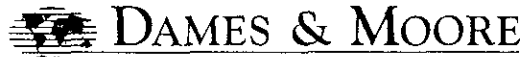


12-16-92

**TANK CLOSURE REPORT
UNDERGROUND STORAGE TANK REMOVAL
FORMER SCHOOL DISTRICT CORPORATION YARD
CASTRO VALLEY STATION**

 **DAMES & MOORE**

Job No. 03715-051-043
December 16, 1992
BART WD-07



221 MAIN STREET, SUITE 600, SAN FRANCISCO, CALIFORNIA 94105-1917
(415) 896-5858 FAX: (415) 882-9261

December 16, 1992
Job No. 03715-051-043

Bay Area Rapid Transit
P.O. Box 12688
Oakland, California 94604-2688

Attention: Mr. Ray Cole
Department Manager
System Safety Department

Dear Mr. Cole:

**Tank Closure Report,
Underground Storage Tank Removal
Former School District Corporation Yard
Castro Valley Station**

Dames & Moore is pleased to submit this Tank Closure Report detailing the results of the underground storage tank removal conducted at the former Castro Valley Unified School District Corporation Yard located at 21000 Wilbeam Avenue in Castro Valley.

Very truly yours,

DAMES & MOORE

A handwritten signature in black ink, appearing to read "Dana Brock".

Dana Brock, P.E., C.E.G.
GES Program Manager

**TANK CLOSURE REPORT
UNDERGROUND STORAGE TANK REMOVAL
FORMER SCHOOL DISTRICT CORPORATION YARD
CASTRO VALLEY STATION**

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**CLOSURE REPORT
UNDERGROUND STORAGE TANK REMOVAL
FORMER SCHOOL DISTRICT CORPORATION YARD
CASTRO VALLEY, CALIFORNIA**

1.0 INTRODUCTION

This report presents the results of the underground storage tank (UST) removal conducted at the former Castro Valley Unified School District (CVUSD) Corporation Yard (the site) located at 21000 Wilbeam Avenue in Castro Valley (Figure 1). The site will be used as part of the parking lot for the proposed Castro Valley Bay Area Rapid Transit District (BART) Station.

2.0 BACKGROUND

The site is owned by BART and was leased to the CVUSD for the past 30+ years. The former corporation yard occupies approximately 60,000 square feet and is accessed from Wilbeam Avenue. It was used as the school district's maintenance/service yard. A two-phase Preliminary Site Assessment (PSA) was conducted for the Dublin/Pleasanton BART extension during December 1990 (PHASE A) and April 1991 (PHASE 2A).

Results of the PSA indicated that the site was identified on the Resource Conservation and Recovery Act (RCRA) List as storing small quantities of hazardous materials. Two 2,000-gallon USTs, reported to contain gasoline and diesel fuel, and a fuel dispensing island were identified on-site. According to the CVUSD maintenance supervisor, the two USTs were installed around 1957 and are of single-walled steel construction. Fuel was dispensed through two product dispensers located in the center of a concrete slab overlying the USTs. During a site visit 13 inches of residual product were measured in the diesel tank and 19 inches in the regular tank.

3.0 OBJECTIVES AND SCOPE OF WORK

The objective of this work was to remove the USTs at the site in preparation for closure of the site. To achieve this objective, the following scope of services was performed:

- Initial activities, including: review of documents provided by BART, preparation of a site-specific health and safety plan in accordance with 29 CFR 1910.120, acquisition of necessary permits, subcontractor procurement, and clearance of underground utilities;
- Removal of the USTs, including: excavation, removal and disposal of the USTs, as well as associated dispensers and piping, soil generated during excavation activities, and groundwater from dewatering of the excavations. Collection of confirmatory samples, and upon approval from the Alameda County Department of Environmental Health Hazardous Materials Division (ACDEHHMD) backfilling of the excavations; and
- Preparation of this Tank Closure Report.

4.0 UNDERGROUND STORAGE TANK REMOVAL

Prior to beginning field activities for removal of the USTs, all necessary permits were obtained and all applicable local agencies were notified of the work at the site, including: the ACDEHHMD, Bay Area Air Quality Management District (BAAQMD), and the Castro Valley Fire Department (CVFD). The exact tank locations and orientations, as well as other utility locations, including water and electricity, were marked by an underground utility locator prior to beginning field activities. Tank removal activities were conducted by Lee Engineering Enterprises, Inc. (Lee) of Sunnyvale, California.

A project-specific health and safety plan was developed by Lee in accordance with 29 CFR 1910.120. All site work associated with UST removal was governed by this plan.

Before beginning the tank removal, the fuel dispensing island and concrete slab overlying the tanks were demolished. The soil overlying the tanks was excavated to expose the tops of the tanks to aid in the removal of residual product and the rinsing of the tanks. Residual product remaining in the tanks and supply lines was removed, and the tanks and lines were triple rinsed with a high-pressure steam cleaner. Rinsate from the cleaning activities was removed and disposed of with the residual product. Disposal of the residual product and rinsate was conducted by Erickson Inc. of Richmond, California. Proper classification and manifesting

procedures were followed. Complete waste profiling data and copies of the manifests are included in Appendix A.

no manifests for product / waste enclosed

During excavation of the soil overlying the tanks, an abandoned line was discovered near the former regular gasoline dispenser. At the request of Mr. Scott Seery of the ACDEHHMD, the line was excavated. The line truncated near a small patched area in a part of the concrete slab that had not been excavated to remove the other two tanks. When the patched area was excavated, another pipe was discovered. The new pipe was oriented vertically, and upon closer examination was determined to be the fill pipe for a ~~third tank~~ not documented as being present at the site. The overlying concrete and soil were excavated to confirm the presence of the tank. Upon approval from BART and modification of the closure permit by the ACDEHHMD, the tank was prepared for removal in the same fashion as the other two tanks.

*3rd
UST*

Once the three tanks were emptied of residual material, dry ice was introduced into the tank to displace the oxygen in the tank, rendering them inert. When the oxygen content of the tank was sufficient to cause the atmosphere inside the tank to fall below the Lower Explosive Limit (LEL) as detected on a combustible gas indicator, approval was given by the ACDEHHMD inspector to remove the tanks from the excavations.

Upon removal from the excavation, the tanks were visually inspected for the presence of corrosion, pitting, and holes. Once the condition of the tanks was documented, they were loaded onto a truck and removed from the site. The tanks were taken to a hazardous waste disposal facility under proper manifest.

All of The above were observed

After the tanks were removed from the excavations and their physical conditions noted, confirmatory soil samples were collected from the sidewalls of the excavations in areas approved by the ACDEHHMD inspector. Confirmatory samples were collected using the bucket of the excavator from just above the standing water line in the excavations. In addition, confirmatory samples were also collected from beneath the two fuel dispensers and along the vent line for the regular tank. Soil samples were collected by manually driving clean, 3-inch-diameter stainless-steel sample rings into the freshly excavated soil at the teeth-end of the excavator bucket. Samples were immediately covered with teflon seals and plastic end caps, labeled with owner, location, date, time, collector's initials and analyses required. Samples were stored in individual

plastic bags in a cooler of ice for transport to the laboratory. Proper chain-of-custody documentation accompanied all samples to the laboratory.

Samples were not collected from the floor of the excavation, as originally proposed, because groundwater was encountered toward the base of the excavation. The groundwater in the excavation was not required to be sampled, as would normally be required, because groundwater samples had already been collected from borings drilled around the tanks as part of a preliminary investigation conducted prior to removal of the USTs. A copy of the letter sent to BART detailing these results is included as Appendix B of this report. Confirmatory soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) as gas, TPH as diesel, benzene, toluene, ethylbenzene and xylenes (BTEX), and total lead by EPA Methods 8015M as gas, 8015M as diesel, 8020, and 6010 respectively. Analytical results are summarized in Table 1, and laboratory reports are presented in Appendix C. Locations of confirmatory soil samples and depths are shown on Figure 3.

Due to the elevated concentrations of TPH as gasoline, TPH as diesel and BTEX in the soil beneath the third tank, additional excavation work was conducted in an effort to remove the fuel-hydrocarbon-contaminated soil. Approximately 100 cubic yards of additional soil was removed from the third tank excavation and from beneath the product dispensers. Material from these areas was removed until no more visible evidence of contamination (based on color and odor) was apparent. Additional excavation from the unknown tank also removed the soil from beneath the regular fuel dispenser to the depth of the unknown tank excavation. Once over-excavation was complete, additional confirmatory samples were collected and analyzed.

After the confirmatory sample results were reviewed by the ACDEHHMD, the excavations were approved for backfilling. Prior to backfilling, all standing water was pumped out of the excavations into a holding tank. The excavations were backfilled and compacted during the week of July 20, 1992. yes

To characterize the stockpiled soil from the excavations for waste disposal purposes, one four-point composite sample was collected for approximately each 50 cubic yards of excavated material and submitted for chemical analyses. The soil was sampled by manually driving clean stainless-steel sampling rings into the stockpiled soil approximately 18 inches below the surface. Samples were sealed, labeled and transported to the laboratory under proper chain-of-custody

procedures. The stockpiled soil was analyzed for TPH as gas, BTEX, TPH as diesel, Toxicity Characteristic Leaching Procedure (TCLP) BTEX, and reactivity, conductivity, and ignitability (RCI) as required by the Browning-Ferris Industries (BFI) Class III landfill in Livermore, California.

The water in the holding tank from dewatering of the excavations was sampled and analyzed for disposal purposes. Samples were collected by lowering a polyethylene bailer into the water in the tank. The water was transferred directly into laboratory-provided glassware using a bottom discharge device on the bailer to minimize the potential for volatilization. The samples were labeled and stored on ice. Samples were analyzed for TPH as gas, TPH as diesel, cyanide, phenols, metals and pH as required by the Ora Loma Sanitary District. Complete analytical laboratory reports and chain-of-custody records are included in Appendix C. Results are summarized in Tables 2 and 3.

All soil and groundwater samples collected for disposal characterization were analyzed by CKY Analytical Laboratory of Pleasanton, California.

5.0 RESULTS

5.1 EXCAVATIONS

An irregularly shaped area approximately 60 feet by 50 feet in dimension was excavated in three locations to approximately 6.5 feet to 9.5 feet bgs in order to remove the three USTs and associated piping. Figure 3 shows the dimensions of the excavations.

5.2 STRATIGRAPHY

Based on examination of the walls of the excavations, the upper 1 to 2.5 feet of soil at the site consists of brownish-yellow sand fill with occasional silt and gravel. The interval from approximately 2.5 to 8.0 feet consists of a dark grey to olive grey clay grading with sands and gravels. The interval from 8.0 to 9.5 feet consists of a brown to yellowish-brown silty sand/sandy clay.

Groundwater was encountered in the bottoms of the excavations, at approximately 10 feet bgs, and rose to approximately 5.5 to 6.0 feet bgs when allowed to equilibrate in the open excavations.

5.3 TANK REMOVAL

Three USTs were removed from the excavations. ^① One tank, previously used for diesel fuel, measured 12.0 feet long by 6.0 feet in diameter. Upon removal, the tank was inspected and found to be slightly corroded and pitted in some areas; no holes were observed. ^② A second tank, used for regular gasoline storage, measured 8.75 feet long by 6.0 feet in diameter. Upon removal, this tank was found to have a large hole (greater than one-half inch) in the end of the tank near the top of the rim. No other holes were observed in this tank. There was no visible evidence of soil staining in the excavation; however, there was a dark product-like material noted floating on the groundwater in the excavation. The product-like material may have been from the tar paper the tank was wrapped in when it was placed in the ground. Groundwater from the excavation was pumped out prior to backfilling. The third ^③ "unknown" tank for which no historical data exist, measured 12.0 feet long by 4.0 feet in diameter. During excavation, very strong hydrocarbon odors and stained soil were noted. Upon removal, this tank was found to have numerous holes in the bottom, top and ends.

Residual product, sludge and tank rinsate generated during cleaning of the tanks were disposed by Erickson, Inc. at the Refinery Services Company facility in Patterson, California. The USTs and associated piping were disposed of by Erickson, Inc. as well.

5.4 CONFIRMATORY SOIL SAMPLE RESULTS

A total of 14 confirmatory soil samples was collected from the three excavations, the vent line for the regular tank, and beneath the two product dispensers. All samples were analyzed for TPH as gas, TPH as diesel, BTEX, and total lead. Table 1 summarizes the results of the confirmatory sampling. Figure 3 shows a plan view of the excavations and sample locations.

Two confirmatory samples were collected from both the diesel and regular tank excavations. As shown on Table 1, the confirmatory samples from the regular tank, RTCS-1 and RTCS-2, were non-detect for TPH as gas and TPH as diesel. Toluene, ethylbenzene and

xylenes were detected in RTCS-2 at concentrations of 0.01, 0.01 and 0.03 mg/kg, respectively. No benzene was detected in these samples. The confirmatory samples from the diesel tank excavations, DTCS-1 and DTCS-2 were non-detect for TPH as gas and TPH as diesel. Benzene and xylenes were detected in DTCS-2 at concentrations of 0.01 and 0.017 mg/kg, respectively. Total lead was detected in all four samples from the regular and diesel tank excavation at concentrations ranging from 27 mg/kg in RTCS-1 and DTCS-1 to 31 mg/kg in RTCS-2.

< 10 x STLC

Two confirmatory samples were collected from the sidewalls of the third (unknown) tank excavation. As shown in Table 1, TPH as gas, TPH as diesel, and BTEX were detected in both samples, UTCS-1 and UTCS-2. TPH as gas was detected at 1,100 mg/kg in UTCS-1 and 810 mg/kg in UTCS-2, TPH as diesel at 140 and 80 mg/kg, benzene at 7.3 and 4.8 mg/kg, toluene at 2.8 and 1.4 mg/kg, ethylbenzene at 44 and 37 mg/kg and xylenes at 20 and 16 mg/kg, respectively. Total lead was detected at 40 mg/kg in UTCS-1 and 45 mg/kg in UTCS-2. The detections of diesel in sample UTCS-1 and UTCS-2 are likely due to interference from heavy fraction gasoline constituents.

Two confirmatory samples, DDCS-1 and RDSCS-1, were collected from beneath each of the fuel dispenser locations. As shown on Table 1, TPH as gas and BTEX were detected in both samples. TPH as gasoline was detected at 7.5 mg/kg in DDCS-1 and 5.5 mg/kg in RDSCS-1, benzene at 0.7 and 0.44 mg/kg, toluene at 0.31 and 1.0 mg/kg, ethylbenzene at 0.31 and 0.20 mg/kg and xylenes at 0.96 and 1.2 mg/kg, respectively. Total lead was detected at 52 mg/kg in DDCS-1 and 60 mg/kg in RDSCS-1.

> 10 x STLC

After the additional excavation was completed, four additional confirmatory samples, UTCS-3 through UTCS-6, were collected from each wall of the unknown excavation. As shown in Table 1, no TPH as gas, TPH as diesel or BTEX were detected in any of the samples. Total lead concentrations ranged from 26 mg/kg in UTCS-5 to 46 mg/kg in UTCS-6.

< 10 x STLC

The second confirmatory sample from beneath the diesel fuel dispenser, DDSCS-2, showed non-detect for TPH as gas, TPH as diesel, and BTEX. Total lead was detected at a concentration of 45 mg/kg. The area beneath the regular tank dispenser was excavated to the depth of the unknown tank excavation and no additional confirmatory sample was collected.

One confirmatory sample was collected from beneath the regular tank vent line, RTVCS-1 (Figure 3). As shown on Table 1, TPH as gas, TPH as diesel, and BTEX were not detected. The total lead concentration was 26 mg/kg.

Copies of the analytical reports for the confirmatory sampling are presented in Appendix C.

5.5 BACKFILLING EXCAVATIONS

Analytical results of confirmatory soil samples were reviewed by the ACDEHHMD. On September 1, 1992 approval to backfill the excavations was obtained from the ACDEHHMD.

All standing water, approximately 15,000 gallons, was pumped from the excavations into a holding tank prior to backfilling. The pits were backfilled with crushed rock to just above where standing water was measured prior to removal. After the crushed rock was placed, the remainder of the excavation was filled with clean imported fill material and compacted to the surface.

5.6 SOIL AND GROUNDWATER DISPOSAL

Approximately 250 cubic yards of soil and 15,000 gallons of groundwater were generated during removal of the USTs. After appropriate waste characterization analyses were conducted, the soil was disposed of at the BFI landfill in Livermore and the groundwater was discharged to the Ora Loma Sanitary District's sewer system. Analytical results of waste characterization are summarized on Tables 2 and 3, and laboratory reports are presented in Appendix D. Also included in Appendix D is the application to the Ora Loma Sanitary District for the disposal of the water, and copies of the nonhazardous special waste manifests required for the soil disposal at BFI Landfill.

5.6.1 Stockpiled Soil

To characterize the stockpiled soil for disposal purposes, a total of 5 four-point composite samples were collected and analyzed. Composite samples were collected and analyzed for waste characterization purposes as described in Section 4.0. Analytical results indicated that TPH as

gas and BTEX were not present in the samples above the laboratory reporting limit. TPH as diesel was detected in concentrations ranging from 7.2 mg/kg to 150 mg/kg. Testing for BTEX by TCLP revealed no BTEX above laboratory reporting limits. After reviewing the analytical results, the landfill accepted the excavated soils for disposal. The stockpiled soil was removed from the site on September 11, 1992 and disposed of at the BFI landfill on Vasco Road in Livermore, California. Nonhazardous special waste manifests were signed by a BART representative and accompanied the soil to the landfill.

5.6.2 Groundwater

Approximately 15,000 gallons of groundwater were pumped from the excavation into a holding tank. On August 4, 1992 the water was sampled for waste characterization purposes as described in Section 4.0. Analytical results indicated that petroleum hydrocarbons and BTEX were not present above the laboratory reporting limits. After reviewing the analytical results, the Ora Loma Sanitary District approved the discharge of the water into their system. The groundwater was pumped from the tank by Pesco Company on September 16, 1992 and discharged to an on-site cleanout confirmed by the sanitary district to connect with the sewer system.

Complete laboratory reports for soil and groundwater waste characterization analyses and chain-of-custody documents are presented in Appendix C. Also included is the "Special Discharge Permit Application" submitted to the Ora Loma Sanitary District and the letter from them authorizing the discharge of the water into their system.

6.0 DISCUSSION OF RESULTS

Soil analytical results from the two soil borings drilled adjacent to the regular gasoline UST as part of the preliminary environmental investigation indicated that the highest concentrations of TPH as gas and BTEX were detected in the shallow soils (see Appendix B for a table of results). Concentrations attenuated sharply between 2.5 and 5.0 feet, indicating these concentrations are likely the result of surface release, possibly from overflowing of the tank or a vehicle, or leakage from supply lines.

Grab groundwater samples collected from the three borings drilled around the USTs indicated the presence of TPH as gas and BTEX. Benzene was detected at concentrations up to 0.44 mg/L, above the Maximum Contaminant Level (MCL) for benzene of 0.001 mg/L. Although the soil analytical results did not indicate a subsurface release, the results of the grab groundwater sampling did indicate that there had been a subsurface release from the tanks.

The condition of the diesel tank when removed was determined to be good. Although slightly corroded and pitted in some areas, no holes were observed in the tank. Some hydrocarbon odors were detected in overlying soil during excavation of the tank, but no visible staining was observed. During excavation of soil overlying the regular tank, strong hydrocarbon odors were detected. After removal from the excavation, the regular UST was observed to have a large (greater than one-half inch) hole in the end of the tank near the top of the rim. There was no visible evidence of soil staining in the excavation; however, there was a dark product-like material, noted floating on the groundwater in the excavation. This may have been from the protective tar paper material wrapped around the tank.

During excavation of the third (previously unknown) tank, very strong hydrocarbon odors were noted. When removed from the excavation, the tank was noted to have several holes in the ends, top and bottom. Heavy staining of the soil underlying the tank was noted in the excavation, though no floating product was detected on the groundwater in the excavation. Based on visual observations made during the tank removals, it appears that the third tank, abandoned in-place, was responsible for the majority of hydrocarbon contamination in the subsurface near the tanks.

Total lead concentrations from the two samples collected from beneath the fuel dispensers were below the Total Threshold Limit Concentration (TTLC), but were above 10 times the Soluble Threshold Limit Concentration (STLC), a criterion often used to evaluate the potential for a sample to be above the STLC (a hazardous waste threshold criteria) if a waste extraction test (WET) is conducted.

Based on the results of the confirmatory sampling from the third tank excavation and beneath the fuel dispensers, it was determined that additional excavation was needed in these areas to reduce concentrations of fuel hydrocarbons and total lead in soil to acceptable levels in order to obtain approval from the ACDEHHMD to backfill the excavations. In addition,

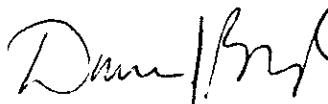
overexcavation of contaminated soil aided in removing potential source material to groundwater. Approximately 100 cubic yards of additional soil was removed from the third tank excavation and beneath the product dispensers. Material from these areas was removed until no visible evidence of contamination was apparent (based on color and odor). Four additional confirmatory samples from the walls of the third tank excavation and one from beneath the diesel dispenser were analyzed, and no detectable levels of TPH as gas, TPH as diesel, or BTEX were reported. In addition, the total lead levels were below 10 times the STLC. Approval to backfill the excavations was obtained from the ACDEHHMD.

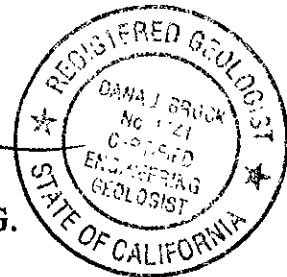
Because it was apparent the tanks had leaked, an Unauthorized Release Report was filed with the ACDEHHMD. A copy of this report is included as Appendix E.


If you have any questions regarding the information in this report, please contact us.

Very truly yours,

DAMES & MOORE


Dana Brock, P.E., C.E.G.
Senior Geologist




Erik Skov
Project Geologist

**TABLE 1
SUMMARY OF CONFIRMATORY SOIL SAMPLE ANALYTICAL RESULTS**

Sample Date	Sample No. ⁽²⁾	Analytes						Total Lead
		TPH Gas ⁽³⁾	TPH Diesel	B	T	E	X	
6/25/92	RTCS-1	ND	ND	ND	ND	ND	ND	27
	RTCS-2	ND	ND	ND	0.010	0.010	0.030	31
	DTCS-1	ND	ND	ND	ND	ND	ND	27
	DTCS-2	ND	ND	0.010	ND	ND	0.017	30
6/26/92	UTCS-1	1,100	0.140	7.3	2.8	44.0	20.0	0.040
	UTCS-2	810	80	4.8	1.4	37.0	16.0	45
	DDCS-1	7.5	ND	0.70	0.31	0.31	0.96	52
	RDCS-1	5.5	ND	0.44	1.0	0.20	1.2	60
	RTVCS-1	ND	ND	ND	ND	ND	ND	26
6/30/92 (After additional excavation)	UTCS-3	ND	ND	ND	ND	ND	ND	31
	UTCS-4	ND	ND	ND	ND	ND	ND	39
	UTCS-5	ND	ND	ND	ND	ND	ND	26
	UTCS-6	ND	ND	ND	ND	ND	ND	46
	DDCS-2	ND	ND	ND	ND	ND	ND	45

Notes:

- 1) All results reported in mg/kg. All samples were analyzed by CKY Environmental Services of Pleasanton, California.
- 2) Sample locations are shown on Plate 3.
- 3) ND = not detected above laboratory reporting limits.

**TABLE 2
SUMMARY OF WASTE CHARACTERIZATION ANALYTICAL RESULTS⁽¹⁾ (WASTE SOIL)**

ANALYSES	DATE	SAMPLE NO. AND RESULTS				
WASTE SOIL	8/4/92	C1	C2	C3	C4	C5
BTEX Benzene		ND ⁽²⁾	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND
Xylenes		ND	ND	ND	ND	ND
TPH Gasoline		ND	ND	ND	ND	ND
TPH Diesel		16	7.2	45	150	28
TCLP BTEX Benzene		ND	ND	ND	ND	ND
Toluene		ND	ND	ND	ND	ND
Ethylbenzene		ND	ND	ND	ND	ND
Xylenes		ND	ND	ND	ND	ND
STLC Lead		0.13 mg/L	0.11 mg/L	0.20 mg/L	0.30 mg/L	0.13 mg/L
Reactive Sulfide		ND	ND	ND	ND	ND
Reactive Cyanide		ND	ND	ND	ND	ND
Electric Conductivity		260 μ homs/cm	300 μ homs/cm	240 μ homs/cm	270 μ homs/cm	150 μ homs/cm
Ignitability		65°C	61°C	72°C	62°C	62°C

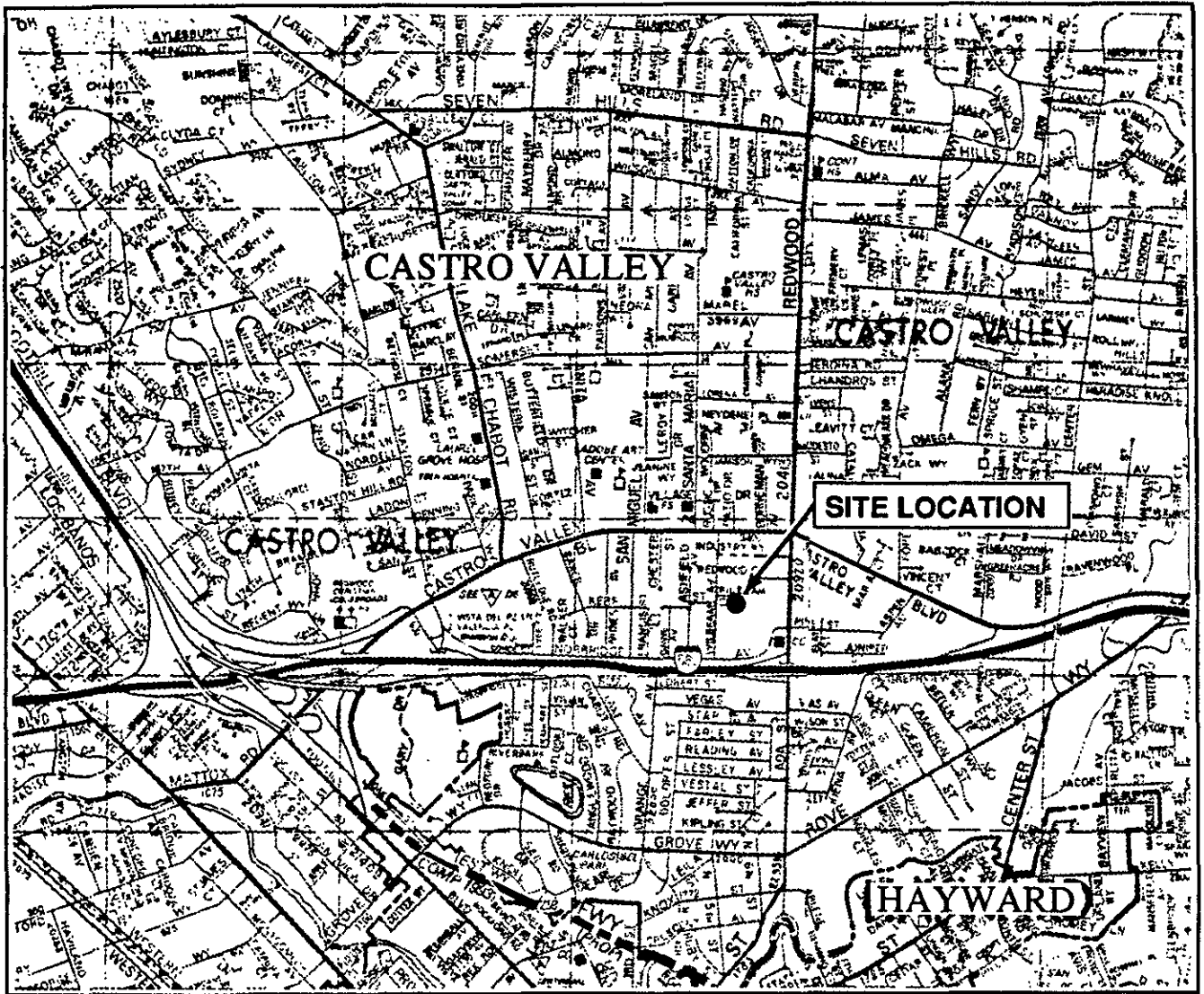
Notes:

- 1) All results reported in mg/kg (ppm) unless otherwise stated. All samples were analyzed by CKY Environmental Services of Pleasanton, California.
- 2) ND = not detected above laboratory reporting limits.

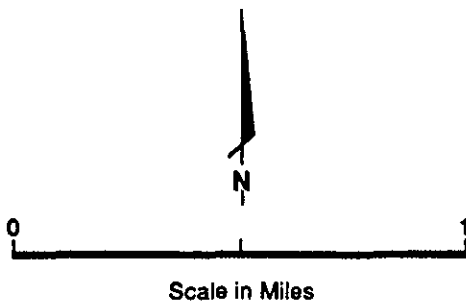
TABLE 3 SUMMARY OF WASTE CHARACTERIZATION ANALYTICAL RESULTS ⁽¹⁾ (WASTEWATER)		
ANALYSES	DATE	SAMPLE NO. AND RESULTS
WASTEWATER	8/4/92	WW1
BTEX Benzene		ND ⁽²⁾
Toluene		ND
Ethylbenzene		ND
Xylenes		ND
TPH Gasoline		ND
TPH Diesel		ND
	8/18/92	WT1
Cyanide		ND
Phenols		ND
TTLIC Metals		ND
Arsenic		ND
Cadmium		ND
Total Chromium		ND
Copper		0.01
Lead		ND
Mercury		ND
Nickel		0.06
Silver		ND
Zinc		0.06
pH		8.7

Notes:

- 1) All results reported in mg/L unless otherwise stated. All samples were analyzed by CKY Environmental Services of Pleasanton, California.
- 2) ND = not detected above laboratory reporting limits.



NOTE:
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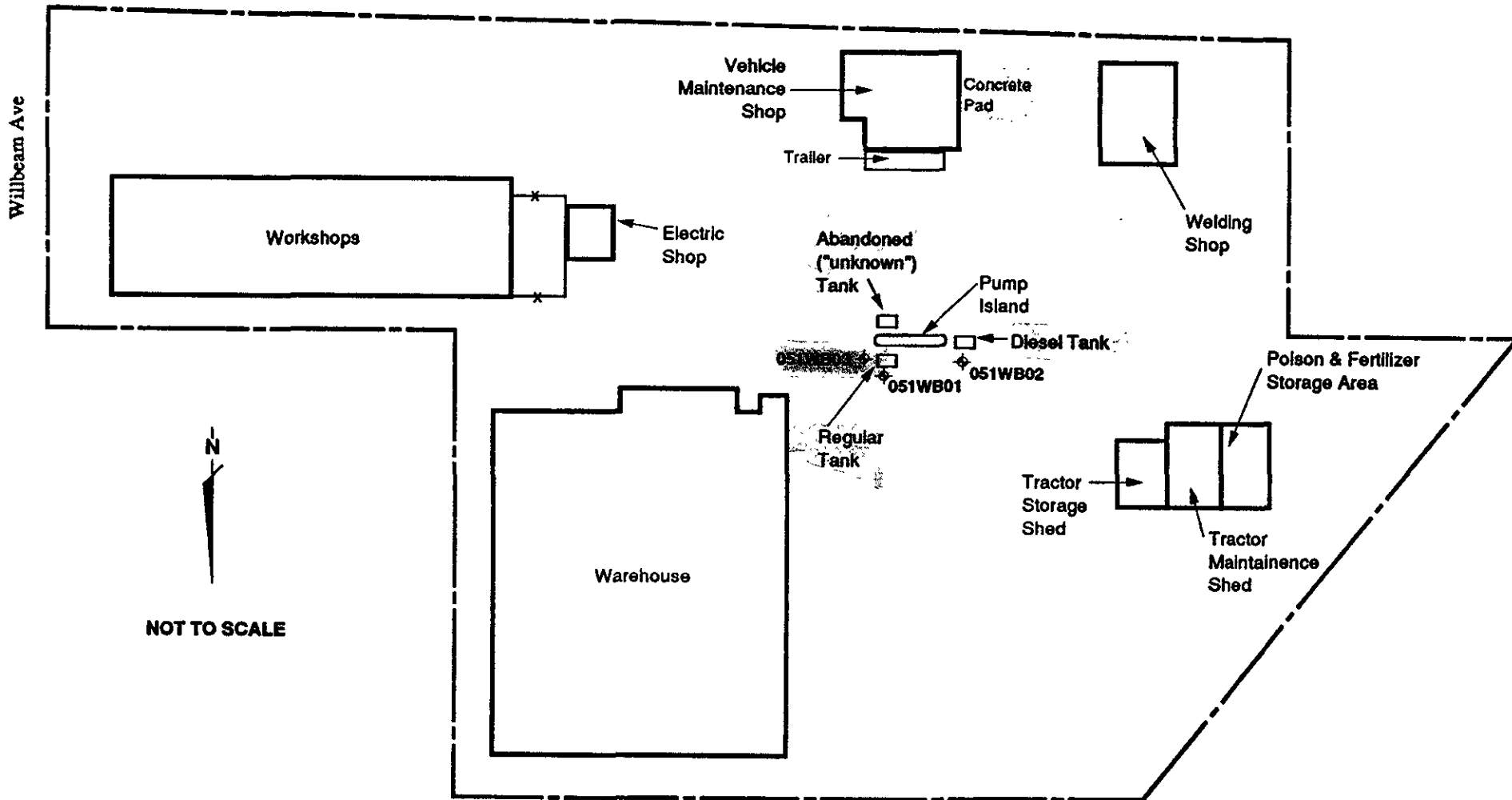


LOCATION MAP

December 1992 BART
 Castro Valley District Corporation Yard
 3715-051-043 Castro Valley, California

 **DAMES & MOORE**

FIGURE 1



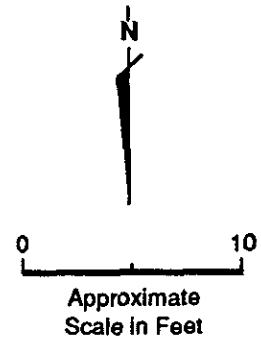
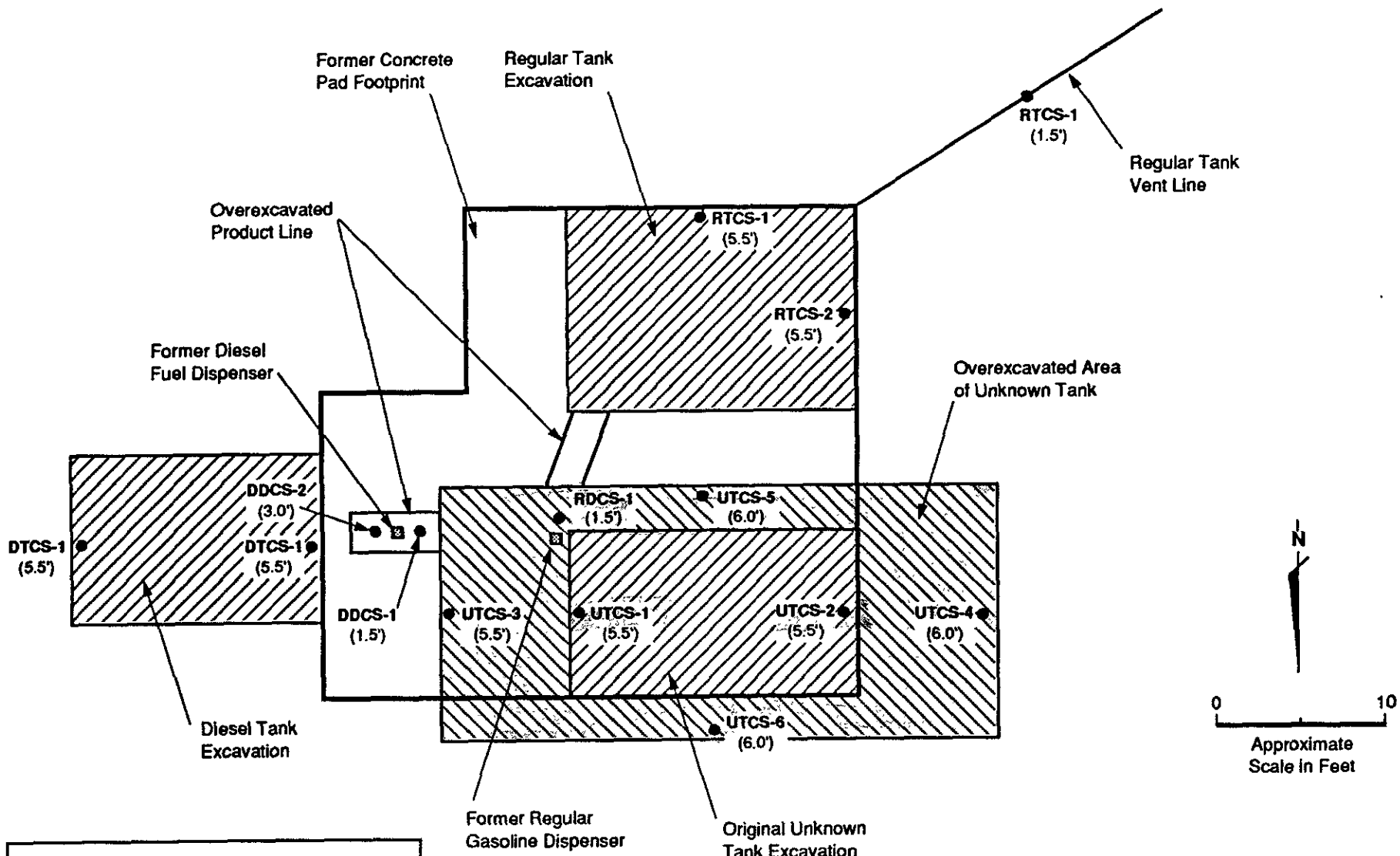
KEY

◆ Soil Boring with Groundwater Sample

051WB01

SITE MAP SHOWING BORING LOCATIONS AND TANK LOCATIONS

BART
 December 1992 Castro Valley District Coporation Yard
 3715-051-043 Castro Valley, California



KEY

- Approximate Areas of Excavation
- Area of Overexcavation
- RTCS-1 Confirmatory Sample Location
(5.5') Sample Depth in Feet

TANK EXCAVATIONS AND CONFIRMATORY SAMPLE LOCATIONS AND DEPTHS

BART
 December 1992 Castro Valley District Corporation Yard
 3715-051-043 Castro Valley, California

APPENDIX A
TANK REMOVAL AND DISPOSAL DOCUMENTATION

b:PKD1.010

Please print or type. Form designed for use on 8 1/2" (12-pitch typewriter).

78933

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. C1A1D10016816784000	Manifest Document No. 021	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address BAY AREA RAPID TRANSIT P.O. Box 12688 - Oakland, California 94604			A. State Manifest Document Number 91489041		B. State Generator's ID	
4. Generator's Phone (510) 464-6192			C. State Transporter's ID 704352		D. Transporter's Phone (510) 783-2881	
5. Transporter 1 Company Name TRIDENT TRUCK LINE, INC.			6. US EPA ID Number C1A1D10016816784000		E. State Transporter's ID	
7. Transporter 2 Company Name			8. US EPA ID Number		F. Transporter's Phone	
9. Designated Facility Name and Site Address ERICKSON INCORPORATED 255 PARR BLVD. RICHMOND, CA 94801			10. US EPA ID Number C1A1D10016816784000		G. State Facility's ID C1A1D10016816784000	
					H. Facility's Phone (510) 235-1393	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers	13. Total Quantity	14. Unit	15. Waste Number	
WASTE EMPTY TANK NON-RCRA HAZARDOUS WASTE SOLID		No. Type			State	Waste Number
		002 T, P	04000	P	512	NONE
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above				
QUANTITY 2 EMPTY STORAGE TANK(S) 9016		a. b. c. d.				
9017 HAVE BEEN INERTED WITH 15 LBS. DRY ICE PER 1000 GAL. CAPACITY						
15. Special Handling Instructions and Additional Information						
KEEP AWAY FROM SOURCES OF IGNITION. ALWAYS WEAR HARDHATS AND GLASSES WHEN WORKING AROUND UNDERGROUND STORAGE TANKS. 24 HR. CONTACT NAME: GARY JENSEN AND PHONE: 510-464-6192						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this 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 international and national government regulations. 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 GARY JENSEN		Signature Gary Jensen		Month Day Year 06 12 59 12		
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature Floyd Avilla		Month Day Year 06 12 59 12		
Printed/Typed Name FLOYD AVILLA		Signature		Month Day Year		
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year		
Printed/Typed Name		Signature		Month Day Year		
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 Donald H. Larson		Signature Donald H. Larson		Month Day Year 06 12 59 12		

DO NOT WRITE BELOW THIS LINE.

Please print or type. Form designed for use on elite (12-pitch typewriter).

78933

91489019
IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550
TRANSPORTER
FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C A C 0 0 0 6 8 6 7 8 4	Manifest Document No. 0 0 0 0 0 0	2. Page 1 of 6	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address BAY AREA RAPID TRANSIT DIST P.O. Box 12688, OAKLAND, CA 94604			A. State Manifest Document Number 91489019		
4. Generator's Phone (510) 464-6192			B. State Generator's ID H Y H 0 3 6 0 4 3 6 4 7		
5. Transporter 1 Company Name TRIDENT TRUCK LINE, INC.		6. US EPA ID Number C 1 A D 9 8 2 4 8 4 3 7 0		C. State Transporter's ID 2 0 4 3 5 2	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (510) 783-2881	
9. Designated Facility Name and Site Address ERICKSON INCORPORATED 255 PARR BLVD. RICHMOND, CA 94801			10. US EPA ID Number C 1 A D 0 0 9 1 4 6 1 6 1 3 9 1 2		E. State Facility's ID G 1 A D 0 0 9 1 4 6 1 6 1 3 9 1 2
			F. Transporter's Phone		G. Facility's Phone (510) 235-1393
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	1. Waste Number State EPA/Other
a. EMPTY STORAGE TANK NON-RCRA HAZARDOUS WASTE SOLID		0 0 1 / T I P 0 1 / 1 0 0 0 P			State 512 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other
11. Additional Descriptions for Materials Listed Above QUANTITY / EMPTY STORAGE TANK(S) 9028 HAVE BEEN INERTED WITH 15 LBS. DRY ICE PER 1,000 GAL CAPACITY			K. Handling Codes for Wastes Listed Above a. 01 b. c. d.		
15. Special Handling Instructions and Additional Information KEEP AWAY FROM SOURCES OF IGNITION. ALWAYS WEAR HARDHATS AND GLASSES WHEN WORKING AROUND UNDERGROUND STORAGE TANKS. 24 HR. CONTACT NAME: GARY JENSEN AND PHONE: (510) 464-7000					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this 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 international and national government regulations. 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 GARY C. JENSEN FOR BART		Signature <i>Gary C Jensen</i>		Month Day Year 0 6 1 2 6 1 9 1 2	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name MIKE VERNAZZA		Signature <i>Mike Verzazza</i>		Month Day Year 0 6 1 2 6 1 9 1 2	
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 hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name DONALD A. RUSSELL		Signature <i>Donald A Russell</i>		Month Day Year 0 6 1 2 6 1 9 1 2	

DO NOT WRITE BELOW THIS LINE.

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE
CERTIFIED SERVICES COMPANY
255 Parr Boulevard • Richmond, California 94801

NO. 1062

CUSTOMER LEE ENG
JOB NO. 78933

FOR: Erickson, Inc. TANK NO. 9016

LOCATION: Richmond DATE: 07/02/92 TIME: 12:59:36

TEST METHOD Visual Gastech/1314 SMPN. LAST PRODUCT D

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 2000 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9%
LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

"ERICKSON INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN
CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS
WASTE FACILITY."

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

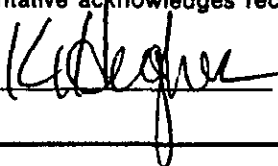
STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissible concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration than permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

REPRESENTATIVE



TITLE

INSPECTOR



DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 1075

CUSTOMER
LEE ENG
JOB NO. 78933

FOR: Erickson, Inc. TANK NO. 9017

LOCATION: Richmond DATE: 06/30/92 TIME: 09:11:30

TEST METHOD Visual Gastech/1314 SMPN LAST PRODUCT LG

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 2000 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9%
LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

"ERICKSON INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN
CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS
WASTE FACILITY."

In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

STANDARD SAFETY DESIGNATION

SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissible concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

K. DeGuzer
REPRESENTATIVE

TITLE

DR
INSPECTOR

From: Erickson, Inc. at #235-1393
To: DICK at #9,1408-734-9828

09-10-92 02:41 pm
001 of 001

September 10, 1992

IRVINE LIVIANU
LEE ENGINEERING
1153 BORDEAUX DRIVE
SUITE 103
SUNNYVALE, CA 94089

Dear IRVINE:

THIS LETTER IS TO VERIFY THAT, THE PIPING ASSOCIATED WITH THE TANKS THAT WERE REMOVED FROM THE BAY AREA RAPID TRANSIT SITE LOCATED AT 21000 WILBEAM, CASTRO VALLEY, CA, WAS BROUGHT IN TO OUR FACILITY FOR PROCESSING AND DISPOSAL. AFTER THE PIPING WAS CLEANED IT WAS TAKEN TO LMC METAL RECYCLERS. IF YOU HAVE ANY QUESTIONS, PLEASE FEEL FREE TO CALL.

Sincerely,

KAREN RUFFIN
ERICKSON, INC.
TSDF OPERATIONS ASSISTANT

APPENDIX B

**PRELIMINARY FINDINGS AND RECOMMENDATIONS
WD-07 FORMER SCHOOL DISTRICT CORPORATION YARD**

b:PXD1.010



221 MAIN STREET, SUITE 600, SAN FRANCISCO, CALIFORNIA 94105-1917
(415) 896-5858 FAX: (415) 882-9261

June 12, 1992
Job No. 03715-051-043

Bay Area Rapid Transit District
P.O. Box 12688
Oakland, California 94604-2688

Attention: Mr. Zoyd Luce
Department Manager
System Safety Department

Dear Mr. Luce:

**Preliminary Findings and Recommendations
WD-07 Former School District Corporation Yard
Castro Valley Station
Dublin-Pleasanton Extension
For Bay Area Rapid Transit District**

INTRODUCTION

Dames & Moore has completed the field work for Task 2 of WD-07. This Task included drilling and sampling six soil borings, three in the area near the underground storage tanks (USTs) and three near the vehicle oil change garage area, and surface and shallow (3.0 feet) subsurface sampling near one shed reported to contain poisons and 3 locations in the unpaved area where buses were reportedly washed. A total of 27 soil samples and 4 grab groundwater samples were submitted to the laboratory for chemical analysis.

Soil and grab groundwater samples collected from the three borings near the USTs were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline and diesel, benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Methods 8015 Modified as gasoline and diesel and 8020/602. In addition, both soil and grab groundwater samples from the three borings near the USTs were analyzed for organic lead. Soil samples collected from the borings near the vehicle oil change area and the surface and shallow subsurface samples from the bus washing area were analyzed for Volatile Organic Compounds (VOCs) and total recoverable petroleum hydrocarbons (TRPH) by EPA Methods 8240 and 418.1. The surface

*

GES1.020

Bay Area Rapid Transit District
June 12, 1992
Page 2

and shallow subsurface samples from near the poison storage shed were analyzed for organochlorinated and organophosphorus pesticides. *

RESULTS

Analytical results from the six soil borings have been received. Table 1 summarizes the results to date of the soil sampling and Table 2 summarizes the results of the grab groundwater sampling. No results have been received from the surface and shallow * subsurface soil samples. As shown in Table 1, TPH as gasoline and BTEX were detected in borings 051WB01 and 051WB03 drilled adjacent to the regular gasoline UST (see attached figure). The highest concentrations in both borings were from samples collected at 2.5 feet below ground surface (bgs). These concentrations are likely a result of a surface release, possibly overfilling of the tank or a vehicle. TRPH were detected in borings 051SB02 and 051SB03, drilled next to the vehicle oil change area (see attached figure), up to 10.0 ft bgs.

As shown in Table 2, TPH as gasoline was detected in all three grab groundwater samples collected from the borings near the USTs. BTEX was detected in two borings, 051WB01 and 051WB03. TPH as diesel was detected in borings 051WBC1 and 051WB03, however, these results are possibly due to interference from heavy fraction gasoline constituents. The grab groundwater sample collected from boring 051SB02 was analyzed for TRPH because of the concentrations detected in the soil. There were no detectable levels of TRPH found in the grab groundwater sample from 051WB02.

RECOMMENDATIONS

Based on our review of the analytical data received to date, Dames & Moore recommends the following actions:

- Conduct an agency review to determine if there are any groundwater investigation sites in the area in which the groundwater flow direction, stratigraphy, and possibly gradient, can be established.

Bay Area Rapid Transit District

June 12, 1992

Page 3

- Install three groundwater monitoring wells, one upgradient and two downgradient of the USTs to assess the extent of fuel hydrocarbon contamination in the groundwater. Based on the results of the well installations it may be necessary to install additional monitoring wells to fully evaluate the extent, vertical and lateral, of fuel hydrocarbon contamination.
- Because elevated concentrations of TPH were detected in shallow soils (2-3 feet bgs) outside of the anticipated excavation area, possibly due to surface spillage, we recommend excavating the shallow soil downslope of the fuel dispensing station during the tank removal. The amount of additional soil to be evacuated will have to be determined in the field during excavation. In addition, because the area of excavation will increase, more confirmatory samples will have to be collected.

The recommendations are outside the scope of work of WD-07. We look forward to discussing the results with you.

Very truly yours,

DAMES & MOORE

Graeme W. Nyland, C.E.G.
GES Program Manager

Erik Skov
Project Geologist

cc: Eugene Burkman
Supervising Engineer DPX

TABLE 1
SUMMARY OF SOIL ANALYTICAL DATA¹
CASTRO VALLEY UNIFIED SCHOOL DISTRICT CORPORATION YARD
21000 WILBEAM AVE, CASTRO VALLEY

(PPb)

Boring No.	Sample Depth (ft.)	Analytes								
		TPH Gasoline	TPH Diesel	B ^{1,2}	T ²	E ²	X ²	Organic Lead	Volatile Organics	TRPH ⁴
051WB01-01	2.5	7,900	5	310	38	180	210	-	NA ²	NA
051WB01-02	5.0	-	-	-	-	-	-	-	NA	NA
051WB01-03	10.0	-	-	-	-	-	-	-	NA	NA
051WB01-04	7.5	-	-	-	-	-	-	-	NA	NA
051WB02-01	2.0	-	-	-	-	-	-	-	NA	NA
051WB02-02	5.0	-	-	-	-	-	-	-	NA	NA
051WB02-03	7.5	-	-	-	-	-	-	-	NA	NA
051WB02-04	10.0	-	-	-	-	-	-	-	NA	NA
051WB03-01	2.5	20,000	-	810	130	250	380	-	NA	NA
051WB03-02	5.0	-	-	-	-	-	-	-	NA	NA
051WB03-03	7.5	820	-	150	5.8	15	5.0	-	NA	NA
051WB03-04	9.5	-	-	-	-	-	-	-	NA	NA
051SB01-01	2.5	NA	NA	NA	NA	NA	NA	NA	-	-
051SB01-02	5.0	NA	NA	NA	NA	NA	NA	NA	-	-
051SB02-01	2.5	NA	NA	NA	NA	NA	NA	NA	-	14,000
051SB02-02	5.0	NA	NA	NA	NA	NA	NA	NA	-	8,000
051SB02-03	10.0	NA	NA	NA	NA	NA	NA	NA	-	7,000
051SB03-01	2.5	NA	NA	NA	NA	NA	NA	NA	-	6,000
051SB03-02	5.0	NA	NA	NA	NA	NA	NA	NA	-	6,000

PPb

PPb

UST-related

- 1) All results in $\mu\text{g}/\text{kg}$ (ppb) unless otherwise stated. All samples analyzed by CKY Environmental Services of Pleasanton, California.
- 2) BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
- 3) NA = Not Analyzed
- 4) TRPH = Total Recoverable Petroleum Hydrocarbons
- 5) - = Not Detected

TABLE 2
SUMMARY OF GRAB GROUNDWATER ANALYTICAL DATA¹
CASTRO VALLEY UNIFIED SCHOOL DISTRICT CORPORATION YARD
21000 WILBEAM AVE., CASTRO VALLEY

Boring No.	TPH Gasoline	Analytes						
		TPH Diesel	B ²	T ²	E ²	X ²	Organic Lead	TRPH ⁵
051WB01-01	320	530 ³	1.5	1.2	- ⁶	-	-	NA ⁴
051WB02-01	80	-	-	-	-	-	-	NA
051WB03-01	1,900	360 ³	440	90	38	5.5	-	NA
051SB02-01	NA	NA	NA	NA	NA	NA	NA	-

Notes:

- 1) All results in $\mu\text{g/L}$ unless otherwise stated. All samples analyzed by CKY Environmental Services of Pleasanton California.
- 2) BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
- 3) Results are from hydrocarbon range C6-C14 and are likely interference from heavy fraction gasoline constituents.
- 4) NA = Not Analyzed
- 5) TRPH = Total Recoverable Petroleum Hydrocarbons
- 6) - = Not Detected

APPENDIX C
CONFIRMATORY SAMPLING ANALYTICAL RESULTS

b:PXD1.010



CKY incorporated Environmental Services

Date: 06/29/92
N9206-22

Dames & Moore
2101 Webster St., #300
Oakland, CA 94612

Attn: Mr. Erik Skov

Subject: Laboratory Report
Project: BART Castro Valley

Enclosed is the laboratory report for samples received on 06/25/92. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysis</u>
M8015 Gas/Diesel	4 Soil
EPA 8020	4 Soil
Total Lead	4 Soil

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,



Danny Hoang
Laboratory Director

Confirmatory soil samples

EPA METHOD 5030/Mod. 8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/25/92
PROJECT:	BART-CV	DATE ANALYZED:	06/26/92
CONTROL NO:	N9206-22	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DET. LIMIT</u> <u>(mg/kg)</u>	<u>% SURRO</u> <u>RECOVERY</u>
DTCS-1	N9206-22-1	ND	5.0	85
DTCS-2	N9206-22-2	ND	5.0	78
RTCS-1	N9206-22-3	ND	5.0	108
RTCS-2	N9206-22-4	ND	5.0	112

=====

EPA METHOD Mod. 8015
TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/25/92
PROJECT:	BART-CV	DATE EXTRACTED:	06/26/92
CONTROL NO:	N9206-22	DATE ANALYZED:	06/26/92
MATRIX:	Soil		

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>H-C RANGE</u>
DTCS-1	N9206-22-1	ND	N.A.
DTCS-2	N9206-22-2	ND	N.A.
RTCS-1	N9206-22-3	ND	N.A.
RTCS-2	N9206-22-4	ND	N.A.

DETECTION LIMIT: 5 mg/kg

=====

EPA METHOD 3050/6010
TOTAL LEAD

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/25/92
PROJECT:	BART-CV	DATE ANALYZED:	06/29/92
CONTROL NO:	N9206-22	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DETECTION LIMIT</u> <u>(mg/kg)</u>
Method Blank	N9206-22	ND	5.0
DTCS-1	N9206-22-1	27	5.0
DTCS-2	N9206-22-2	30	5.0
RTCS-1	N9206-22-3	27	5.0
RTCS-2	N9206-22-4	31	5.0

=====

QUALITY CONTROL DATA

CLIENT: Dames & Moore
 PROJECT: BART-CV
 CONTROL NO: N9206-22

=====
 METHOD: EPA 8020
 MATRIX: Soil

SAMPLE ID: N9206-22-1

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Benzene	ND	20	85	80	6
Toluene	ND	20	90	90	0
Ethyl Benzene	ND	20	110	115	4
Xylene	ND	20	133	118	12

=====

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-22

=====

METHOD EPA M8015G
MATRIX: Soil

SAMPLE ID: N9206-22-1

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Gas	ND	2	90	80	12

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-22

METHOD: EPA M8015D
MATRIX: Soil

SAMPLE ID: N9206-22-1

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Diesel	ND	500	109	108	1

LABORATORY CONTROL SAMPLE

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-22

=====

METHOD EPA 3050/6010
MATRIX: Soil

LOT NO:: 212

<u>COMPOUND</u>	<u>FOUND</u> (mg/kg)	<u>TRUE</u> <u>VALUE</u> (mg/kg)	<u>% REC</u>
Lead	76	74	103

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-22

METHOD EPA 3050/6010
MATRIX: Soil

SAMPLE ID: 9206104-4

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Lead	410	100	110	130	17

1-2206-20

CLIENT NAME: ~~James & Moore~~
 ADDRESS: ~~2077 Webster St~~
 Oakland CA
 PHONE NO. 510 839-3600 FAX NO.
 PROJECT NAME: Port Castro Valley
 SEND REPORT TO: Erik Skov

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

DATE: 6/25
 PAGE 1 OF 1



CKY Incorporated
 Environmental Services
 3942 Valley Avenue, Suite F
 Pleasanton, CA 94566
 Tel: 510-846-3188
 Fax: 510-846-1236

418.1
 M8015 Gas + BTEX
 M8015 Diesel
 Total Lead

SAMPLER NAME/SIGNATURE			TURN AROUND TIME		ANALYSES REQUIRED									
SAMPLE NUMBER	SAMPLING DATE/TIME	PRESERVATIVE	CONTAINER SIZE/TYPE	NORMAL										
				RUSH	418.1	M8015 Gas + BTEX	M8015 Diesel	Total Lead	8080/808	8240/824	8270/825	CAM Metals		
01	DTC5-1	6/25/92	3" 5/8 Ring	<input checked="" type="checkbox"/>		X	X	X						
02	DTC5-2	6/25/92	3" 5/8 Ring	<input checked="" type="checkbox"/>		X	X	X						
03	DTC5-1	6/25/92	3" 5/8 Ring	<input checked="" type="checkbox"/>		X	X	X						
04	DTC5-2	6/25/92	3" 5/8 Ring	<input checked="" type="checkbox"/>		X	X	X						

COMMENTS: Run for 8015 Gas + BTEX, 8015 Diesel, Total Lead **RUSH 24 Hr. Turnaround**
Erik Skov 6/25/92

Relinquished by: (Signature) <u>Erik Skov</u>	Date: <u>6/25/92</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/25/92</u>	Relinquished by: (Signature)	Date:	Received by: (Signature)	Date:
Company: <u>James & Moore</u>	Time: <u>11:05</u>	Company: <u>CKY</u>	Time: <u>15:10</u>	Company:	Time:	Company:	Time:

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample



CKY incorporated Environmental Services

Date: 06/29/92
N9206-30

Dames & Moore
2101 Webster St., Suite 300
Oakland, CA 94612

Attn: Mr. Erik Skov

Subject: Laboratory Report
Project: BART-Castro Valley

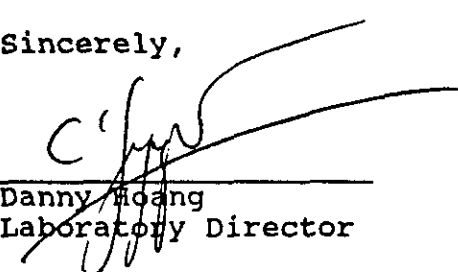
Enclosed is the laboratory report for samples received on 06/26/92. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysis</u>
M8015 Gas/Diesel	5 Soil
EPA 8020	5 Soil
Lead	5 Soil

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,



Danny Hoang
Laboratory Director

Confirmatory soil samples

EPA METHOD Mod. 8015
TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/26/92
PROJECT:	BART-CV	DATE EXTRACTED:	06/28/92
CONTROL NO:	N9206-30	DATE ANALYZED:	06/28/92
MATRIX:	Soil		

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>H-C RANGE</u>
UTCS-1	N9206-30-1	140	C6-C14
UTCS-2	N9206-30-2	80	C6-C14
DDCS-1	N9206-30-3	ND	N.A.
RDCS-1	N9206-30-4	ND	N.A.
RTVLCS-1	N9206-30-5	ND	N.A.

DETECTION LIMIT: 5.0 mg/kg

=====

EPA METHOD 5030/Mod. 8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/26/92
PROJECT:	BART-CV	DATE ANALYZED:	06/28/92
CONTROL NO:	N9206-30	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DETECTION LIMIT</u> <u>(mg/kg)</u>
UTCS-1	N9206-30-1	*1100	1.0
UTCS-2	N9206-30-2	*810	1.0
DDCS-1	N9206-30-3	7.5	1.0
RDCS-1	N9206-30-4	5.5	1.0
RTVLCS-1	N9206-30-5	ND	1.0

=====

* Dilution of 1:100

EPA METHOD 7421
TOTAL LEAD

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/26/92
PROJECT:	BART-CV	DATE ANALYZED:	06/29/92
CONTROL NO:	N9206-30	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DETECTION LIMIT</u> <u>(mg/kg)</u>
UTCS-1	N9206-30-1	40	5.0
UTCS-2	N9206-30-2	45	5.0
DDCS-1	N9206-30-3	52	5.0
RDCS-1	N9206-30-4	60	5.0
RTVLCS-1	N9206-30-5	26	5.0
Method Blank	N9206-30	ND	5.0

=====

QUALITY CONTROL DATA

CLIENT: Dames & Moore
 PROJECT: BART-CV
 CONTROL NO: N9206-30

METHOD: EPA 8020
 MATRIX: Soil

SAMPLE ID: N9206-30-5

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Benzene	ND	10	92	86	6
Toluene	ND	10	87	85	2
Ethyl Benzene	ND	10	73	71	2
Xylene	ND	10	85	88	3

94

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-30

METHOD: EPA M8015G
MATRIX: Soil

SAMPLE ID: N9206-30-5

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Gasoline	ND	2	85	85	0

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-30

METHOD EPA M8015D
MATRIX: Soil

SAMPLE ID: N9206-30-5

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Diesel	ND	500	82	90	9

CKY

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-30

METHOD: EPA Lead
MATRIX: Soil

SAMPLE ID: N9206-30-5

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Lead	26	100	86	90	4



CKY incorporated Environmental Services

Date: 07/02/92
N9206-34

Dames & Moore
2101 Webster St. # 300
Oakland, CA 94612

Attn: Mr. Erik Skov

Subject: Laboratory Report
Project: BART-CV

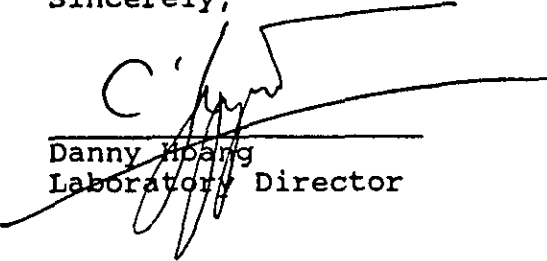
Enclosed is the laboratory report for samples received on 06/30/92. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysis</u>
M8015 Gas/Diesel	5 Soil
EPA 8020	5 Soil
LEAD	5 Soil

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,



Danny Hoang
Laboratory Director

Confirmatory soil samples

EPA METHOD 7421
TOTAL LEAD

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/30/92
PROJECT:	BART-CV	DATE ANALYZED:	07/02/92
CONTROL NO:	N9206-34	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DETECTION LIMIT</u> <u>(mg/kg)</u>
Method Blank	N9206-34	ND	5.0
DDCS-2	N9206-34-1	45	5.0
UTCS-3	N9206-34-2	31	5.0
UTCS-4	N9206-34-3	39	5.0
UTCS-5	N9206-34-4	26	5.0
UTCS-6	N9206-34-5	46	5.0

=====

LABORATORY CONTROL SAMPLE

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-34

METHOD: EPA Lead
MATRIX: Soil

LOT NO:: 212

<u>COMPOUND</u>	<u>FOUND</u> (mg/kg)	<u>TRUE</u> <u>VALUE</u> (mg/kg)	<u>±</u> <u>REC</u>
Lead	72	74	97

64

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-34

METHOD: EPA Lead
MATRIX: Soil

SAMPLE ID: N9206-34-1

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>
Lead	44	100	92



EPA METHOD 5030/Mod. 8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/30/92
PROJECT:	BART-CV	DATE ANALYZED:	06/30/92
CONTROL NO:	N9206-34	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DET. LIMIT</u> <u>(mg/kg)</u>	<u>% SURRO</u> <u>RECOVERY</u>
DDCS-2	N9206-34-1	ND	5.0	91
UTCS-3	N9206-34-2	ND	5.0	96
UTCS-4	N9206-34-3	ND	5.0	80
UTCS-5	N9206-34-4	ND	5.0	65
UTCS-6	N9206-34-5	ND	5.0	92

=====

EPA METHOD Mod. 8015
TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

=====

CLIENT:	Dames & Moore	DATE REC'D:	06/30/92
PROJECT:	BART-CV	DATE EXTRACTED:	06/30/92
CONTROL NO:	N9206-34	DATE ANALYZED:	06/30/92
MATRIX:	Soil		

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>H-C RANGE</u>
DDCS-2	N9206-34-1	ND	N.A.
UTCS-3	N9206-34-2	ND	N.A.
UTCS-4	N9206-34-3	ND	N.A.
UTCS-5	N9206-34-4	ND	N.A.
UTCS-6	N9206-34-5	ND	N.A.

DETECTION LIMIT: 5.0 mg/kg

=====

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-34

=====

METHOD EPA M8015G
MATRIX: Soil

SAMPLE ID: N9206-29-10

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Gasoline	ND	2	110	120	9

QUALITY CONTROL DATA

CLIENT: Dames & Moore
 PROJECT: BART-CV
 CONTROL NO: N9206-34

=====
 METHOD EPA 8020
 MATRIX: Soil

SAMPLE ID: N9206-29-10

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Benzene	ND	20	120	110	9
Toluene	ND	20	80	85	6
Ethyl Benzene	ND	20	80	80	0
Xylene	ND	40	103	93	10

CKY

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9206-34

=====

METHOD EPA M8015D
MATRIX: Soil

SAMPLE ID: N9206-29-15

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Diesel	ND	500	124	128	3



CLIENT NAME: DAMES & MOORE
 ADDRESS: 2101 WEBSTER ST. #300
OKLAND, CA 94612
 PHONE NO. 510-837-3600 FAX NO.

**CHAIN OF CUSTODY RECORD
 REQUEST FOR ANALYSIS**

DATE: 6/30/90
 PAGE 1 OF 1



CKY Incorporated
 Environmental Services
 3942 Valley Avenue, Suite F
 Pleasanton, CA 94566
 Tel: 510-846-3188
 Fax: 510-846-1236

PROJECT NAME: BART - CASTRO VALLEY CORP. YARD
 SEND REPORT TO: ERIK SED

SAMPLER NAME/SIGNATURE

GEORGE CHIU *gchiu*

TURN AROUND TIME

NORMAL
 RUSH

ANALYSES REQUIRED

SAMPLE NUMBER	SAMPLING DATE/TIME	PRESERVATIVE	CONTAINER SIZE/TYPE	SAMPLE DESCRIPTION			418.1	M8015 Gas + BTEX	M8015 Diesel	Total Lead	8080/608	8240/624	8270/625	CAM Metals
				WATER	SOIL	OTHER								
DDCS-2	6/30/92	2:30	3" stainless		X			X	X	X				
UTCS-3					X			X	X	X				
UTCS-4					X			X	X	X				
UTCS-5					X			X	X	X				
UTCS-6					X			X	X	X				

COMMENTS: Run for 8015 M Gas + BTEX
8015 M Diesel
Total Lead

24 Hr. RUSH

Relinquished by: (Signature)

Date:

Received by: (Signature)

Date:

Relinquished by: (Signature)

Date:

Received by: (Signature)

Date:

Company:

Time:

Company:

Time:

Company:

Time:

Company:

Time:

DAMES & MOORE

15:30

gchiu

6/30/90

gchiu

15:30

15:30

15:30

15:30

APPENDIX D

WASTE CHARACTERIZATION AND DISPOSAL DOCUMENTS

b:PXDI.010



**CKY incorporated
Environmental Services**

Date: 08/17/92
N9208-01

Dames & Moore
2101 Webster Street, #300
Oakland, CA 94612

Attn: Mr. Erik Skov

Subject: Laboratory Report
Project: BART-Castro Valley


Enclosed is the laboratory report for samples received on 08/04/92. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysis</u>
M8015 (Gas/Diesel)	5 Comp. Soil/1 Water
EPA 8020	5 Comp. Soil/1 Water
RCI	5 Comp. Soil
STLC Lead	5 Comp. Soil
TCLP BTEX	5 Comp. Soil

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,



Danny Hoang
Laboratory Director

EPA METHOD - 8020
BTEX

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE ANALYZED:	08/04/92
CONTROL NO:	N9208-01	MATRIX TYPE:	Soil

=====

SAMPLE ID:	CONTROL NO:	RESULTS (ug/kg)				% SURRO
		Benz	Tol	Et Benz	Xyls	RECOVERY
C1-1,2,3,4	N9208-01-1:4	ND	ND	ND	ND	96
C2-1,2,3,4	N9208-01-5:8	ND	ND	ND	ND	88
C3-1,2,3,4	N9208-01-9:12	ND	ND	ND	ND	75
C4-1,2,3,4	N9208-01-13:16	ND	ND	ND	ND	70
C5-1,2,3,4	N9208-01-17:20	ND	ND	ND	ND	76
DETECTION LIMIT		5	5	5	5	

=====

CKY

EPA METHOD 5030/Mod. 8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE ANALYZED:	08/05/92
CONTROL NO:	N9208-01	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DET. LIMIT</u> <u>(mg/kg)</u>	<u>% SURRO</u> <u>RECOVERY</u>
C1-1,2,3,4	N9208-01-1:4	ND	5.0	96
C2-1,2,3,4	N9208-01-5:8	ND	5.0	88
C3-1,2,3,4	N9208-02-9:12	ND	5.0	75
C4-1,2,3,4	N9208-02-13:16	ND	5.0	70
C5-1,2,3,4	N9208-02-17:20	ND	5.0	76

=====

CKY

EPA METHOD Mod. 8015
TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

=====
CLIENT: Dames & Moore DATE REC'D: 08/04/92
PROJECT: BART-CV DATE EXTRACTED: 08/05/92
CONTROL NO: N9208-01 DATE ANALYZED: 08/05/92
MATRIX: Soil
=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>H-C RANGE</u>
C1-1,2,3,4	N9208-01-1:4	16	C12-C24
C2-1,2,3,4	N9208-01-5:8	7.2	C12-C24
C3-1,2,3,4	N9208-01-9:12	45	C12-C24
C4-1,2,2,4	N9208-01-13:16	150	C12-C24
C5-1,2,3,4	N9208-01-17:20	28	C12-C24

DETECTION LIMIT: 5 mg/kg
=====

94

EPA METHOD - TCLP 8020
BTEX

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE ANALYZED:	08/14/92
CONTROL NO:	N920801	MATRIX TYPE:	Soil

=====

SAMPLE ID:	CONTROL NO:	RESULTS (ug/kg)				% SURRO RECOVERY
		Benz	Tol	Et	Benz Xyls	
C1-1,2,3,4	n920801-1:4	ND	ND	ND	ND	77
C2-1,2,3,4	n920801-5:8	ND	ND	ND	ND	77
C3-1,2,3,4	n920801-9:12	ND	ND	ND	ND	73
C4-1,2,3,4	n920801-13:16	ND	ND	ND	ND	67
C5-1,2,3,4	n920801-17:20	ND	ND	ND	ND	89
TCLP Blank	n920801 Blk	ND	ND	ND	ND	97

DETECTION LIMIT

5 5 5 5

=====

WET EPA 3010/6010
STLC LEAD by ICP

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE ANALYZED:	08/11/92
CONTROL NO:	N920801	MATRIX:	Water

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/L)</u>	<u>DETECTION LIMIT</u> <u>(mg/L)</u>
C1-1,2,3,4	n920804-1:4	0.13	0.10
C2-1,2,3,4	n920804-5:8	0.11	0.10
C3-1,2,3,4	n920804-9:12	0.20	0.10
C4-1,2,3,4	n920804-13:16	0.30	0.10
C5-1,2,3,4	n920804-17:20	0.13	0.10

=====

CKY

EPA 376.1
REACTIVE SULFIDE

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE EXTRACTED:	08/06/92
CONTROL NO:	N9208-01	DATE ANALYZED:	08/06/92
MATRIX:	Soil		

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DETECTION LIMIT</u> <u>(mg/kg)</u>
C1-1,2,3,4	N9208-01-1:4	ND	50
C2-1,2,3,4	N9208-01-5:8	ND	50
C3-1,2,3,4	N9208-01-9:12	ND	50
C4-1,2,3,4	N9208-01-13:16	ND	50
C5-1,2,3,4	N9208-01-17:20	ND	50

=====

EPA 335.2
REACTIVE CYANIDE

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE EXTRACTED:	08/06/92
CONTROL NO:	N9208-01	DATE ANALYZED:	08/07/92
MATRIX:	Soil		

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DETECTION LIMIT</u> <u>(mg/kg)</u>
C1-1,2,3,4	N9208-01-1:4	ND	50
C2-1,2,3,4	N9208-01-5:8	ND	50
C3-1,2,3,4	N9208-01-9:12	ND	50
C4-1,2,3,4	N9208-01-13:16	ND	50
C5-1,2,3,4	N9208-01-17:20	ND	50

=====

CKY

EPA 120.1
ELECTRICAL CONDUCTIVITY

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE EXTRACTED:	08/06/92
CONTROL NO:	N9208-01	DATE ANALYZED:	08/06/92
MATRIX:	Soil		

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(uhoms/cm)</u>	<u>DET. LIMIT</u> <u>(uhoms/cm)</u>
C1-1,2,3,4	N9208-01-1:4	260	1.0
C2-1,2,3,4	N9208-01-5:8	300	1.0
C3-1,2,3,4	N9208-01-9:12	240	1.0
C4-1,2,3,4	N9208-01-13:16	270	1.0
C5-1,2,3,4	N9208-01-17:20	150	1.0

=====

EPA 1010
IGNITABILITY

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE ANALYZED:	08/07/92
CONTROL NO:	N9208-01	MATRIX TYPE:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(°C)</u>	<u>DETECTION LIMIT</u> <u>(°C)</u>
C1-1,2,3,4	N9208-01-1:4	65	20
C2-1,2,3,4	N9208-01-5:8	61	20
C3-1,2,3,4	N9208-01-9:12	72	20
C4-1,2,3,4	N9208-01-13:16	62	20
C5-1,2,3,4	N9208-01-17:20	62	20

=====

QUALITY CONTROL DATA

CLIENT: Dames & Moore
 PROJECT: BART-CV
 CONTROL NO: N9208-01

METHOD: EPA 8020
 MATRIX: Soil

SAMPLE ID: N9208-01-1:4

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Benzene	ND	20	105	120	13
Toluene	ND	20	115	110	4
Ethyl Benzene	ND	20	100	90	11
Xylene	ND	40	95	98	3

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9208-01

=====

METHOD EPA M8015G
MATRIX: Soil

SAMPLE ID: N9208-01-13:16

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Gasoline	ND	2	105	85	21

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9208-01

METHOD: EPA M8015D
MATRIX: Soil

SAMPLE ID: N9208-01-5:8

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Diesel	7.2	500	83	86	3

QUALITY CONTROL DATA

CLIENT: Dames & Moore
 PROJECT: BART-CV
 CONTROL NO: N920801

METHOD: EPA TCLP 8020
 MATRIX: Soil

SAMPLE ID: 920836-1

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Benzene	ND	12	108	92	16
Toluene	ND	14	121	100	19
Chlorobenzene	ND	15	113	100	12

CKY

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N920801

=====

METHOD EPA WET 3010/6010
MATRIX: Soil

SAMPLE ID: Blank Spike/Duplicate

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/L)	<u>AMOUNT SPIKED</u> (mg/L)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Lead	ND	1.0	81	72	12

QUALITY CONTROL FORM

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9208-01

METHOD EPA 376.1
MATRIX Soil

SAMPLE ID N9208-01-17:20

<u>COMPOUND</u>	<u>SAMPLE RESULT</u> (mg/kg)	<u>DUP. SAMPLE RESULT</u> (mg/kg)	<u>% RPD</u>
Sulfide	ND	ND	0

94

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9208-01

=====

METHOD EPA 1010
MATRIX Soil

SAMPLE ID N9208-01-1:4

<u>COMPOUND</u>	<u>SAMPLE RESULT</u> (°C)	<u>DUP. SAMPLE RESULT</u> (°C)	<u>% RPD</u>
Ignitability	65	65	0

QUALITY CONTROL FORM

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9208-01

=====

METHOD EPA 335.2
MATRIX Soil

SAMPLE ID N9208-01-17:20

<u>COMPOUND</u>	<u>SAMPLE RESULT</u> (mg/kg)	<u>DUP. SAMPLE RESULT</u> (mg/kg)	<u>% RPD</u>
Cyanide	ND	ND	0

CKY

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9208-01

METHOD EPA 120.1
MATRIX Soil

SAMPLE ID N9208-01-1:4

<u>COMPOUND</u>	<u>SAMPLE RESULT</u> (mg/kg)	<u>DUP. SAMPLE RESULT</u> (mg/kg)	<u>% RPD</u>
EC	260	260	0

CKY

CLIENT NAME: JAMES F MOORE

ADDRESS: 2101 WEBSTER

PHONE NO. 939-3600 FAX NO. 946 12

PROJECT NAME: BART - CASTRO VALLEY
SEND REPORT TO: E SKOV

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

DATE: 8/3/92
PAGE 1 OF 2

03715-051 Field



CKY Incorporated
Environmental Services
3942 Valley Avenue Suite F
Pleasanton, CA 94506
Tel: 910 846 3188
Fax: 910 846 1236

SAMPLER NAME / SIGNATURE

PETER DAVIS / Peter Davis

SAMPLF NUMBER	SAMPLING DATE/TIME	PRESERVATIVE	CONTAINER SIZE/TYPE
C1-1	8/3/92	NONE	5 STEEL RING
C1-2	↓	↓	↓
C1-3			
C1-4			
C2-1			
C2-2	↓	↓	↓
C2-3			
C2-4			
C3-1			
C3-2	↓	↓	↓
C3-3			
C3-4			

TURN AROUND TIME

SAMPLE	TEST	TURN AROUND TIME
WATER	SOIL	OTHER
	BRAD	

ANALYSES REQUIRED

MB-1	MB-2	MB-3	MB-4	MB-5	MB-6	MB-7	MB-8	MB-9	MB-10	MB-11	MB-12	MB-13	MB-14	MB-15	MB-16	MB-17	MB-18	MB-19	MB-20	

COMMENTS

HOLD PENDING INSTRUCTIONS fm. ERIC SKOV. Int'l Receipt 10.000 8/4/92

Relinquished by (Signature) Peter Davis	Date 8/3/92	Received by (Signature) Eric Skov	Date 8/4/92
Company Davis + Moore	Time 5:00	Company CKY	Time 11:00

Relinquished by (Signature)	Date	Received by (Signature)	Date
Company	Time	Company	Time

Storage/Disposal of Samples Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter Disposal of sample by the Laboratory will be charged at \$10/sample

CLIENT NAME: DAMES & MOORE E

ADDRESS: 2101 WEBSTER
CA 94612

PHONE NO. 839-3600 FAX NO.

PROJECT NAME: BART-CASTRO VALLEY

SEND REPORT TO: ERIK SLOV

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

DATE: 8/3/92
PAGE: 2 OF 2



Computerized
Environmental Services
241 Valley Avenue, Suite 1
Pleasanton, CA 94566
Tel: 510 816-3188
Fax: 510 816-1236

SAMPLER NAME/SIGNATURE
PETER DAVIS / Peter Davis

TURN AROUND TIME
NORMAL
RUSH

ANALYSES REQUIRED

SAMPLE NUMBER	SAMPLING DATE/TIME	PRESERVATIVE	CONTAINER SIZE/TYP	SAMPLE DESCRIPTION			418	MSU S	831C 601	8020 602	8080 606	5240 624	5270 621	CAY Metals		
				WATER	SOIL	OTHER										
C4-1	8/3/92	NONE	S-STEEL		GRAB											
C4-2	↓	↓	↓													
C4-3																
C4-4																
C5-1																
C5-2																
C5-3																
C5-4																
WW1			(5) NOA'S		GRAB											
WW2			(2) R AMBER		↓											

COMMENTS: HOLD

Relinquished by (Signature) <u>Peter Davis</u>	Date: <u>8/3/92</u>	Received by (Signature) <u>[Signature]</u>	Date: <u>8/4/92</u>	Relinquished by (Signature)	Date:	Received by (Signature)	Date:
Company: <u>Dames & Moore</u>	Time: <u>5:00</u>	Company: <u>CKY</u>	Time: <u>11:00</u>	Company:	Time:	Company:	Time:

Storage/Disposal of Samples. Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample

EPA METHOD - 8020
BTEX

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE ANALYZED:	08/04/92
CONTROL NO:	N9208-01	MATRIX TYPE:	Water

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS (ug/L)</u>				<u>% SURRO</u>
		<u>Benz</u>	<u>Tol</u>	<u>Et Benz</u>	<u>Xyls</u>	<u>RECOVERY</u>
WW1	N9208-01-21	ND	ND	ND	ND	82
<u>DETECTION LIMIT</u>		<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	

=====

EPA METHOD 5030/Mod. 8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE ANALYZED:	08/04/92
CONTROL NO:	N9208-01	MATRIX:	Water

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/L)</u>	<u>DET. LIMIT</u> <u>(mg/L)</u>	<u>% SURRO</u> <u>RECOVERY</u>
WW-1	N9208-01-21	ND	1.0	82

=====

CKY

EPA METHOD Mod. 8015
TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/04/92
PROJECT:	BART-CV	DATE EXTRACTED:	08/06/92
CONTROL NO:	N9208-01	DATE ANALYZED:	08/06/92
MATRIX:	Water		

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/L)</u>	<u>H-C RANGE</u>
WW1	N9208-01-21	ND	N.A.

DETECTION LIMIT: 5 mg/L

=====

QUALITY CONTROL DATA

CLIENT: Dames & Moore
 PROJECT: BART-CV
 CONTROL NO: N9208-01

=====
 METHOD EPA 8020
 MATRIX: Water

SAMPLE ID: Blank

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (ug/L)	<u>AMOUNT SPIKED</u> (ug/L)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Benzene	ND	20	95	120	23
Toluene	ND	20	110	110	0
Ethyl Benzene	ND	20	110	90	20
Xylene	ND	40	103	98	5

=====

CKY

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9208-01

=====

METHOD EPA M8015G
MATRIX: Water

SAMPLE ID: Blank

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/L)	<u>AMOUNT SPIKED</u> (mg/L)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Gasoline	ND	2	100	85	16

QUALITY CONTROL DATA

CLIENT: Dames & Moore
PROJECT: BART-CV
CONTROL NO: N9208-01

METHOD: EPA M8015D
MATRIX: Water
SAMPLE ID: N9208-01-21

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/L)	<u>AMOUNT SPIKED</u> (mg/L)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Diesel	ND	500	101	106	5

CKY

CLIENT NAME: DANIEL T. MOORE E.

ADDRESS: 2101 WEBSTER
CAV 94612

PHONE NO. 839-3600 FAX NO.

PROJECT NAME: BART-CASTRO VALLEY

SEND REPORT TO: ERIK SKOV

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

DATE 8/3/92
PAGE 2 OF 2



Environmental Services
2101 Webster Avenue, Suite 200
Fremont, CA 94556
Tel: 510 816-1188
Fax: 510 816-1236

SAMPLER NAME/SIGNATURE
PETER DAVIS / Peter Davis

TURN AROUND TIME
FORMAL
RUSH

ANALYSES: (By Client)

SAMPLE NUMBER	SAMPLING DATE/TIME	PRESERVATIVE	CONTAINER SIZE/TYP	SAMPLE DESCRIPTION			ANALYSES: (By Client)										
				WATER	SOIL	OTHER	MS: 3	BC10: 601	BC20: 602	BC30: 603	BC40: 624	BC50: 625	SAF: Metals				
C4-1	8/3/92	NONE	S-STEEL		GRAB												
C4-2																	
C4-3																	
C4-4																	
C5-1																	
C5-2																	
C5-3																	
C5-4																	
WW 1																	
WW 1				(5) VOA'S	GRAB												
				(2) D AMBER													

COMMENTS: HOLD

Relinquished by: (Signature) <u>Peter Davis</u>	Date: <u>8/3/92</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>8/4/92</u>	Relinquished by: (Signature)	Date:	Received by: (Signature)	Date:
Company: <u>Danest Moore</u>	Time: <u>5:00</u>	Company: <u>CKY</u>	Time: <u>11:00</u>	Company:	Time:	Company:	Time:

Storage/Disposal of Samples: Sample will be stored at C.K.Y. for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.



CKY incorporated Analytical Laboratories

Date: 08/25/92
920851

Dames & Moore
2101 Webster St. # 300
Oakland CA 94612

Attn: Graeme Nyland

Subject: Laboratory Report
Project: Bart Castro Valley

Enclosed is the laboratory report for samples received on 08/18/92. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysis</u>
EPA 335.2 (Cyanide)	1 Water
EPA 9065 (Phenols)	1 Water
EPA 3005/6010	1 Water
EPA 150.1 (pH)	1 Water

The results are summarized on seven pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Wasfi Attalla, Ph.D.
Laboratory Director

EPA 335.2
CYANIDE

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/18/92
PROJECT:	Bart Castro Valley	DATE EXTRACTED:	08/20/92
CONTROL NO:	920851	DATE ANALYZED:	08/21/92
MATRIX:	Soil		

=====

SAMPLE ID:	CONTROL NO:	RESULTS (mg/L)	DETECTION LIMIT (mg/L)
WT 1	920851-2	ND	0.02
Method Blank	920851	ND	0.02

=====

CKY

EPA 9065
PHENOLS

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/18/92
PROJECT:	Bart Castro Valley	DATE EXTRACTED:	08/20/92
CONTROL NO:	920851	DATE ANALYZED:	08/21/92
MATRIX:	Soil		

=====

=====

SAMPLE ID:	CONTROL NO:	RESULTS (mg/L)	DETECTION LIMIT (mg/L)
WT 1	920851-1	ND	0.05
Method Blank	920851	ND	0.05

=====

CKY

EPA 3005/6010/7000
TTLC METALS BY ICP/AAS

=====

CLIENT:	Dames & Moore	DATE REC'D:	08/18/92
PROJECT:	Bart Castro Valley	DATE EXTRACTED:	08/19/92
SAMPLE ID:	WT 1	DATE ANALYZED:	08/19/92
CONTROL NO:	920851-3	MATRIX TYPE:	Water

=====

<u>PARAMETERS</u>	<u>RESULTS</u> <u>(mg/L)</u>	<u>DETECTION LIMIT</u> <u>(mg/L)</u>
Arsenic	ND	0.01
Cadmium	ND	0.01
Chromium - Total	ND	0.01
Copper	0.01	0.01
Lead	ND	0.10
Mercury	ND	0.0002
Nickel	0.06	0.05
Silver	ND	0.01
Zinc	0.06	0.01

=====

EPA 3005/6010/7000
TTLC METALS BY ICP/AAS

=====

CLIENT:	Dames & Moore	DATE REC'D:	081/8/92
PROJECT:	Bart Castro Valley	DATE EXTRACTED:	08/19/92
SAMPLE ID:	Method Blank	DATE ANALYZED:	08/19/92
CONTROL NO:	920851	MATRIX TYPE:	Water

=====

<u>PARAMETERS</u>	<u>RESULTS</u> <u>(mg/L)</u>	<u>DETECTION LIMIT</u> <u>(mg/L)</u>
Arsenic	ND	0.01
Cadmium	ND	0.01
Chromium - Total	ND	0.01
Copper	ND	0.01
Lead	ND	0.10
Mercury	ND	0.0002
Nickel	ND	0.05
Silver	ND	0.01
Zinc	0.05	0.01

=====

EPA 150.1
pH

```
=====
CLIENT:      Dames & Moore           DATE REC'D:    08/18/92
PROJECT:     Bart Castro Valley      DATE ANALYZED: 07/18/92
CONTROL NO:  920851                 MATRIX:        Water
=====
```

```
=====
SAMPLE ID:           CONTROL NO:           RESULTS      DETECTION LIMIT
                   (pH Units)             (pH Units)
WT 1                 920851-4                 8.7          0.1
=====
```

QUALITY CONTROL DATA

CLIENT: Dames & Moore
 PROJECT: Bart Castro Valley
 CONTROL NO: 920851

METHOD: EPA 150.1
 MATRIX: Water

SAMPLE ID: 920851-4

<u>COMPOUND</u>	<u>SAMPLE RESULT</u> (pH units)	<u>DUP. SAMPLE RESULT</u> (pH units)	<u>RPD %</u>
pH	8.7	8.7	0

METHOD: EPA 3005/6010
 MATRIX: Water

SAMPLE ID: 920851-3

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/L)	<u>AMOUNT SPIKED</u> (mg/L)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Arsenic	ND	1.0	104	115	10
Cadmium	ND	1.0	103	99	4
Chromium	ND	1.0	102	95	7
Lead	ND	1.0	98	96	2
Silver	ND	1.0	102	90	12
Nickel	ND	1.0	108	103	5
Mercury	ND	0.005	80	100	20

QUALITY CONTROL DATA

CLIENT: Dames & Moore
 PROJECT: Bart Castro Valley
 CONTROL NO: 920851

METHOD: EPA 9065
 MATRIX: Water

SAMPLE ID: 920851-1

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/L)	<u>AMOUNT SPIKED</u> (mg/L)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Phenols	ND	0.50	92	88	4

METHOD: EPA 335.2
 MATRIX: Water

SAMPLE ID: Method Blank

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/L)	<u>AMOUNT SPIKED</u> (mg/L)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Cyanide	ND	0.20	90	90	0

920851

CLIENT NAME: DAMES & MOORE
ADDRESS: 2101 WEBSTER ST. #300
OAKLAND, CA 94612
PHONE NO. _____ FAX NO. _____
PROJECT NAME: BART CASTRO VALLEY
SEND REPORT TO: GRAEME NYLAND

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

DATE: 8/17/92
PAGE _____ OF _____

due 8/28
R3B



CKY Incorporated
Environmental Services
3942 Valley Avenue, Suite F
Pleasanton, CA 94566
Tel: 510-846-3188
Fax: 510-846-1236

SAMPLER NAME/SIGNATURE				TURN AROUND TIME			ANALYSES REQUIRED										
<u>Edison</u>				NORMAL	<input checked="" type="checkbox"/>		418.1	MB015	8010/601	8020/602	8080/608	8240/624	8270/625	CCAM Metals	Phenols	CYANIDE	PH
				RUSH	<input type="checkbox"/>												
SAMPLE NUMBER	SAMPLING DATE/TIME	PRESERVATIVE	CONTAINER SIZE/TYPE	SAMPLE DESCRIPTION													
				WATER	SOIL	OTHER											
1 2 3 4 ↓	8/17/92 11:00AM	H ₂ SO ₄	1 liter glass	X										X			
		NaOH	500ml plastic	X											X		
		Nitric Acid	1 liter plastic	X									X				
		NONE	500ml glass	X												X	


COMMENTS: SEE LIST OF METALS ON ATTACHED LIST

Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>8/17/92</u>	Received by: (Signature)	Date:	Relinquished by: (Signature)	Date:	Received by: (Signature)	Date: <u>8/18</u>
Company: <u>CKY</u>	Time:	Company:	Time:	Company:	Time:	Company: <u>CKY</u>	Time: <u>10am</u>

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.

ORO LOMA SANITARY DISTRICT
SPECIAL DISCHARGE PERMIT APPLICATION

SECTION I: General Condition

1. Applicant Business Name: Bay Area Rapid Transit District
2. Applicant Address: 1330 Broadway, Suite 1800
City/State/Zip: Oakland, CA 94604-2688
3. Name of Environmental/Engineering Firm Representing Applicant
DAMES & MOORE
4. Environmental/Engineering Firm Address
Street: 2101 Webster Street, Suite 300
City/State/Zip: Oakland, CA 94612
5. Person to Contact About this Application
Name George Chiu Title Staff Engineer Date: August 13, 1992
6. Person to Contact in case of Emergency
Name Erik Skov Title Project Manager
Day Phone 510-839-3600 Night Phone _____
7. *Certification*
I certify that the information contained in this application is familiar to me and to the best of knowledge, such information is true, complete and accurate.
 August 13, 1992
Signature Date
George Chiu
Print Name

**ORO LOMA SANITARY DISTRICT
SPECIAL DISCHARGE PERMIT APPLICATION**

SECTION 2 SITE INFORMATION

1. Name and Address of Remediation Site

Name Former Castro Valley Unified School District Corporation Yard

Street 21,000 Wilbeam Avenue, CA 94546

City/State/Zip Castro Valley, CA 94546

2. Discuss the nature of the problem and state the reason(s) why there is no reasonable alternative but to discharge into the wastewater system. (Attach additional pages as necessary).

Groundwater were found in the excavation pits during excavation. The water
were pumped out and stored in a baker tank. Water samples were taken and
tested for hydrocarbon content. As the results show that the concentration is
non-detectable, it is more cost effective to discharge the water to a nearby
cleanout and subsequently treated by the waste water system. (This is a one
time batch discharge, approximately 15,000 gallons)

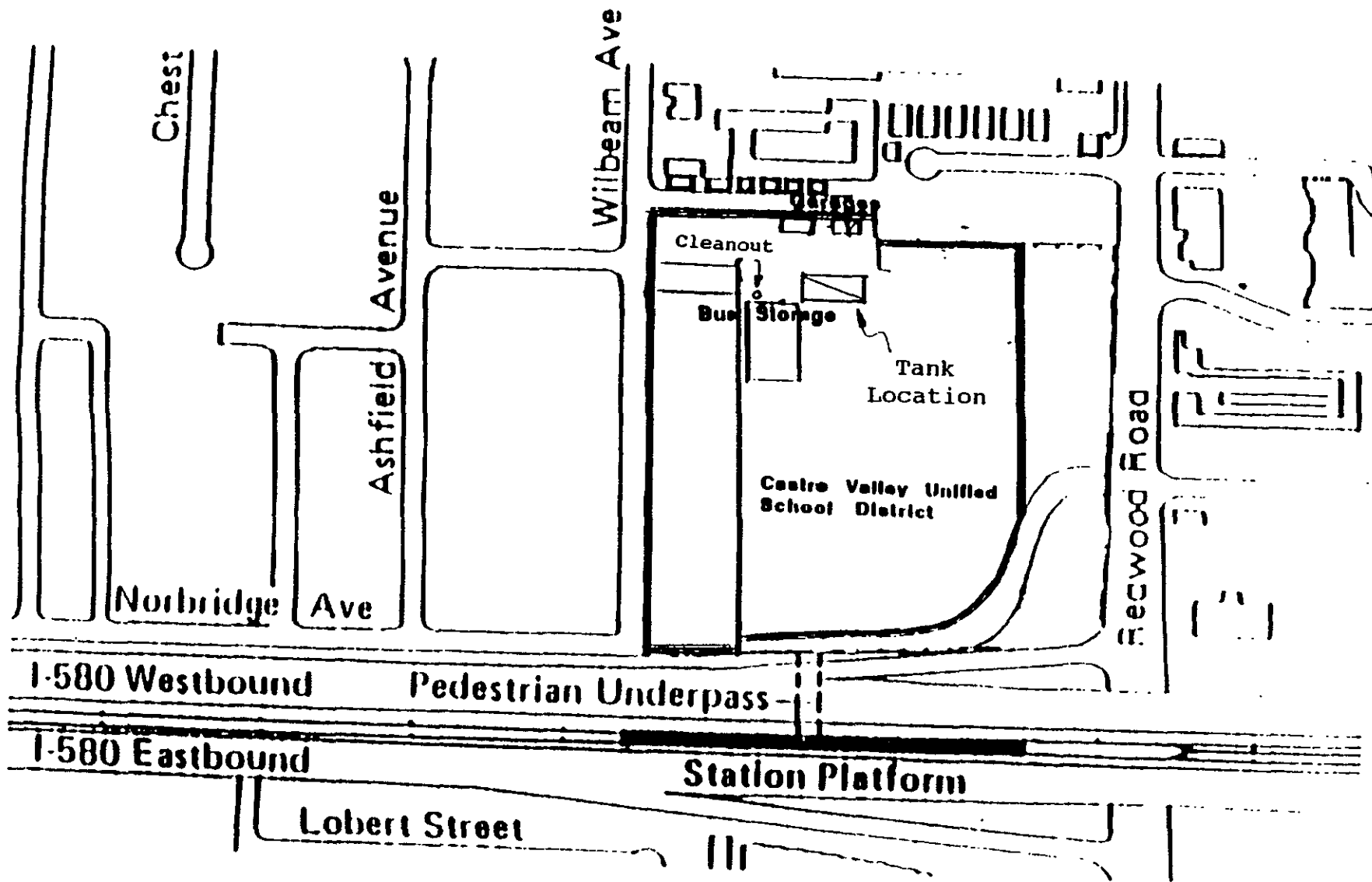
3. Site Description

- a) Provide a map showing the location of the site.
- b) Provide a diagram showing location of all monitoring wells, treatment unit and connection point to the District sewer system. N.A.
- c) Provide copies of laboratory analysis of pollutant concentration.

4. Wastewater Flow Information N.A. - This is a one time batch discharge.

Estimated Discharge Flow Rate _____ (gal/min)
Peak Hourly Flow Rate _____ (gal/min)
Maximum Daily Flow Rate _____ (gal/min)

Estimated Duration of Discharge _____



LOCATION PLAN

FORMER CASTRO VALLEY UNIFIED SCHOOL DISTRICT CORPORATION YARD

**PERMIT CONDITIONS
PART 5**

Special Discharge - Groundwater Discharges

3(B) SAMPLING REQUIREMENTS

Parameter *O.L.S.D. Limit*

<i>Metals</i>	
Arsenic	0.1 mg/L
Cadmium	0.2 mg/L
Copper	2.0 mg/L
Lead	1.0 mg/L
Mercury	0.01 mg/L
Nickel	1.0 mg/L
Silver	0.2 mg/L
Total Chromium	0.5 mg/L
Zinc	3.0 mg/L

Additional Testing

Total Petroleum Hydrocarbons (EPA 8015)	15 mg/L
B.T.E.X. (EPA 8020)	Non-detectable
Phenols	1.0 mg/L
Cyanide	1.0 mg/L

General Analysis

COD	N/A
Suspended Solids	N/A
pH	No lower than 5.5 units

03715-051-043

Post-It™ brand fax transmittal memo 7671		# of pages ▶
To	From	
Co.	Co.	
Dept.	Dept.	
Fax #	Phone #	

To: HARRY
 Co: CKEY
 Dept:
 Fax #: 510-246-1336
 From: G. CHU
 Co: D + M
 Phone #: 510-208-1368
 Fax #:

CASTRO VALLEY SANITARY DISTRICT

DONALD H. STROOT, PRESIDENT
JAMES S. MARTIN, SECRETARY
THUR L. VARGAS
ANTHONY MORSILLI
JAMES A. LAYTON

21040 MARSHALL STREET • CASTRO VALLEY, CALIFORNIA 94546-6098 • TELEPHONE (510) 537-0757
FAX (510) 537-1312

MARY E. FREDETTE, DISTRICT MANAGER

September 1, 1992

Mr. George Chiu
Dames & Moore
2101 Webster Street
Suite 300
Oakland, CA 94612

Subject: Special Discharge Permit
Castro Valley Unified School District
Corporation Yard
21000 Wilbeam Avenue
Castro Valley, CA

Dear Mr. Chiu:

This will advise that this letter will be the permit for the discharge of 15,000 gallons of water from a portable holding tank at the Castro Valley Unified School District Corporation Yard at 21000 Wilbeam Avenue, Castro Valley, CA, into the sewer system.

This permit will be valid on receipt of the following:

Inspection	\$200.00
Treatment of 15,000 Gallons	<u>31.12</u>
Total	\$231.12

Very truly yours,


DELMER J. HERRERA
District Inspector

DJH:eg

specdis2.1tr



printed on recycled paper

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART

Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 5 1 0 - 4 6 4 6 1 9 2 Phone No. -

BFI Waste Code C A 4 0 5 0 9 0 8 9 2 4 3 5 9 6 Containers Type
Description of Waste Quantity Units No. Type
D - Drum
C - Carton
B - Bag
T - Truck
P - Pounds
Y - Yards
O - Other

NON-HAZARDOUS SOIL

Quantity	Units	No.	Type
<u>0 0 0 1 8</u>	<u>Y</u>	<u>0 2</u>	<u>T</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>

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.

Generator Authorized Agent Name GARY C. JENSEN Signature [Signature] Shipment Date 09 11 92

TRANSPORTER

Truck No. 65 Phone No. 510-634-6850
Transporter Name Dillard Trucking, Inc. Driver Name (Print) STEVE LEONARD
218/2
Address P. O. Box 218 Vehicle License No./State 439573
Byron, California 94544 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] Shipment Date 09 11 92 Driver Signature [Signature] Delivery Date 09 11 92

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 5 1 0 - 4 4 7 0 4 9 1
Address 4001 North Vasco Rd., Livermore, Ca. 94550

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 09 11 92

PASS CODE

TRANSPORTER RETAIN

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1800 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 510-364-8192 Phone No. 435-96

BFI Waste Code	Description of Waste	Quantity	Units	No.	Type	Containers	Type
<u>CA</u>	<u>NON HAZARDOUS SOLID</u>	<u>00018</u>	<u>Y</u>	<u>0</u>	<u>1</u>	<u>T</u>	D - Drum C - Carton 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.

Generator Authorized Agent Name [Signature] Signature [Signature] Shipment Date 09/11/92

Truck No. J81 Phone No. 510-634-8850
 Transporter Name Willow Trucking, Inc. Driver Name (Print) JIM BURNETT
11372 Vehicle License No./State 3X74359
 Address 11111 21st Vehicle Certification _____
Castro Valley, CA 94541

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

Driver Signature [Signature] Shipment Date 09/11/92 Driver Signature [Signature] Delivery Date 09/11/92

DESTINATION

Site Name D.F.T. Vasco Road Landfill Phone No. 510-470-4911
4001 North Vasco Rd., Livermore, Ca. 94550
 Address _____

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 Accepting Agent [Signature] Signature [Signature] Receipt Date 09/11/92

PASS CODE _____

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 510-4646192 Phone No.

BFI Waste Code	<u>CA</u>	<u>405</u>	<u>090892</u>	<u>43596</u>	Containers	Type
Description of Waste				Quantity	Units	No. Type
NON HAZARDOUS SOIL				<u>00018</u>	<u>Y</u>	<u>0</u> <u>T</u>

- D - Drum
- C - Carton
- 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.

Generator Authorized Agent Name GARY C. JENSEN Signature [Signature] Shipment Date 091192

TRANSPORTER

Truck No. 142 Super Trucking Phone No. 510-634-6850
 Transporter Name Dillard Trucking, Inc. Driver Name (Print) CURTIS O COLLINS
Job # 218/2
 Address P. O. Box 218 Vehicle License No./State BP 86553
Byron, California 94544
 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.

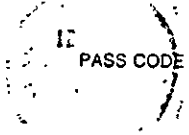
Driver Signature [Signature] Shipment Date 911092 Driver Signature [Signature] Delivery Date 091192

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 510-4470491
 Address 4001 North Vasco Rd., Livermore, Ca. 94550

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] Receipt Date 091192



TRANSPORTER RETAIN

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 5 1 0 - 4 6 4 6 1 9 2 Phone No. -

BFI Waste Code C A 4 0 5 0 9 0 8 9 2 4 3 5 9 6 Containers

Type	No.	Type
D - Drum		
C - Carton		
B - Bag		
T - Truck		
P - Pounds		
Y - Yards		
O - Other		

 Description of Waste NON HAZARDOUS SOIL Quantity 0 0 0 1 8 Units Y No. 0 Type T

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.

Generator Authorized Agent Name GARY C JENSEN Signature [Signature] Shipment Date 09 11 92

TRANSPORTER

Truck No. 3 Phone No. 510-634-6850
 Transporter Name Billard Trucking, Inc. Job # 213/2 Driver Name (Print) LARRY MCGUIRE
 Address P. O. Box 218 Vehicle License No./State 2X61336
Byron, California 94544 Vehicle Certification 300811

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] Shipment Date 09 11 92 Driver Signature [Signature] Delivery Date 09 11 92

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 5 1 0 - 4 4 7 0 4 9 1
 Address 4001 North Vasco Rd., Livermore, Ca. 94550

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 09 11 92

PASS CODE _____

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 5 1 0 - 4 6 4 6 1 9 2 Phone No. -

BFI Waste Code CA 405 090892 43596 Containers Type
 Description of Waste NON HAZARDOUS SOIL Quantity 00018 Units Y No. 01 Type T
 D - Drum
 C - Carton
 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.

Generator Authorized Agent Name GARY C. JENSEN Signature [Signature] Shipment Date 091192

TRANSPORTER

Truck No. 39 Phone No. 510-634-6350
 Transporter Name Dillard Trucking, Inc. Driver Name (Print) JIM FERREIRA
Job # 218/2 Address P. O. Box 218 Vehicle License No./State 4C08284
Byron, California 94544 Vehicle Certification 300810

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] Shipment Date 091192 Driver Signature [Signature] Delivery Date 091192

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 5 1 0 - 4 4 7 0 4 9 1
 Address 4001 North Vasco Rd., Livermore, Ca. 94550

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 9/1/92

PASS CODE

No. 907356



NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 5 1 0 - 4 6 4 6 1 9 2 Phone No. -

BFI Waste Code C A 4 0 5 0 9 0 8 9 2 4 3 5 9 6 Containers Type
 Description of Waste Quantity Units No. Type
NON HAZARDOUS SOIL 0 0 0 1 8 Y 0 / T

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.

Generator Authorized Agent Name GARY C JENSEN Signature [Signature] Shipment Date 09/11/92

TRANSPORTER

Truck No. JB1 Phone No. 510-634-6850
 Transporter Name Dillard Trucking, Inc. Driver Name (Print) JIM BURNETT
218/2 Vehicle License No./State 3X74359
 Address P. O. Box 218 Vehicle Certification
Byron, California 94544

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] Shipment Date 09/11/92 Driver Signature [Signature] Delivery Date 09/11/92

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 5 1 0 - 4 4 7 0 4 9 1
 Address 4001 North Vasco Rd., Livermore, Ca. 94550

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] Receipt Date 9/11/92

PASS CODE

TRANSPORTER RETAIN

No. 907357

Items™
INDUSTRIES

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

BART

Generating Location BART

1390 Broadway, Suite 1702
Oakland, CA 94612

Address 21000 Wilbeam Ave.
Castro Valley, CA

No. 5 1 0 - 4 6 4 6 1 9 2

Phone No.

Waste Code CA 405 090892

4 3 5 9 6

Containers

NON HAZARDOUS SOIL

Quantity	Units	No.	Type
<u>0 0 0 1 8</u>	<u>Y</u>	<u>0 2</u>	<u>T</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>

- Type
- D - Drum
- C - Carton
- 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.

GARY C. JENSEN
Generator Authorized Agent Name

Mary C. Jensen
Signature

091192
Shipment Date

TRANSPORTER

Truck No. 65

Phone No. 510-634-6850

Transporter Name Dillard Trucking, Inc.
Job # 218/2

Driver Name (Print) STEVE LUKARD

Address P. O. Box 218
Byron, California 94544

Vehicle License No./State 739573

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]
Driver Signature

091192
Shipment Date

[Signature]
Driver Signature

091192
Delivery Date

DESTINATION

Site Name B.F.I. Vasco Road Landfill

Phone No. 5 1 0 - 4 4 7 0 4 9 1

Address 4001 North Vasco Rd., Livermore, Ca. 94550

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]

9/11/92
Receipt Date

PASS CODE

TRANSPORTER RETAIN

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1830 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 510-4646192 Phone No.

BFI Waste Code CA 405 090892 43596 Containers
 Description of Waste NON HAZARDOUS SOIL Quantity 00018 Units Y No. 0 Type T
 Type: D - Drum, C - Carton, 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.

Generator Authorized Agent Name GARY C. JENSEN Signature [Signature] Shipment Date 091192

TRANSPORTER

Truck No. B Dillard Trucking Phone No. (510) 510-634-6850
 Transportor Name Dillard Trucking, Inc. Driver Name (Print) Curtis O Collins
Job # 210/2 Address P. O. Box 218 Vehicle License No./State PP86553
Byron, California 94544 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] Shipment Date 091192 Driver Signature [Signature] Delivery Date 091192

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 510-4470491
 Address 4001 North Vasco Rd., Livermore, Ca. 94550

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] Receipt Date 091192

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 510-4646192 Phone No.
 BFI Waste Code CA 405 090892 43596 Containers
 Description of Waste Quantity Units No. Type

NON HAZARDOUS SOIL	0	0	0	1	8	Y	0	/	T

- Type
 D - Drum
 C - Carton
 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.

Generator Authorized Agent Name GARY C. JENSEN Signature [Signature] Shipment Date 091192

TRANSPORTER

Truck No. 3 Phone No. 510-634-6850
 Transporter Name Billard Trucking, Inc. Driver Name (Print) LARRY MCGUIRE
Job # 21872 Vehicle License No./State 2X61336
 Address P. O. Box 218 Vehicle Certification 300811
Byron, California 94544

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] Shipment Date 091192 Driver Signature [Signature] Delivery Date 091192

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 510-4470491
 Address 4001 North Vasco Rd., Livermore, Ca. 94550

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 091192

PASS CODE

TRANSPORTER RETAIN
 TRANSPORTER RETAIN

No. 907361

Items™
INDUSTRIES

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

BART

Generating Location BART

1330 Broadway, Suite 1702
Oakland, CA 94612

Address 21000 Wilbeam Ave.
Castro Valley, CA

Phone No. 5 1 0 - 4 6 4 6 1 9 2

Phone No. 4 3 5 9 6

BFI Waste Code C A 4 0 5 0 9 0 8 9 2

Description of Waste

Quantity	Units	No.	Type
<u>0 0 0 1 8</u>	<u>Y</u>	<u>0 2</u>	<u>T</u>

Containers

- Type
- D - Drum
- C - Carton
- B - Bag
- T - Truck
- P - Pounds
- Y - Yards
- O - Other

NON HAZARDOUS SOIL

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.

GARY JENSEN
Generator Authorized Agent Name

Mary Jensen
Signature

0 9 1 1 9 2
Shipment Date

TRANSPORTER

Truck No. 65

Phone No. 510-634-6850

Transporter Name Dillard Trucking, Inc.
Job # 218/2
Address P. O. Box 218
Byron, California 94544

Driver Name (Print) STEVE LEONARD
Vehicle License No./State Y39573
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]
Driver Signature

0 9 1 1 9 2
Shipment Date

[Signature]
Driver Signature

0 9 1 1 9 2
Delivery Date

DESTINATION

Site Name B.F.I. Vasco Road Landfill
Address 4001 North Vasco Rd., Livermore, Ca. 94550

Phone No. 5 1 0 - 4 4 7 0 4 9 1

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]
Name of Authorized Agent

[Signature]
Signature

0 9 1 1 9 2
Receipt Date

PASS CODE

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 5 1 0 - 4 6 4 6 1 9 2 Phone No. -

BFI Waste Code C A 4 0 5 0 9 0 8 9 2 4 3 5 9 6 Containers 0 Type T
 Description of Waste NON HAZARDOUS SOIL Quantity 0 0 0 1 8 Units Y No. 0 Type T
 D - Drum
 C - Carton
 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.

GARY C. JENKIN Signature [Signature] Shipment Date 09 11 92
 Generator Authorized Agent Name

TRANSPORTER

Truck No. B Super Trucking Phone No. 510-634-6850
 Transporter Name Dillard Trucking, Inc. Driver Name (Print) Curtis O Collins
Job # 218/2 Vehicle License No./State BP86553
 Address P. O. Box 218 Vehicle Certification
Byron, California 94544

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.

Curtis O Collins Shipment Date 09 11 92 Curtis O Collins Delivery Date 09 11 92
 Driver Signature

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 5 1 0 - 4 4 7 0 4 9 1
 Address 4001 North Vasco Rd., Livermore, Ca. 94550

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] Receipt Date 09 11 92
 Name of Authorized Agent Signature

PASS CODE

TRANSPORTER RETAIN



NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 510-1640102 Phone No. 43596

BFI Waste Code CA 405 090892 Description of Waste NON HAZARDOUS SOIL
 Quantity 00018 Units Y Containers No. 0 Type T
 Type Legend: D - Drum, C - Carton, 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.

Generator Authorized Agent Name GARY C. JENSEN Signature [Signature] Shipment Date 091192

TRANSPORTER

Truck No. 3 Phone No. 510-634-6850
 Transporter Name Dillard Trucking, Inc. Driver Name (Print) LARRY McGUIRE
218/2 Vehicle License No./State 3XG1335
 Address P. O. Box 218 Vehicle Certification 300811
Byron, California 94544

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] Shipment Date 091192 Driver Signature [Signature] Delivery Date 091192

DESTINATION

Site Name B.P.I. Vasco Road Landfill Phone No. 510-4470491
 Address 4001 North Vasco Rd., Livermore, Ca 94550

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 091192

PASS CODE _____

TRANSPORTER RETAIN

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name BART Generating Location BART
 Address 1330 Broadway, Suite 1702 Address 21000 Wilbeam Ave.
Oakland, CA 94612 Castro Valley, CA

Phone No. 5 1 0 - 4 3 4 6 1 9 2 Phone No. -

BFI Waste Code	<u>C</u> <u>A</u>	<u>4</u> <u>0</u> <u>5</u>	<u>0</u> <u>9</u> <u>0</u> <u>3</u> <u>9</u> <u>2</u>	<u>4</u> <u>3</u> <u>5</u> <u>9</u> <u>6</u>	Containers	Type		
Description of Waste					Quantity	Units	No.	Type
NON HAZARDOUS SOIL					<u>0</u> <u>0</u> <u>0</u> <u>1</u> <u>8</u>	<u>Y</u>	<u>0</u>	<u>T</u>

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.

Generator Authorized Agent Name GARY C. JENSEN Signature [Signature] Shipment Date 091192

TRANSPORTER

Truck No. 39 Phone No. 510-634-6850
 Transporter Name Dillard Trucking, Inc. Driver Name (Print) JIM FERREIRO
Job # 21812
 Address P. O. Box 218 Vehicle License No./State 4C08284
Byron, California 94544 Vehicle Certification 300810

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] Shipment Date 091192 Driver Signature [Signature] Delivery Date 091192

DESTINATION

Site Name B.F.I. Vasco Road Landfill Phone No. 5 1 0 - 4 4 7 0 4 9 1
 Address 4001 North Vasco Rd., Livermore, Ca. 94550

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 091192

PASS CODE _____

APPENDIX E

**TANK CLOSURE PERMITS AND UNDERGROUND STORAGE TANK
UNAUTHORIZED RELEASE REPORT**

b:BART/GES2.001

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
 DEPARTMENT OF ENVIRONMENTAL HEALTH
 HAZARDOUS MATERIALS DIVISION
 80 SWAN WAY, ROOM 200
 OAKLAND, CA 94621
 PHONE NO. 415/271-4320

Scott Seery

6-17-92
 DEPARTMENT OF ENVIRONMENTAL HEALTH
 HAZARDOUS MATERIALS DIVISION
 THESE PLANS MUST BE FOUND TO BE ACCEPTABLE TO THE DEPARTMENT OF ENVIRONMENTAL HEALTH AND THE STATE AND LOCAL HEALTH OFFICIALS. THESE PLANS MUST BE APPROVED FOR ISSUE BY THE DEPARTMENT OF ENVIRONMENTAL HEALTH AND THE STATE AND LOCAL HEALTH OFFICIALS. THESE PLANS MUST BE APPROVED FOR ISSUE BY THE DEPARTMENT OF ENVIRONMENTAL HEALTH AND THE STATE AND LOCAL HEALTH OFFICIALS. THESE PLANS MUST BE APPROVED FOR ISSUE BY THE DEPARTMENT OF ENVIRONMENTAL HEALTH AND THE STATE AND LOCAL HEALTH OFFICIALS.

UNDERGROUND TANK CLOSURE PLAN

*** Complete according to attached instructions ***

1. Business Name Castro Valley Unified School District Corporation Yard
 Business Owner Castro Valley Unified School District
 2. Site Address 21,000 Wilbeam Avenue
 City Castro Valley Zip 94546 Phone 510-537-3000
 3. Mailing Address 3300, Norbridge Avenue
 City Castro Valley Zip 94546 Phone 510-537-3000
 4. Land Owner Bay Area Rapid Transit District
 Address P.O. Box 12688 City, State Oakland Zip 94604
 5. Generator name under which tank will be manifested Bay Area Rapid Transit District
- EPA I.D. No. under which tank will be manifested CAC 000 68 67 84

6. Contractor LEE ENGINEERING ENTERPRISES
Address 1153 Bordeaux Drive, Suite 103
City Sunnyvale, CA 94089 Phone (408) 734-2556
License Type* A. B. C10, C20, C36 ID# 587934 Exp. 2/94
HAZ, ASB

*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board. Indicate that the certificate has been received, in addition, to holding the appropriate contractors license type.

7. Consultant DAMES & MOORE
Address 2101 Webster Street, Suite 300
City Oakland, CA 94612 Phone (510) 839-3600

8. Contact Person for Investigation
Name Erwin Livianu Title Project Manager
Phone (408) 734-2556

9. Number of tanks being closed under this plan TWO
Length of piping being removed under this plan 50 FEET
Total number of tanks at facility TWO

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

** Underground tanks are hazardous waste and must be handled **
as hazardous waste

a) Product/Residual Sludge/Rinsate Transporter
Name Refineries Service EPA I.D. No. CAD 981696420
Hauler License No. 2591 License Exp. Date 10/31/92
Address 13331 No. Hwy 33
City Patterson State CA Zip 95363

b) Product/Residual Sludge/Rinsate Disposal Site
Name Refineries Service EPA I.D. No. CAD 083166728
Address 13331 No. Hwy 33
City Patterson State CA Zip 95363

c) Tank and Piping Transporter

Name Erickson, Inc. EPA I.D. No. CAD 009 466 392
Hauler License No. 0019 License Exp. Date May 1993
Address 255 Parr Blvd.
City Richmond State CA Zip 94801

d) Tank and Piping Disposal Site

Name Erickson, Inc. EPA I.D. No. CAD 009 466 392
Address 255 Parr Blvd.
City Richmond State CA Zip 94801

11. Experienced Sample Collector

Name Peter Davis/Luke Anderson
Company DAMES & MOORE
Address 2101 Webster Street, Suite 300
City Oakland State CA Zip 94612 Phone (510) 839-3600

12. Laboratory

Name *CKY, INC. Analytical Service
Address 3942 Valley Avenue, Suite F
City Pleasanton State CA Zip 94566
State Certification No. 1587

13. Have tanks or pipes leaked in the past? Yes [] No [] UNKNOWN

If yes, describe. _____

* SEE PAGE 5

14. Describe methods to be used for rendering tank inert

30 pounds of dry ice per 1000 gallon capacity will be added to the tanks
Once the LEL has been sufficiently lowered to the satisfaction of the
Fire department and County Inspectors, the tanks will be removed.

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be plugged.

The Bay Area Air Quality Management District (771-6000), along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of explosion proof combustible gas meters to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.

15. Tank History and Sampling Information

Tank		Material to be sampled (tank contents, soil, ground-water, etc.)	Location and Depth of Samples
Capacity	Use History (see instructions)		
1. 2000 gal	Installed 1957. Single wall; steel construction; contained gasoline	SOIL	One soil sample taken from NATIVE SOIL immediately below each tank, and one soil sample from each sidewall in the center and at the bottom of the wall. Groundwater is not anticipated in the tank pit. Also, one soil sample for every 20 linear feet of pipe will be collected from beneath the pipes, CONCENTRATING AT JOINTS, ELBOWS, OR OTHER CONNECTION POINTS
2. 2000 gal	Installed 1957. Single wall; steel construction; contained diesel	SOIL	
	Both tanks were last used in 1989. Tank Integrity Tests performed at that time did not show any tank leaks.	ADD GROUNDWATER IF ENCOUNTERED	
* 3. 1000 gallon	unknown fuel (gas?)		

One soil sample must be collected for every 20 feet of piping that is removed. A ground water sample must be collected should any ground water be present in the excavation.

* This UST was discovered during closure of initial two USTs on 6-25-92.

Excavated/Stockpiled Soil	
Stockpiled Soil Volume (Estimated)	Sampling Plan
200 cubic yards	1 4-point composite/ ⁵⁰ 100 cubic yards, APPROPRIATE FOR OFF-SITE DISCREAL/BAGGING ONE DETECTIVE SAMPLE PER 20 YDS ³ FOR ON-SITE REUSE; NO RESULTS REQUIRED

stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

16. Chemical methods and associated detection limits to be used for analyzing samples

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
DIESEL	EPA 3550	EPA-Modified 8015	1 ppm
TPH-Gasoline	EPA 5030	EPA-Modified 8015	1 ppm
BTEX	EPA 8020	8020	2.5 ppb
* Total Lead	EPA 7421	EPA 7421	0.2 ppm
* <u>Note:</u> The contracted laboratory is not certified to perform inorganic analyses. Another lab will need to perform this test.			

17. Submit Site Health and Safety Plan (See Instructions)

18. Submit Worker's Compensation Certificate copy

Name of Insurer MAROEVICH TALMADGE & ASSOCIATES

19. Submit Plot Plan (See Instructions)

20. Enclose Deposit (See Instructions)

21. Report any leaks or contamination to this office within 5 days of discovery. The report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (see Instructions)

22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions.

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true.

I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

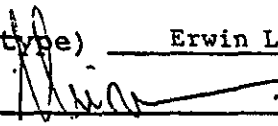
I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

Signature of Contractor.

Name (please type) Erwin Livianu

Signature 

Date May 29, 1992

Signature of Site Owner or Operator

Name (please type) GARY C. JENSEN FOR S.F. BAY AREA RAPID TRANSIT

Signature 

Date 6/2/97

ACORD. CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY)
REVISED

PRODUCER

MAROEVICH TALMADGE & ASSOCIATES
4655 OLD IRONSIDES DRIVE
SUITE 370
SANTA CLARA, CA 95054
(408) 982-1360

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

INSURED

LEE ENGINEERING ENTERPRISES, INC.
1153 BORDEAUX DRIVE, SUITE 103
SUNNYVALE, CA 94089

COMPANY LETTER **A**

SCOTTSDALE INSURANCE COMPANY

COMPANY LETTER **B**

RELIANCE INSURANCE COMPANY

COMPANY LETTER **C**

REPUBLIC INDEMNITY COMPANY

COMPANY LETTER **D**

ASSOCIATED INTERNATIONAL COMPANY

COMPANY LETTER **E**

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
	GENERAL LIABILITY				
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY CLAIMS MADE <input checked="" type="checkbox"/> OCCUR. OWNER'S & CONTRACTOR'S PROT. <input checked="" type="checkbox"/> OLD OCCURRENCE FORM - NOT SUBJECT OT ANNUAL AGGREGATES.	GLS281305	2/15/91	2/15/92	GENERAL AGGREGATE \$ N/A PRODUCTS-COMP/OP AGG. \$ N/A PERSONAL & ADV. INJURY \$ 1,000,000 EACH OCCURRENCE \$ 1,000,000 FIRE DAMAGE (Any one fire) \$ 50,000 MED. EXPENSE (Any one person) \$ 5,000
	AUTOMOBILE LIABILITY				
A	ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS GARAGE LIABILITY	GLS281305	2/15/91	2/15/92	COMBINED SINGLE LIMIT \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$
	EXCESS LIABILITY				
D	<input type="checkbox"/> UMBRELLA FORM <input checked="" type="checkbox"/> OTHER THAN UMBRELLA FORM	XS400720 EXCESS-SPECIFIED PROJECT COVERAGE	1/8/92	2/15/92	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000 SIR: 10,000
	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY				STATUTORY LIMITS
C		PC941898	7/1/91	7/1/92	EACH ACCIDENT \$ 2,000,000 DISEASE-POLICY LIMIT \$ 2,000,000 DISEASE-EACH EMPLOYEE \$ 2,000,000
	OTHER				
B	ENVIRONMENTAL IMPAIRMENT LIABILITY TBD SPECIFIC PROJECT COVERAGE		1/10/92	1/10/93	\$2,000,000 LIMITS PER OCCURRENCE/\$2,000,000 ANNUAL AGGREGATE \$50,000 SIR

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

WAIVER OF SUBROGATION APPLIES TO THE WORKERS COMPENSATION POLICY. DAMES & MOORE IS ADDITIONAL INSURED IN GENERAL, POLLUTION, AUTO AND EXCESS LIABILITY POLICIES. IT IS AGREED THESE POLICIES ARE PRIMARY AND CROSS LIABILITY CLAUSE IS INCLUDED.

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT. ~~NO OTHER WORKERS COMPENSATION POLICY SHALL BE IN EFFECT UNLESS IT IS SPECIFICALLY APPROVED BY THE COMPANY'S AGENT OR REPRESENTATIVE.~~

AUTHORIZED REPRESENTATIVE

SITE HEALTH AND SAFETY PLAN

INTRODUCTION

This health and safety plan prescribes the work-place procedures which should be followed during the soil and groundwater assessment of the site located at Former School District Corporation Yard, 21000 Wilbeam Avenue, Castro Valley, California. The provisions of this plan are mandatory for all Lee Engineering Enterprises (L.E.E.) personnel and subcontractors assigned to this project. All authorized visitors to the site will be required to abide by the procedures. The requirements in this plan may change due to changes in the work conditions; however, no changes will be made without prior written approval of the Health and Safety Officer and the Project Manager.

LEE ENGINEERING ENTERPRISES, INC. is committed to providing a safe and healthful working environmental for all its employees and subcontractors.

ASSIGNMENT OF RESPONSIBILITY

PROJECT MANAGER

L.E.E.'s Project Manager will be Erwin Livianu, who will be responsible for oversight and management of the project. Paul H. King will be responsible for the implementation and management of the Health and Safety plan.

HEALTH AND SAFETY OFFICER

Mr. Paul H. King or his designee will visit the site periodically and during critical phases of the project. The Health and Safety Officer is responsible for preparation of this plan.

L.E.E. SITE REPRESENTATIVE

During most of this project there will be an L.E.E. representative on site. That representative will be responsible for day to day implementation of the Health and Safety plan and overall direction of subcontractor personnel. The L.E.E. representative is empowered to stop all site work in the case of violation of the requirements of the Health and Safety plan.

OTHER PROJECT PERSONNEL/SUBCONTRACTOR

All project and subcontractor personnel will be responsible for understanding and complying with the project Health and Safety requirements.

HAZARD CHARACTERIZATION AND RISK ANALYSIS

PETROLEUM CONTAMINATED WATER AND SOILS

Gasoline and its constituents pose health hazards in two major classifications: explosivity and toxicity. The extreme flammability of gasoline is commonly known. The Lower Explosion Limit (LEL) of gasoline vapor is 1.3 percent in air. If the concentration of gasoline vapor in air exceeds 1.3 percent (13,000 parts per million) and sufficient quantities of oxygen are present, then the introduction of sufficient heat, spark, or flame will result in an explosion.

Prior to conducting any subsurface excavation in the vicinity of a fuel tank, the tank should be emptied of all liquid product and receive sufficient quantities of dry ice (frozen carbon dioxide) so that available oxygen is displaced from the tank atmosphere.

A lesser known health hazard resulting from exposure to gasoline is toxicity. Over exposure to petroleum hydrocarbon vapor can cause depression of the central nervous system. Inhalation of high concentrations of gasoline can cause chemical pneumonia and/or pulmonary edema. Repeated prolonged skin exposure to gasoline or gasoline contaminated materials can cause dermatitis or even blistering of the skin.

Several common constituents of gasoline which have been shown to cause serious health problems resulting from relatively minor exposures, includes benzene, toluene, meta, para, ortho xylenes, ethyl benzene and tetraethyl lead.

Typical percentages (by weight) of these constituents in gasoline are: benzene - 0.12-3.50%, toluene - 2.73-21.80%, meta xylene - 1.77-3.87%, para xylene - 0.77-1.58%, ortho xylene - 0.68-2.66%, and ethyl benzene - 0.36-2.36%. Typical percentage of tetraethyl lead is not available.

Units used to describe occupational exposures to hazardous substances include: exposure limit, also known as the "Threshold Limit Value" (TLV), ceiling limit, and the concentration level that is "Immediately Dangerous to Life and Health" (IDLH). The exposure limit defines the maximum concentration of a substance to which one can be exposed during an eight (8) hour period without suffering significant health effects. The ceiling limit is the concentration level that cannot be exceeded at any time; i.e., a suitable respirator must be worn if concentration values reach the ceiling limit.

The IDLH level represents a maximum concentration from which one could escape within 30 minutes of respirator failure without experiencing escape-impairment or irreversible health damage. IDLH values are not listed for substances that are potential human carcinogens.

EXPOSURE TABLE

<u>SUBSTANCE</u>	<u>EXPOSURE LIMIT</u>	<u>CEILING LIMIT</u>	<u>IDLH</u>
Benzene	0.1 ppm (8 Hrs.)	1 ppm (15 Min.)	Carcinogen
Toluene	100 ppm (10 Hrs.)	200 ppm (10 Min.)	2,000 ppm
Xylene	100 ppm (8 Hrs.)	200 ppm (10 Min.)	1,000 ppm
Ethyl Benzene	100 ppm (8 Hrs.)	N/A	2,000 ppm
Tetraethyl Lead	0.0067 ppm	N/A	3.6 ppm

Prolonged exposures to concentrations above the limits noted may affect the central nervous system, cardiovascular system, respiratory system, eyes, skin, kidneys, bones and bone marrow. Research has shown that benzene is a carcinogen.

Immediate symptoms of over-exposure include: eye irritation, nose irritation, throat irritation, headache, nausea, dizziness, weakness, confusion, euphoria, excitement, staggered gait, abnormal pain, respiratory difficulties, muscle fatigue, and coma.

In order to protect against over-exposure to these compounds, the ambient air will be monitored with a "lower explosion limit/oxygen content meter and/or handheld Photo Ionizing Detector (PID). As soon as vapor concentrations approach 75% of the exposure limit value, work will cease until all on-site personnel have donned protective clothing and suitable respiratory devices.

Personnel exposures to excessive job-related hazards are expected to be minimal using these safeguards.

It should be noted that summertime heat may initiate weather stress-related problems and decrease productivity on the job site.

Based upon L.E.E.'s experience with investigations of potentially gasoline contaminated soil and water, overexposure of personnel to gasoline vapor is unlikely.

Personnel, however, may be exposed to short term vapor concentrations approaching 100 ppm. Respiratory protection plans will be directed to protecting personnel from the transient exposures.

DRILLING ACTIVITIES

Various hazards are present during excavating procedures.

- o Electrical hazards due to overhead and underground utility line.
- o Excessive noise.
- o Confined space.
- o Moving portions of the drilling.
- o Falling of heavy overhead objects.
- o Fall hazards due to working at heights.

SITE CONTROL

A site map has been attached to this plan. The areas where work will occur, will be on the site, and may be barricaded to prevent unauthorized access. Only authorized personnel shall be allowed in the work areas and any unauthorized visitors must remain outside any barricaded area.

The site is small enough that normal voice communication can be used. In the vicinity of the excavation, common hand signals will be used.

TRAINING

L.E.E. PERSONNEL

All L.E.E. project personnel shall have completed forty (40) hours of off-site health and safety training, related to hazardous waste operations. In general, L.E.E. personnel will have completed a combination of paid training courses which meet the requirements of both the interim and final Occupational Safety and Health Administration (OSHA) rule for Hazardous Waste and Emergency Response Operations (29 CFR 1910.120). All L.E.E. supervisory personnel on-site will have completed an additional eight (8) hours of relevant health and safety training.

L.E.E. personnel who may visit the site occasionally, and are unlikely to be exposed to chemical hazards, will have completed at least twenty-four (24) hours of relevant health and safety training.

Any L.E.E. or contractor personnel operating specialized industrial equipment such as forklifts, heavy equipment, drilling equipment, etc. shall be able to demonstrate their competency in the safe operation of such items.

PERSONNEL

All subcontractor personnel who are likely to be exposed to hazardous materials, either by inhalation or dermal contact, shall have completed forty (40) hours of off-site health and safety training, in accordance with the OSHA interim and final Hazardous Waste and Emergency Operations rule. Subcontractor personnel who are required to work on the site for short periods of time (1 day or less), and who will not be required to wear any protective equipment, shall have completed at least twenty-four (24) hours of off-site health and safety training.

ALL SITE PERSONNEL

Prior to starting the project, a kick-off safety will be on the site. During this meeting, all personnel will be briefed on the requirements contained within the health and safety plan, and will be told the site safety rules. The kick-off safety meeting will be conducted jointly by the project manager and the HSO.

At the beginning of each work shift, or whenever new personnel arrive on the site, a tailgate safety meetings will be conducted by the first line supervisors. The project manager will review records of all tailgate safety meetings.

MEDICAL SURVEILLANCE

All L.E.E. subcontractor personnel shall provide proof of having successfully completed a preplacement or annual update physical examination. This examination shall have been designed to comply with regulatory requirements for hazardous waste operations and shall include the following:

- o Medical and occupational history form
- o Physical examination
- o Blood analysis
- o Urinalysis
- o Chest X-Ray
- o Pulmonary function test
- o Audiogram
- o Electrocardiogram (if indicated during the physical exam)
- o Alcohol and illegal drug screening

GOVERNMENT AND L.E.E. STANDARDS

Currently the health and safety of workers performing hazardous waste activities are regulated by OSHA (29 CFR 1910.120).

If the PID indicates that hydrocarbon vapor levels are 50 ppm or greater, then daily air samples will be collected from representative project personnel using charcoal tube sampling methods (OSHA Method 1M1S1340). Personnel will be notified in writing of the results of any personal air samples and their significance. A copy of this report will be maintained in the employee's medical surveillance file.

ACCESS AND DECONTAMINATION

ACCESS

Access to the project work area zones shall be regulated and limited to authorized persons. A daily log shall be kept on all persons entering such areas. The work area itself shall be cordoned off using barrier tape or other suitable barriers.

DECONTAMINATION

Due to the low toxicity of the material involved (gasoline), the anticipated low levels of contamination and the minimal hazard posed of spread of contaminated soil, formal decontamination procedures will not be required. The following site requirements will be enforced:

- o Eating, drinking and smoking within the work area are prohibited.
- o Project personnel may eat, drink or smoke outside the work area, only if they have washed their hands and face.
- o An emergency eye wash station shall be located on the job site adjacent to the work area.

Any potentially contaminated equipment will either be disposed of, or washed off with soap and water.

Any equipment used in the contaminated zone should be washed with soap and water before it is removed from the site.

SAFE USE OF FLAMMABLE AND COMBUSTIBLE MATERIALS

Employees shall make sure that combustible scrap, debris and waste

SAFE USE OF FLAMMABLE AND COMBUSTIBLE MATERIALS

Employees shall make sure that combustible scrap, debris and waste materials (oily rags, etc.) are stored in covered metal receptacles and removed from the worksite promptly. Be sure that proper storage is practiced to minimize the risk of fire including spontaneous combustible liquids and that approved containers and tanks are used for the storage and handling of flammable and combustible liquids.

Employees shall make sure that all connections on drums and combustible liquid piping, vapor and liquid are tight, that all bulk drums of flammable liquids are grounded and bonded to containers during dispensing.

Be certain that storage rooms for flammable and combustible liquids have explosive-proof lights and that storage rooms for flammable and combustible liquids have mechanical or gravity ventilation.

Make sure that liquefied petroleum gas is stored, handled and used in accordance with safe practices and standards, pay particular attention in that "NO SMOKING" signs are posted on liquefied petroleum gas tanks. All solvent wastes, and flammable liquids will be kept in fire-resistant, covered containers until they are removed from the worksite.

Vacuuming shall be used whenever possible, rather than blowing or sweeping combustible dust. Be certain that firm separators are placed between containers of combustibles or flammables, when stacked one upon another, to assure their support and stability.

All fire extinguishers will be selected and provided for the particular types of materials in areas where they are to be used.

- Class A: Ordinary combustible material fires.
- Class B: Flammable liquid, gas or grease fires.
- Class C: Energized-electrical equipment fires.

All appropriate fire extinguishers shall be mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials. Said fire extinguishers shall be free from obstructions or blockage and that all extinguishers are serviced, maintained and tagged at intervals not to exceed one year.

Be certain that "NO SMOKING" signs are posted where appropriate in areas where flammable or combustible materials are used or stored and that safety cans are used for dispensing flammable or combustible liquids at a point of use. Spills of flammable or combustible liquids are to be cleaned up promptly.

Make sure that storage tanks are adequately vented to prevent the development of excessive vacuum or pressure as a result of filling, emptying, or atmosphere temperature changes. Be certain that storage tanks are equipped with emergency venting that will relieve excessive internal pressure caused by fire exposure and that "NO SMOKING" rules are enforced in areas involving storage and use of hazardous materials.

EMPLOYEE AND WORK RULES AROUND EXCAVATIONS

When excavation is necessary at a job site, before work commences and during the performance of work the site shall be adequately protected to prevent sloughing of earth by shoring or sloping. The site shall be fenced in or boarded over to prevent personnel from slipping or falling in the area when moving about.

No employee shall enter or perform work in an excavation which requires the person's head to be below the surface of the ground until all confined space procedures are followed.

Employees are not permitted to work in or adjacent to any excavation until an inspection is conducted to determine that they will not be exposed to injuries resulting from moving ground and that necessary permits have been obtained.

TOOL AND EQUIPMENT HANDLING

SAFETY DEVICES - Employees must never remove, displace, damage, destroy, or carry away any safety device, safeguard, notice, or warning used at the Company facilities, Company property, or customer job locations.

Never, in any way, interfere with the use of another employee's safety device or safeguard. Verify that all guards and other protective devices are in their proper place, in good repair, and properly adjusted for safe operation. Any deficiency or malfunction must be reported immediately to the supervisor or Safety Representative.

DAMAGED/UNSAFE EQUIPMENT - REPAIR WORK

Employees must not repair operating equipment or machinery, oil moving parts, except when the equipment or machinery is designed or fitted with safeguards or protect the employee while performing the work.

Equipment that is worn, damaged, or otherwise defective to the extent that it is unsafe must be reported immediately to the supervisor or Safety Representative.

CRANE/HOISTING EQUIPMENT

Unauthorized persons are not to be permitted in a crane cab or on a crane at any time. All unattended equipment shall be guarded against operation by unauthorized persons, signals to the operator of the equipment shall be given by a designated person.

Cranes, derricks, hoists or other equipment shall not be used for side pulls or lifts that would affect the stability of overstress the equipment.

Hoisting equipment shall be loaded so that the load is in a stable position and does not exceed the designated safe load. Loads shall be test lifted, brakes checked, and slings readjusted when required, to check the stability and safety of the lift.

Outriggers, when provided, shall be used for the stability and safe operation of the equipment. The operator shall personally check that the outriggers have been properly placed and blocked in position.

A mobile or overhead traveling crane, hoist, or shovel shall not be operated unless the gong or other effective warning device is in suitable operating condition. Equipment surfaces and walkways shall be maintained free of oil, grease, or debris, and, where necessary, non-slip material shall be used.

Wire rope, under tension, shall not be guided by the nads or feet. Employees shall avoid standing or passing under suspended loads, extreme care shall be exercised in the selection, inspection, and use of chains.

Precautions in dealing with wire rope slings:

- Do not use knots to make sling.
- Pad or block sharp corners.
- Do not jerk loads. Lift and lower loads slowly.
- Use slings of adequate capacity. Consult the charts.
- Know how much weight you are lifting.

EMERGENCY RESPONSE

In the event of an emergency such as a sickness, injury or fire, the following procedures will be followed:

- o Emergency procedures will be initiated by the first person recognizing the emergency situation. This person shall immediately notify the L.E.E. site representative.
- o The designated L.E.E. First Aid/CPR provider and a project member shall provide assistance to any injured or sick employee. In the case of suspected release of toxic

material, these personnel shall first don protective suits and self-contained breathing apparatus. The injured employee will first be moved to a safe location before any attempt at treatment is made.

- o A project member will be designated to call the emergency services number (911) to obtain paramedic or fire department assistance if it is needed. Any injured employees will be taken to:

1. Police, Fire, or Ambulance emergency: 911
2. Nearest Emergency Hospital: 510-537-1234
Eden Hospital
20103 Lake Chabot Road
Castro Valley, California
3. Alameda County 510-271-4320
Department of Environmental Services
Hazardous Materials Services
80 Swan Way, Room 200
Oakland, CA 94621
4. Poison control 209-445-1222
5. Office of Emergency Services 800-852-7550
6. Chemtrac 800-424-9300
7. EPA Region 9 415-974-8153
8. BHS Region 9 415-556-7260
9. OSHA Region 9 415-556-3782

Any injuries or incidents which have the potential to result in an injury will be recorded by the L.E.E. site representative on the supervisor's employee injury report form. This form, when completed by the site representative, shall be forwarded to the VCI project manager, and the VCI. Corporate health and Safety Department.

white -env.health
 yellow -facility
 pink -files

ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
 Oakland, CA 94621
 (415) 271-4320

Hazardous Materials Division Inspection Form

Site ID# _____ Site Name CVUSD Corp Yard (BART) Today's Date 6/25/92
 Site Address 2100 Wilbeam Ave EPA ID# _____
 City Castro Valley Zip 94546 Phone _____

MAX Amt. Stored > 500lbs/55g/200cf? Y N
 Hazardous Waste generated per month? _____

Inspection Categories:

- I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- II. Business Plans, Acute Hazardous Materials
- III. Underground Tanks

The marked items represent violations of the Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

LA GENERATOR (Title 22)

- | | | |
|-------|------------------|-------|
| ___ | 1. Waste ID | 66471 |
| ___ | 2. EPA ID | 66472 |
| ___ | 3. > 90 days | 66508 |
| ___ | 4. Label dates | 66508 |
| ___ | 5. Biennial | 66493 |
| <hr/> | | |
| ___ | 6. Records | 66492 |
| ___ | 7. Correct | 66484 |
| ___ | 8. Copy sent | 66492 |
| ___ | 9. Exception | 66484 |
| ___ | 10. Copies Rec'd | 66492 |

- | | | |
|-----|-----------------------------|---------|
| ___ | 11. Treatment | 66371 |
| ___ | 12. On-site Dsp. (H.S.A.C.) | 26189.5 |
| ___ | 13. Ex Haz. Waste | 66570 |

- | | | |
|-----|---------------------|-------|
| ___ | 14. Communications | 67121 |
| ___ | 15. Aisle Space | 67124 |
| ___ | 16. Local Authority | 67126 |
| ___ | 17. Maintenance | 67123 |
| ___ | 18. Training | 67105 |

- | | | |
|-----|----------------------|-------|
| ___ | 19. Prepared | 67140 |
| ___ | 20. Name List | 67141 |
| ___ | 21. Copies | 67141 |
| ___ | 22. Emg. Coord. Tmg. | 67144 |

- | | | |
|-----|---------------------|-------|
| ___ | 23. Condition | 67241 |
| ___ | 24. Compatibility | 67242 |
| ___ | 25. Maintenance | 67243 |
| ___ | 26. Inspection | 67244 |
| ___ | 27. Buffer Zone | 67246 |
| ___ | 28. Tank Inspection | 67239 |
| ___ | 29. Containment | 67245 |
| ___ | 30. Safe Storage | 67251 |
| ___ | 31. Freeboard | 67257 |

LB TRANSPORTER (Title 22)

- | | | |
|-----|--------------------------|-------|
| ___ | 32. Applic./Insurance | 66428 |
| ___ | 33. Comp. Cert./CHP trap | 66448 |
| ___ | 34. Containers | 66465 |

- | | | |
|-----|-----------------|-------|
| ___ | 35. Vehicles | 66466 |
| ___ | 36. EPA ID #s | 66531 |
| ___ | 37. Correct | 66541 |
| ___ | 38. HW Delivery | 66543 |
| ___ | 39. Records | 66544 |

- | | | |
|-----|------------------|-------|
| ___ | 40. Name/ Covers | 66545 |
| ___ | 41. Recyclables | 66800 |

Comments:

8:30-12:00 1:30-4:30

On site to witness closure of 2 USTs; one formerly stored gasoline, the other, diesel. Representatives from BART, Dames & Moore and Lee Engineering were on hand. VCI has the heavy equipment sub-contractor.

Upon arrival, (apparent) product was noted floating on shallow ground water welling into both UST pits. A "mystery" run of pipe was followed, eventually leading to the discovery of a 3rd UST, located very proximal to the initial two. The two initial tanks were inerted using solid CO₂ and monitored for inertness.

① Diesel tank - unusual construction; extremely thick gauge steel; heavy tar wrap. Looks in good condition. No obvious holes.

② Gasoline tank - tar-wrapped steel construction. approx 1/3 of tank missing tar wrapping, likely from over spillage. large (~1/2") hole discovered on inner wall at tank end cap.

③ Unknown tank - to be removed tomorrow (6-26)

Dames & Moore recently completed a limited site assessment, including the advancement of borings adjacent to the UST complex and the collection of soil and grab GW samples. The results are in a 6/12 report by same. Only sidewall samples required today, because of GW data already generated.

Contact: Tom Kline
 Title: Manager - Lee Engineering
 Signature: _____

Inspector: S. Seem
 Signature: _____

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

Site ID# _____ Site Name CVUSD Corp Yard / BART Today's Date 6/26/92
 Site Address 2100 W. Ibeam Ave EPA ID# _____
 City Castro Valley Zip 94546 Phone _____

MAX Amt. Stored > 500lbs/55g/200cr? Y N
 Hazardous Waste generated per month? _____

- Inspection Categories:**
- I. Haz. Mat/Waste GENERATOR/TRANSPORTER
 - II. Business Plans, Acute Hazardous Materials
 - III. Underground Tanks

The marked items represent violations of the Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

IA GENERATOR (Title 22)		
___	1. Waste ID	66471
___	2. EPA ID	66472
___	3. > 90 days	66508
___	4. Label dates	66508
___	5. Biennial	66493
<hr/>		
___	6. Records	66492
___	7. Contact	66484
___	8. Copy sent	66492
___	9. Exception	66484
___	10. Copies Rec'd	66492
<hr/>		
___	11. Treatment	66371
___	12. On-site Dis. (H.S.&C.)	26189.5
___	13. Ex Haz. Waste	66570
<hr/>		
___	14. Communications	67121
___	15. Aisle Space	67124
___	16. Local Authority	67126
___	17. Maintenance	67120
___	18. Training	67105
<hr/>		
___	19. Prepared	67140
___	20. Name List	67141
___	21. Copies	67141
___	22. Emg. Coord. Trng.	67144
<hr/>		
___	23. Condition	67241
___	24. Compatibility	67242
___	25. Maintenance	67243
___	26. Inspection	67244
___	27. Buffer Zone	67246
___	28. Tank Inspection	67299
___	29. Containment	67245
___	30. Safe Storage	67261
___	31. Freeboard	67257

IB TRANSPORTER (Title 22)		
___	32. Applic./Insurance	66428
___	33. Comp. Cert./CHP Insp.	66448
___	34. Containers	66465
<hr/>		
___	35. Vehicles	66465
___	36. EPA ID #s	66531
___	37. Contact	66541
___	38. HW Delivery	66543
___	39. Records	66544
<hr/>		
___	40. Name/ Covers	66545
___	41. Recyclables	66800

Comments: 9:50 -
 On-site to witness closure of 3rd Fuel UST.
 A vacuum truck was voiding tank contents upon my arrival. This tank was observed to have holes on its top; other holes were encountered yesterday while uncovering the tank, likely a result of damage caused by the excavator. Although LEL read 0% following removal of its contents, the O₂ was still ambient. Solid CO₂ was added to reduce O₂ levels prior to removal.
 Once removed from its excavation, obvious holes were observed in various locations along the tank's bottom ends, and top.
 Soil samples were collected from pit sidewalls opposite tank ends.
 Pipe trench samples to be collected in my absence
 Samples from 3rd unknown tank to be analyzed for TPH-G, TPH-D, and BTEX; total lead.

Contact: Paul King
 Title: Proj. Mgr. - Lee Engineering
 Signature: D. S. H. King

Inspector: S. [Signature]
 Signature: _____

CASTRO VALLEY FIRE PROTECTION DISTRICT

Tank Closure Authorization Permit
 Procedure Guide for Temporary Closure,
 Placing Out of Service or Removal of
 Flammable and Combustible Liquid Tanks

~~EXPIRES~~ JUN 22

Project Location 21000 Wilbeam Ave
 Date of Removal June 25, 1992 Fees Paid N/A
 Fire Dept Authorization by L. Brand Date 6-19-92

I. Permits

A. A fire permit is required to remove, abandon, place temporarily out of service or otherwise dispose of any flammable or combustible liquid tank.

B. Application for a fire permit shall consist of submittal of:

1. Approved copy of Alameda County's tank closure/modification plan.

Note: Alameda County Hazardous Material Division must have a closure plan submitted for placing underground tanks out of service. They can be contacted at (415) 271-4320.

2. A description of the procedure that will be used to remove and inert the tank along with a "safety plan" describing the safety procedures to be taken.

3. A site plan indicating size and location of tank and associated piping, nearby buildings, property lines, method and location of site security (fences, etc.).

II. Placing Temporarily Out of Service (less than 90 days)

A. Fill line, gauge openings, vapor return and pump connection shall be secured against tampering.

B. Vent lines shall remain open and maintained in accordance with the Fire Code.

C. Monitoring and leak detection shall be maintained as if the tanks are in service.

III. Tank Out of Service 90 Days

A. Such tanks shall be properly safeguarded or removed.

B. The following shall be followed for safe guarding tanks.

1. Remove all product from tank and purge tank.

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY <input type="checkbox"/> YES <input type="checkbox"/> NO		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.	
REPORT DATE 6/25/92		CASE #		SIGNED _____ DATE _____	
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT GEORGE CHIU		PHONE (510) 208 1368	SIGNATURE <i>[Signature]</i>	
	REPRESENTING <input type="checkbox"/> LOCAL AGENCY <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> OTHER		COMPANY OR AGENCY NAME DAMES & MOORE		
RESPONSIBLE PARTY	ADDRESS 2101 WESTER ST., SUIT #300 OAKLAND CA 94612				
	NAME B.A.R.T.D <input type="checkbox"/> UNKNOWN		CONTACT PERSON GARY JENSEN	PHONE ()	
SITE LOCATION	ADDRESS P.O. BOX 12688 OAKLAND CA 94604				
	FACILITY NAME (IF APPLICABLE) CASTRO VALLEY UNIFIED SCHOOL DISTRICT CORPORATION YARD		OPERATOR	PHONE (510) 537 3000	
ADDRESS 21,000 WILBEAM AVENUE CASTRO VALLEY COUNTY 94546					
CROSS STREET NORBRIDGE					
IMPLEMENTING AGENCIES	LOCAL AGENCY ALAMEDA COUNTY HEALTH AGENCY		AGENCY NAME	CONTACT PERSON SCOTT O STEELY	PHONE (510) 271 4530
	REGIONAL BOARD				PHONE ()
SUBSTANCES INVOLVED	(1) NAME GASOLINE				QUANTITY LOST (GALLONS) _____ <input checked="" type="checkbox"/> UNKNOWN
	(2)				_____ <input type="checkbox"/> UNKNOWN
DISCOVERY/ABATEMENT	DATE DISCOVERED 6/25/92		HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input type="checkbox"/> TANK TEST <input checked="" type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER		
	DATE DISCHARGE BEGAN		METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)		
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 6/25/92		<input type="checkbox"/> REMOVE CONTENTS <input checked="" type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> REPLACE TANK <input type="checkbox"/> OTHER		
SOURCE/ CAUSE	SOURCE OF DISCHARGE <input checked="" type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER		CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/> OTHER <u>HOLE</u>		
	CHECK ONE ONLY <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)				
CURRENT STATUS	CHECK ONE ONLY				
	<input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION <input type="checkbox"/> LEAK BEING CONFIRMED <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input checked="" type="checkbox"/> CLEANUP UNDERWAY				
REMEDIAL ACTION	CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)				
	<input checked="" type="checkbox"/> EXCAVATE & DISPOSE (ED) <input checked="" type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CAP SITE (CS) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input checked="" type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> OTHER (OT)				
COMMENTS	Leak was found upon tank closure. Tank removed and remediation underway.				

To: Alameda County Department of
Environmental Health,
Hazardous Materials Division
80 Swan Way, Room 200
Oakland CA, 94621
Attention: Mr. Scott Seery
Subject: Tank Closure Report

Date 12/17/92

Your Order No.

Our Job No. 03715-051-043

We are sending you via Overnight Delivery

the following Tank Closure Report,
Underground Storage Tank Removal
Former School District Corporation Yac:
Castro Valley Station

This is
These are for Your Records

No. of copies submitted: |

Copies to:

Dames & Moore

By Erik Shor
Project Geologist