 95492 Vehicle Certification _____

I hereby certify that the above named material was picked up at the generator site listed above. I hereby certify that the above named material was delivered without incident to the destination listed below.

Ed Wors 081098 _____
 Driver Signature Date Driver Signature Date

DESTINATION

Site Name Laidlaw Environmental Phone No. _____
 Address 2500 w. Lokern Rd. Buttonwillow, Ca 93206

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

[Signature] [Signature] 081098
 Name of Authorized Agent Signature Receipt Date

C-9 9A19292

14R4632

01296

NON-HAZARDOUS SPECIAL WASTE MANIFEST

19691 BDN 0898 per Elias

GENERATOR Kashman agent for generator 8/10/9
13:55, at Cal Hwy in common, Laidlaw.

Generator Name Bigge St. Investors L.L.C

Generating Location Bigge Investors, L.L.C

Address 1200 Snyder Ln

Address 1200 Snyder Ln.

Walnut Creek 94598

Walnut Creek, 94598

Phone No. 510 9431313

Phone No. 510 9431313

Lot/Waste Code 19691BDNO898

Description of Waste
CAL 001495104
Soil & Debris

Quantity 00018

Containers	Type
<input type="checkbox"/>	D-Drum
<input type="checkbox"/>	C-Carton
<input type="checkbox"/>	B-Bag
<input type="checkbox"/>	T-Truck
<input type="checkbox"/>	P-Pounds
<input type="checkbox"/>	Y-Yards
<input type="checkbox"/>	O-Other

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

180896

Generator Authorized Agent Name ARS, Inc. as agent for Bigge Street Investors

Signature Richard F. Kala

Shipment Date 081098

TRANSPORTER

Truck No. C-9
Transporter Name Chism Trucking
Den Beste Transportation
10755
Address 930 Shiloh Rd, #44
Riverdale CA 93256
Windsor Ca. 95492

Driver Name (Print) LARRY
Phone No. 707-838-1407
Vehicle License No./State 9A19292
Vehicle Certification _____

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature [Signature]

Date 081098

Driver Signature _____ Date _____

DESTINATION

Site Name Laidlaw Environmental

Phone No. (705) 762-7372

Address 2500 W. Lokern Rd Buttonwillow Ca. 93202

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent [Signature]

Signature [Signature]

Receipt Date 081098

PA18293

C-11 19691BDN0898*

01297

NON-HAZARDOUS SPECIAL WASTE MANIFEST

* per Elias Rasmussen, agent for generator, 8/10/98 @ 13:55 at City of Richmond, landlaw.

GENERATOR

Generator Name Bigge St. Investors LLC Generating Location Bigge St. Investors LLC
 Address 1200 Snyder Ln Address 1200 Snyder Ln
Walnut Creek 94598 Walnut Creek 94598
 Phone No. 510 9431313 Phone No. 510 9431313

Lot/Waste Code	Description of Waste	Quantity	Units	Containers		Type
				No.	Type	D-Drum
19691BDN0898	CAL 001495144 Soil + Debris	00018	Y			<input type="checkbox"/> C-Can <input type="checkbox"/> B-Bag <input type="checkbox"/> T-Truck <input type="checkbox"/> P-Pounds <input type="checkbox"/> Y-Yards <input type="checkbox"/> O-Other

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

7808997

ARS, Inc. as agent for Bigge Street Investors - Michael F. Kahl 081098
 Generator Authorized Agent Name Signature Shipment Date

TRANSPORTER

Truck No. C-11 Driver Name (Print) William Cassidy
PHISM Trucking
 Transporter Name Den Beste Transportation Phone No. 707-838-1407
RIVERDALE CA
 Address 930 Sinton Rd #44 Vehicle License No./State PA18293
RIVERDALE CA
Windsor Calif Vehicle Certification

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

W Cassidy 081098 _____
 Driver Signature Date Driver Signature Date

DESTINATION

Site Name Laidlaw Environmental Phone No. (705) 762-2372
 Address 2500 W. Lokern Rd. Buttonwillow Ca. 93206

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Mered Moore _____ 081098
 Name of Authorized Agent Signature Receipt Date

19691-BDN-0898*

01298

NON-HAZARDOUS SPECIAL WASTE MANIFEST

*per Elias Rashmawi, agent for generator, 8/10/98 @ 13:55,
by Carl K. Keomini, Laidlaw GENERATOR

888898

Generator Name Bigge St Investors, L.L.C. Generating Location Biggest Investors, LLC
 Address 1200 Snyder Ln Address 1200 Snyder Ln
walnut creek, 94598 walnut creek, 94598
 Phone No. 510 9431313 Phone No. 510 9431313

Let/Waste Code	19691BDN0898	Quantity	Units	No.	Type
Description of Waste	CAC001495144	00018	<input checked="" type="checkbox"/>		<input type="checkbox"/> C-Drum
	Soil + Debris				<input type="checkbox"/> B-Bag
					<input type="checkbox"/> T-Truck
					<input type="checkbox"/> P-Pounds
					<input type="checkbox"/> Y-Yards
					<input type="checkbox"/> O-Other

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

ARS, Inc. as agent for Bigge St Investors Michael F. Keller 081098
 Generator Authorized Agent Name Signature Shipment Date

TRANSPORTER

Truck No. C-5 Driver Name (Print) _____
CHISM TRUCKING
 Transporter Name ~~CHISM TRUCKING~~ Phone No. 707-832-0407
 Address 930 Shiloh Rd #44 Vehicle License No./State _____
Windsor Ca 95492 Vehicle Certification _____

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

[Signature] 081098 [Signature] 081098
 Driver Signature Date Driver Signature Date

DESTINATION

Site Name Eaidlaw Environmental Phone No. _____
 Address 2500 W. Loken Rd Butternutwillow Ca 93206

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

[Signature] [Signature] 081098
 Name of Authorized Agent Signature Receipt Date

Please print or type
 Form designed for use on site (12-inch typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NOT APPLICABLE	Manifest Document No.	2. Page 1 of	Authorization No.
3. Generator's Name and Mailing Address BIGGE STREET INVESTORS, L.L.C. 1200 Snyder Lane, Walnut Creek, CA 94598					
4. Generator's Phone (707) 748-4205					
5. Transporter 1 Company Name Applied Remedial Services, Inc.	6. US EPA ID Number NOT APPLICABLE				
7. Transporter 2 Company Name	8. US EPA ID Number NOT APPLICABLE				
9. Designated Facility Name and Site Address B & J LANDFILL 6426 HAY ROAD VACAVILLE, CA 95687	10. US EPA ID Number NOT APPLICABLE	A. Transporter's Phone 707-748-4205			
		B. Transporter's Phone			
		C. Facility's Phone (707) 451-3278			
11. Waste Shipping Name and Description		12. Containers	13. Total Quantity		14. Unit W/Vol
		No.	Type		
a. Non Friable Asbestos (Transite Pipe)		011B	A	0002	CY
b.					
c.					
d.					
D. Additional Descriptions for Materials Listed Above			E. Handling Codes for Wastes Listed Above		
11a) Non Friable Asbestos Containing Transite pipe					
15. Special Handling Instructions and Additional Information					
Avoid breathing or creating dusts. Wear appropriate protective equipment when handling waste. In the event of an emergency, contact ARS, Inc. @ 707-748-4205, 510-304-3257.					
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
ARS, Inc. as Agent For Bigge St. Investors		<i>[Signature]</i>		07/29/98	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
<i>[Signature]</i>		<i>[Signature]</i>		07/29/98	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature		Month Day Year	
Terry Sousa		<i>[Signature]</i>		07/29/98	

GENERATOR

TRANSPORTER

FACILITY

Appendix - Section VI
Draft Environmental Restriction and Covenant

RECORDING REQUESTED BY:

WHEN RECORDED MAIL TO:
Crosby, Heafey, Roach & May
Professional Corporation
P. O. Box 7936
San Francisco, California 94120-7936
Attn: Sean M. Rhatigan, Esq.

DRAFT

ENVIRONMENTAL RESTRICTION
AND COVENANT

(Civil Code § 1471)

THIS ENVIRONMENTAL RESTRICTION AND COVENANT ("Covenant") is made as of _____, 1998, by Bigge Street Investors and the California Regional Water Quality Control Board, San Francisco Bay Region (the "Regional Board") for the benefit of the Bigge Street Investors, the Regional Board and all Owners and Occupants of the Property, as defined below.

RECITALS

A. The Bigge Street Investors own that real property located in the City of Oakland, County of Alameda, State of California, as described on Exhibit A attached hereto (the "Property").

B. The Property was previously used by Owens-Corning as a roofing and asphalt manufacturing plant. These operations resulted in soil contamination, with some subsurface areas of the property containing asphaltic materials (similar to road paving material, which contains petroleum hydrocarbons), as more fully described in the Risk Evaluation and Management Plan dated January 1997, prepared by GeoMatrix Consultants, Inc., as supplemented by the Workplan, Soil Backfill and Site Grading Activities dated June, 1998, prepared by Applied Remedial Services, Inc. ("the Plan." as it may be amended from time to time with the approval of the Regional Board).

C. The Regional Board has determined that the requirements of this Covenant are reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the Property of residual levels of certain hazardous materials identified in the Plan. The risk of public exposure to the contaminants has been substantially lessened by the remediation and controls described in the Plan.

NOW, THEREFORE, the Bigge Street Investors and the Regional Board agree as follows:

1. Definitions

1.1 BSI. "BSI" shall mean Bigge Street Investors, LLC, a California limited liability company, and shall include any successor business organization (whether by name change, merger or other action) of BSI.

1.2 Covenant. "Covenant" shall mean this Environmental Restriction and Covenant.

1.3 Effective Date. "Effective Date" shall mean the date this Agreement is recorded in the Official Records of Alameda County, California.

1.4 Occupants. "Occupants" shall mean those persons (whether individuals, corporations or any other legal entities), who, from and after the Effective Date, from time to time become entitled by leasehold, subleasehold or other legal relationship with an Owner or Occupant to occupy any portion of the Property and to engage in activities thereon that are subject to one or more Requirements set forth herein.

1.5 Owners. "Owners" shall mean those persons (whether individuals, corporations or other legal entities) who hold title (whether legal or equitable) from time to time to all or any portion of the Property.

1.6 Plan. "Plan" shall mean the Plan described in Recital B above, as it may be amended from time to time with the approval of the Regional Board.

1.7 Property. "Property" means the real property described in Exhibit A.

1.8 Regional Board. "Regional Board" shall mean the California Regional Water Quality Control Board, San Francisco Bay Region, and shall include its successor agencies, if any.

1.9 Requirements. "Requirements" shall have the meaning set forth in Section 2.2 hereof.

2. Environmental Restriction.

2.1 Land Affected. The land that is to be affected by this Covenant is the Property.

2.2 Covenants to Run with the Land. This Covenant (including the Plan and all exhibits, attachments, or appendices thereto, all documents incorporated herein by reference and all exhibits attached hereto) sets forth protective provisions, covenants, restrictions and conditions (collectively referred to as "Requirements"), upon and subject to which the Property and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. Each and all of the Requirements shall also inure to the benefit of and pass with each and every portion of the Property, and shall apply to, benefit and bind the respective successors in interest to the Property. Each and all of the Requirements shall be for the benefit of, and enforceable by the Regional Board, Owners, Occupants, and BSI, as their interests may appear. Each and all of the Requirements are imposed upon the entire Property unless expressly stated as applicable to a specific portion of the Property. This Covenant and each and all of the Requirements shall run with the land and pass with each and every portion of the Property, pursuant to California Civil Code Section 1471.

2.3 Necessity. Each and all of the Requirements relates to the use of the Property and each of the Requirements is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the Property of the hazardous materials listed in the Plan. This is not a statement that a hazard exists.

2.4 Concurrence of BSI, Owners and Occupants Presumed. BSI by its execution of this Covenant, and all other Owners and Occupants of all or any portion of the Property, by their purchase, leasing, or possession of all or any portion of the Property, shall be deemed to consent to and ratify the provisions hereof, including (without limitation) Section 2.2 hereof and to agree for and among themselves, their heirs, administrators, executors, successors and assigns, and the lessees of such Owners, heirs, administrators, executors, successors and assigns, that this Covenant and the Requirements as herein established must be adhered to for the benefit of present and future Owners and Occupants and that their interest in the Property shall be subject to this Covenant and the Requirements contained herein.

3. Provisions.

3.1 Implementation of Plan. BSI and each and every Owner and Occupant shall comply with and implement the Plan, as the Plan may be amended from time to time in accordance with applicable law and the rules and regulations of the Regional Board, during the period of time that BSI and such Owner and/or Occupant owns and/or holds an interest in the Property. Each Owner shall be responsible for insuring compliance with the Plan and this Covenant by all Occupants of, and all other persons holding or claiming any interest in, that portion of the Property owned by such Owner.

3.2 Restriction on Use. BSI and each and every Owner and Occupant, separately and independently, covenant to follow the provisions of the Plan when conducting any excavation work on the property, and covenant not to use the Property for any of the following during the period of time that BSI or any other Owner and/or Occupant owns and/or holds an interest in the Property, without first obtaining the prior written consent of the Regional Board:

a. Use as a residence, including any mobile home or factory built housing, apartment building, single-family home, or other structure constructed or installed for use as permanently occupied human habitation;

b. Use as a hospital; or

c. Use as a school for persons under 21 years of age or day care centers for children.

3.3 Notice. Each Owner and Occupant (including BSI) shall provide each new Owner, tenant, licensee or any person acquiring an interest in the Property from such Owner or Occupant with notice of this Covenant and the Plan and include the following provision in each deed, lease, license or other agreement to or with such person:

The land described herein is subject to that certain Environmental Restriction and Covenant dated as of _____, 1998 and recorded on _____, 1998 in the Official Records of Alameda County, California as Document No. _____, which imposes certain covenants, conditions and restrictions on usage of the property described herein. The provisions of the Environmental Restriction and Covenant are incorporated herein by reference and made a part hereof as if set forth in full.

3.4 Waiver of Claims. Each and every Owner and Occupant hereby waive release acquit and forever discharge BSI and their respective agents, directors, officers, employees, parent corporations, affiliated corporations, affiliated business entities, heirs, administrators, executives and successors, to the maximum extent permitted by law, of and from any and all claims, actions, causes of action, demands, rights, liabilities, damages, losses, cost expenses, or compensation, whatsoever, direct or indirect, known or unknown, foreseen or unforeseen, that they or any of them may now have or which may arise in the future on account of or in any way growing out of or connected with this Covenant, the Plan and the hazardous materials referred to in the Plan, except to the extent that BSI was an Owner or Occupant of the Property and failed to comply with this Covenant or the Plan.

EACH OWNER AND OCCUPANT EXPRESSLY WAIVE ANY OF THEIR RIGHTS GRANTED UNDER CALIFORNIA CIVIL CODE SECTION 1542, WHICH PROVIDES AS FOLLOWS: "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS

WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR."

4. General Provisions

4.1 Term. This Agreement shall continue in effect perpetually, unless properly terminated in accordance with applicable law. The termination of this Agreement shall be considered a form of "Amendment" for which the provisions of Section 4.2 shall apply.

4.2 Amendment. Any Owner or, with the Owner's consent any Occupant of the Property or any portion thereof, may apply to the Regional Board for a written amendment to the provisions of the Plan or any provision of this Covenant as they apply to all or any portion of the Property. Any amendment to the Covenant which results from any such application shall apply only to that Owner or Occupant who made application for the same, unless explicitly stated to bind future Owners and Occupants. The Regional Board may also propose to Owners and (with the Owner's consent) to Occupants, written amendments to the Covenant relating to the Order and/or the Plan and the approval of the particular Owners and/or Occupants shall not be unreasonably withheld. Any amendment, termination or variance pursuant to this Section 4.2 must be in writing and signed by the Executive Officer of the Regional Board and such Owners and/or Occupants affected thereby. Notwithstanding the foregoing, no amendment to this Covenant or to the Plan shall be effective without the prior written consent of BSI.

4.3 No Dedication Intended. Nothing set forth herein shall be constructed to be a gift or dedication, or offer of a gift or dedication, of the Property or any portion thereof to the general public or for any purposes whatsoever.

4.4 Notices. Whenever any person gives or serves any notice demand or other communication with respect to this Covenant, each such notice, demand or other communication shall be in writing and shall be deemed effective (i) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, (ii) on delivery after deposit in the mail if mailed by United States mail, postage paid certified, return receipt requested, (iii) delivered by Federal Express or another recognized courier service, or (iv) one business day after delivery by facsimile or other electronic transmission, with confirmation of successful delivery to the facsimile number provided below:

To BSI:

Telephone:
Facsimile:

To the Regional Board: California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street
Oakland, CA 94612
Attention: Executive Officer
Telephone: (510) 286-1255
Facsimile: (510) 286-1380

To Owners: At the address shown on the Alameda County property tax records.

To Occupants: At the Property.

4.5 Partial Invalidity. If any portion of this Covenant is determined to be invalid for any reason, the remaining portions shall remain in full force and effect as if such portion had not been included herein.

4.6 Headings. Headings at the beginning of each numbered section of this Covenant are solely for the convenience of the parties and are not a part of the Covenant.

4.7 Recordation. This instrument shall be executed by BSI and the Regional Board. This instrument shall be recorded by BSI in the County of Alameda prior to the recordation of any conveyance of, or execution of any lease for, any portion of the Property by BSI in favor of any Owner or Occupant.

4.8 Authority. The execution of this Covenant has been duly authorized on behalf of the parties hereto and constitutes the binding obligation of each such entity and agency.

4.9 Counterparts. This Covenant may be executed in one or more counterparts and shall become effective when one or more counterparts have been signed by all of the parties and filed in the Official Records of Alameda County, California; each such counterpart being deemed an original but all counterparts constituting a single instrument.

4.10 Parties Bound. this Covenant applies to and is binding upon (a) BSI, Owners, Occupants and their respective heirs, administrators, executors, successors and assigns; and (b) the Regional Board and any successor agency of the State of California that may have responsibility for and jurisdiction over the subject matter of this Covenant.

4.11 Governing Law. This Covenant shall be construed and governed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, the Parties have executed this Covenant as of the date set forth above.

CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
San Francisco Bay Region

By: _____

LORETTA K. BARSAMIAN
Executive Officer

BSI LLC,
a California limited liability company

By: _____

Name:
Title:

Appendix - Section VII
Assurance Letter from Site Owner

Bigge Street Investors, L.L.C.
1200 Snyder Lane
Walnut Creek, California 94598

September 4, 1998

Susan L. Hugo
Senior Hazardous Materials Specialist
Division of Environmental Protection
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

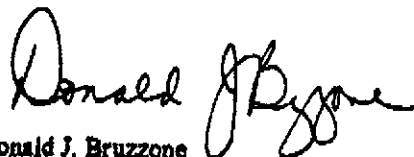
Dr. Ravi Arulananthum
Staff Toxicologist
Regional Water Quality Control Board
1515 Clay Street
Suite 1400
Oakland, CA 94612

Subject: Assurances to implement the Long Term Management Plan
2001 Marina Blvd., San Leandro, California

Dear Ms. Hugo and Dr. Arulananthum:

On behalf of Bigge Street Investors, L.L.C. (BSI), I wish to state our intent to fully comply with the mandates of the Long Term Management Plan that was detailed by Geomatrix Consultants in their Risk Evaluation and Management Plan of January 1997 for the above referenced Site, and with the requirements of Alameda County Department of Environmental Health and the Regional Water Quality Control Board. BSI will further adhere to recommendations provided by Applied Remedial Services, Inc., in their final report dated September 4, 1998, entitled "Soil Backfill and Site Grading Activities."

Sincerely,



Donald J. Bruzzone
General Managing Partner
Bigge Street Investors, L.L.C.

Appendix - Section VIII

Excerpts from Geomatrix Consultants Long-Term Site Management Plan

[Only the relevant sections of the original document entitled "Risk Evaluation and Management Plan" are included herein (pages 8 to 13). The remaining portions and un-related attachments have been excluded]



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

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

- 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, Fiberglass Tower, Toledo, Ohio 43659, January 9.
- U.S. EPA, Region IX, 1996, Preliminary Remediation Goals (PRGs), August 1.