

**PACIFIC RIM ENVIRONMENTAL**

Post Office Box 192972  
San Francisco, CA U.S.A. 94119  
Phone: 415-255-0860 Fax: 415-431-0334

ALCO  
HAZMAT

94 FEB -3 PM 12:19

## **Tank Closure Report**

**Prepared for:**

**Mr. Richard Croop  
436 14th Street, Suite 305  
Oakland, California 94612**

**Prepared By:**

**Pacific Rim Environmental  
P.O. Box 192972  
San Francisco, California**

**Project Location:**

**2901 Glasscock Avenue  
Oakland, California**

**Don W. James  
Project Manager  
Pacific Rim Environmental**

**January 21, 1994**

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## **1.0 Introduction**

Pacific Rim Environmental (Pacific Rim) has been contracted to prepare a closure report for two underground fuel storage tanks (USTs) removed from 2901 Glasscock Avenue in Oakland California. This report documents the excavation, removal, sampling and analytical results for soil and water samples collected from the tank excavations. Also included in the report are the invoices and manifests for the disposal of the tanks and soils.

## **2.0 Scope of Services**

Pursuant to the contract dated on November 11, 1992 and subsequent directions of the partners, Pacific Rim performed the following services:

- Excavation and removal of two underground storage tanks.
- Collection and submittal for laboratory analysis of soil samples taken from tank excavations.
- Overexcavation of tank pits.
- Installation of soil borings and monitoring of the expanded excavations.
- Removal of stockpiled soils.
- Wrote and submitted a tank closure report.

## **3.0 Background**

The subject property is comprised of a small strip of undeveloped land and a large warehouse. The property sits upon the Oakland estuary in Oakland, California.

Under permit from the Alameda County Environmental Health Department, Pacific Rim was contracted to remove two underground storage tanks (USTs) and the associated piping at the site which included a 4,000 gallon fuel oil tank and a 20,000 gallon fuel oil tank. The owners believe the tanks have been out of operation for approximately thirty years. Both tanks previously contained fuel oil used to run machinery in the warehouse.

#### **4.0 Field Activities**

##### **4.1 Removal of the 4000 gallon tank (tank #1) and sampling**

On February 22, 1993 Pacific Rim commenced excavation around tank #1 at the Glasscock Avenue Warehouse. The tank was removed from the excavation and the site on February 23, 1993 under the supervision of Alameda County personnel.

The tank had experienced some corrosion but was generally in good condition. The tank was manifested, hauled away, and destroyed by the subcontractor (see attached Appendix B).

Under the guidance of Alameda County Environmental Health Department, two undisturbed soil samples were collected from 18 inches beneath the tanks. Samples were taken directly from the backhoe bucket, stored in brass sleeves, sealed with teflon liners and end caps. The two samples were then labeled and placed on ice at 4 degrees Celsius and transported according to the United States Environmental Protection Agency (USEPA) protocol to a State of California Department of Health Services (DOHS) certified laboratory. Sample identification and chain- of- custody procedures were utilized for the sample possession from the time of collection to the laboratory. All sampling equipment was washed with a non-phosphate cleanser, pre-rinsed with tap water and finally rinsed with de-ionized water prior to sampling. (Analytical reports and chain-of-custody reports are presented in Appendix A).



#### **4.2 Removal of 20,000 gallon tank (tank #2) and sampling**

On February 24, 1993 Pacific Rim commenced excavation around tank #2 at the Glasscock Avenue Warehouse. The tank was removed from the excavation and site on February 26, 1993 under the supervision of Alameda County personnel.

The tank had experienced some corrosion but was intact. The tank was manifested, hauled away and destroyed by the subcontractor. (The manifest is presented in Appendix D). Four soil samples and four water samples were collected from the excavation. The samples were labeled and placed on ice at four degrees Celsius and transported according to the United States Environmental Protection Agency (USEPA) protocol to a State of California Department of Health Services (DOHS) certified laboratory. Sample identification and chain- of- custody procedures were utilized for the sample possession from the time of collection to the laboratory. All sampling equipment was washed with a non-phosphate cleanser, pre-rinsed with tap water and finally rinsed with de-ionized water prior to sampling. (See the chain- of- custody and laboratory analysis reports that are presented in Appendix C).

#### **4.3 Overexcavation**

The Glasscock Avenue Partners instructed Pacific Rim to resume excavation activities in both tank pits. This activity was performed in hopes of removing petroleum contaminated soils from both excavations to eliminate the need for future investigation or remediation. Pacific Rim excavated for two days and monitored excavated soils with an organic vapor analyzer (OVA) for petroleum hydrocarbons.

##### **TANK #1**

Excavation activities were stopped when it became apparent that further excavation would jeopardize the foundation of the building. Readings from the tank #1 excavation showed continually lower petroleum hydrocarbon levels although non-detect

was never reached. Pacific Rim feels the extent of petroleum hydrocarbon migration from this tank to be minimal. The initially low and declining levels of petroleum hydrocarbon readings within the excavation support this conclusion (see attached Appendix E).

## **TANK #2**

As the Tank #2 excavation was deepened, OVA readings for petroleum hydrocarbons continually declined. Excavation was stopped when the contractor felt further excavation might jeopardize the structural integrity of the building.

A non-detect reading was never reached within the excavation. A plot plan of the excavation is attached as Appendix E.

## **4.4 Stockpiled Soils**

Soils from both tank excavations were stockpiled on the site. Alameda County Environmental Health requested that all stockpiled soils be removed from the site before closure would be granted. On 12/01/93 approximately 198 cubic yards of stockpiled soils were manifested and hauled away by subcontractor. (The manifest and disposal documents are presented in Appendix F).

## **5.0 Discussion**

Pacific Rim believes some additional petroleum hydrocarbon contamination exists around both tank excavations. It is thought that all potential sources of contamination have been removed from the property. Whether further investigation or remedial measures are necessary is up to the discretion of Alameda County Environmental Health and Regional Water Quality Control Board.

## **6.0 Conclusion**

This report has been prepared for the exclusive use of the owners of 2901 Glasscock Avenue. The findings and conclusions rendered in this report are opinions based on laboratory testing of soil samples collected during this project. This report does not reflect subsurface variations which may exist between sampling points. These variations cannot be anticipated nor can they be entirely accounted for even with exhaustive additional testing.

All work has been performed in accordance with generally accepted practices in geotechnical\environmental engineering, engineering geology and hydrology. No other warranty, either expressed or implied, is made.

If you have any questions regarding this report or the information contained herein, please contact this office at your convenience.

**APPENDIX A**  
**(Tank # 1 Analytical Report)**

Page 1 of 1

Sampler: DON JAMES

Report to: LANE

## Analyses

Project No: 6983

Company: PACIFIC RIM SERVICES INC

Project Name: GLASCOCK (TAK 1)

Telephone: 415-255-0860

Turnaround Time: NORMAL

**Fax:**

[illegible]

**NOTES:**

RELINQUISHED BY:

RECEIVED BY:

1 Peter Shupe

2/25/93

DATE/TIME \_\_\_\_\_

陈

DATE/TIME

DATE/TIME

Michael May

2-25-93

DATE/TIME \_\_\_\_\_

DATE/TIME

DATE/TIME \_\_\_\_\_

Signature on this form constitutes a firm purchase order for the services requested above.



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878  
2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

DATE RECEIVED: 02/25/93  
DATE REPORTED: 03/11/93

LABORATORY NUMBER: 110178

CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES

PROJECT ID: 6983

LOCATION: GLASCOCK (TANK 1)

RESULTS: SEE ATTACHED

Teresa K. Morrison  
Reviewed by

Kathy OB  
Reviewed by

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Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 110178  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: GLASCOCK (TANK 1)

DATE SAMPLED: 02/23/93  
DATE RECEIVED: 02/25/93  
DATE ANALYZED: 03/04/93  
DATE REPORTED: 03/11/93

Total Volatile Hydrocarbons as Gasoline in Soils & Wastes  
California DOHS Method  
LUFT Manual October 1989

LAB ID	CLIENT ID	TVH AS GASOLINE (mg/Kg)	REPORTING LIMIT (mg/Kg)
110178-1	1	ND	1
110178-2	2	1	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

RPD, %	1
RECOVERY, %	88



Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 110178  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: GLASCOCK (TANK 1)

DATE SAMPLED: 02/23/93  
DATE RECEIVED: 02/25/93  
DATE EXTRACTED: 03/05/93  
DATE ANALYZED: 03/06/93  
DATE REPORTED: 03/11/93

Extractable Petroleum Hydrocarbons in Soils & Wastes  
California DOHS Method  
LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
110178-1	1	ND	ND	1
110178-2	2	**	1,400	10

Tank 1

ND = Not Detected at or above reporting limit.

\* Reporting limit applies to all analytes.

\*\*Kerosene range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY

LCS RECOVERY, %

118





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LABORATORY NUMBER: 110178-1  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: GLASCOCK (TANK 1)  
SAMPLE ID: 1

DATE SAMPLED: 02/23/93  
DATE RECEIVED: 02/25/93  
DATE ANALYZED: 03/08/93  
DATE REPORTED: 03/11/93

EPA 8020: Volatile Aromatic Hydrocarbons in Soils & Wastes  
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/Kg	Reporting Limit ug/Kg
Benzene.....	ND	5
Toluene.....	ND	5
Ethyl Benzene.....	ND	5
Total Xylenes.....	ND	5
Chlorobenzene.....	ND	5
1,3-Dichlorobenzene.....	ND	5
1,4-Dichlorobenzene.....	ND	5
1,2-Dichlorobenzene.....	ND	5

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

§ SURROGATE RECOVERY

100



Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 110178-2  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: GLASCOCK (TANK 1)  
SAMPLE ID: 2

DATE SAMPLED: 02/23/93  
DATE RECEIVED: 02/25/93  
DATE ANALYZED: 03/08/93  
DATE REPORTED: 03/11/93

EPA 8020: Volatile Aromatic Hydrocarbons in Soils & Wastes  
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/Kg	Reporting Limit ug/Kg
Benzene.....	ND	5
Toluene.....	ND	5
Ethyl Benzene.....	ND	5
Total Xylenes.....	ND	5
Chlorobenzene.....	ND	5
1,3-Dichlorobenzene.....	ND	5
1,4-Dichlorobenzene.....	ND	5
1,2-Dichlorobenzene.....	ND	5

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

§ SURROGATE RECOVERY

106



Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 110178-METHOD BLANK  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: GLASCOCK (TANK 1)

DATE ANALYZED: 03/08/93  
DATE REPORTED: 03/11/93

EPA 8020: Volatile Aromatic Hydrocarbons in Soils & Wastes  
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/Kg	Reporting Limit ug/Kg
Benzene.....	ND	5
Toluene.....	ND	5
Ethyl Benzene.....	ND	5
Total Xylenes.....	ND	5
Chlorobenzene.....	ND	5
1,3-Dichlorobenzene.....	ND	5
1,4-Dichlorobenzene.....	ND	5
1,2-Dichlorobenzene.....	ND	5

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

% SURROGATE RECOVERY

101

## LCS SUMMARY SHEET FOR EPA 8020

Laboratory Number: 110178  
Analysis date: 03/08/93  
Sample type: WATER

LCS file: CST-004.RST

## 8020 LCS DATA (spiked at 5 ppb)

SPIKE COMPOUNDS	READING	RECOVERY	STATUS	LIMITS
Benzene	4.73	95 %	OK	39 - 150
Toluene	5.08	102 %	OK	46 - 148
Chlorobenzene	4.82	96 %	OK	55 - 135
SURROGATES				
BROMOFLUOROBENZENE	49.57	99 %	OK	75 - 125



Curtis &amp; Tompkins, Ltd.

## MS/MSD SUMMARY SHEET FOR EPA 8020

Laboratory Number: 110178  
Analysis date: 03/08/93  
Sample type: Water

Spike file: CST\_011.RST  
Spike dup file: CST\_012.RST

## 8020 MS/MSD DATA (spiked at 5 ppb)

SPIKE COMPOUNDS	READING	RECOVERY	STATUS	LIMITS
Benzene	4.59	92 %	OK	39 - 150
Toluene	6.76	135 %	OK	46 - 148
Chlorobenzene	4.83	97 %	OK	55 - 135
SPIKE DUP COMPOUNDS				
Benzene	4.60	92 %	OK	39 - 150
Toluene	4.94	99 %	OK	46 - 148
Chlorobenzene	4.53	91 %	OK	55 - 135
SURROGATES				
BROMOFLUOROBENZENE (MS)	54.53	109 %	OK	75 - 125
BROMOFLUOROBENZENE (MSD)	49.83	100 %	OK	75 - 125

## MATRIX RESULTS:

Benzene	0
Toluene	0
Chlorobenzene	0

## RPD DATA

8020 COMPOUNDS					
Benzene	4.59	4.60	0 %	OK	<= 11
Toluene	6.76	4.94	31 %	NOT OK	<= 13
Chlorobenzene	4.83	4.53	6 %	OK	<= 13

**APPENDIX B**  
**(Tank # 1 Disposal Manifest)**

**UNIFORM HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1

Information in the shaded areas  
is not required by Federal law.

3. Generator's Name and Mailing Address

**DENNIS BURAN & PARTNERS / c/o E.B. FIELD & COMPANY**  
**436 - 14th Avenue, Oakland, CA. 94612**

4. Generator's Phone (510) 444-1391

5. Transporter 1 Company Name

6. US EPA ID Number

**H & H Ship Service Company**

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

**H & H Ship Service Company**  
**220 Terry A. Francois Street**  
**San Francisco, CA. 94107**

10. US EPA ID Number

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers

No.

Type

13. Total

Quantity

14. Unit

Wt/Vol

Waste Number

a. **RESIDUE FUEL OIL TANK**

**NON-RCRA HAZARDOUS WASTE SOLID**

0 0 1

T P

0 4 0 0 0

P

b.

c.

d.

J. Additional Descriptions for Materials Listed Above

**EMPTY 4,000 gallon tank last containing fuel oil.**  
**Tank inerted with dry ice for transport.**

**PROFILE #A2455**

K. Handling Codes for Wastes Listed Above

a. 01

b.

c.

d.

15. Special Handling Instructions and Additional Information

**JOB #12206**

**24 Hr. Emergency Contact: H & H (415) 543-4835**

**APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR**

**JOB SITE: GLASCOCK AVENUE WAREHOUSE**  
**2901 Glascock Avenue**  
**Oakland, California**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Month

Day

Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month

Day

Year

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

Signature

Month

Day

Year

DO NOT WRITE BELOW THIS LINE.

**APPENDIX C**  
**(Tank # 2 Analytical Report)**



# CHAIN OF CUSTODY FORM

Page 1 of 1

Analyses

**Curtis & Tompkins, Ltd.**  
2323 Fifth Street  
Berkeley, CA 94710  
(510) 486-0900 Phone  
(510) 486-0532 Fax

Sampler: DON JAMES

Report to: DON JAMES

Project No: 6983

Company: PACIFIC RIM SERVICES

Project Name: 2901 GLASCOC AVE  
TANK REMOVAL

Telephone: 415-255-0860

Turnaround Time: NORMAL

Fax: 415-431-0334

Laboratory Number	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				Field Notes	TPH	Diesel	Oil & Grease	8020 (4 size)
			Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE					
110179-1	1 WATER	2/24/93 12 <sup>30</sup> pm	X			1					STREET SIDE	X			
2	2 WATER	2/24/93 12 <sup>30</sup> pm	X			1					BACK SIDE	X			
3	1 SOIL	2/24/93 12 <sup>30</sup> pm	X			1					STREET SIDE	X	X	X	
4	2 SOIL	2/24/93 12 <sup>30</sup> pm	X			1					24" BELOW TANK	X	X	X	
5	3 SOIL	2/24/93 12 <sup>30</sup> pm	X			1					STREET SIDE	X	X	X	
6	4 SOIL	2/24/93 12 <sup>30</sup> pm	X			1					24" BELOW TANK	X	X	X	
											BACK SIDE	X	X	X	
											24" BELOW TANK				

NOTES:

20,000 GALLON TANK

RELINQUISHED BY:

[Signature]

12-26-93

DATE/TIME

DATE/TIME

DATE/TIME

RECEIVED BY:

[Signature]

2/26/93

DATE/TIME

DATE/TIME

DATE/TIME

Signature on this form constitutes a firm purchase order for the services requested above.



## Page \_\_\_\_\_

## Analyses

Sampler: Don James

Report to: Don James

Project No: 6983

Company: Pacific Rim Services

Project Name: GLASCOCK Ave Telephone: (415) 255-0860

Turnaround Time: Normal Fax: 431-0334

[illegible]

**NOTES:**

Aspen Den James in phone  
conversation 3/2/93  
NJW/lan

3:4 = same sample  
8020 samples transferred to box  
at 106 m.w. 3/2

RELINQUISHED BY:

Peter A. Schiller

DATE/TIME \_\_\_\_\_

DATE/TIME

RECEIVED BY:

DATE/TIME \_\_\_\_\_

DATE/TIME

DATE/TIME

DATE/TIME June 3, 1975 DATE/TIME \_\_\_\_\_  
Signature on this form constitutes a firm purchase order for the services requested above.



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878  
2323 Fifth Street, Berkeley, CA 94710 Phone (510) 486-0900

DATE RECEIVED: 02/26/93  
DATE REPORTED: 03/10/93

LABORATORY NUMBER: 110179

CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES

PROJECT ID: 6983

LOCATION: 2901 GLASCOCK AVE TANK REMOVAL

RESULTS: SEE ATTACHED

Teresa K. Morrison  
Reviewed by

[Signature]  
Reviewed by

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Curtis & Tompkins Ltd

LABORATORY NUMBER: 110179  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: 2901 GLASCOCK AVE TANK REMOVAL

DATE SAMPLED: 02/26/93  
DATE RECEIVED: 02/26/93  
DATE EXTRACTED: 03/02/93  
DATE ANALYZED: 03/02/93  
DATE REPORTED: 03/10/93

Extractable Petroleum Hydrocarbons in Aqueous Solutions  
California DOHS Method  
LUFT Manual October 1989

*16 mg/L*

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT* (ug/L)
110179-1	1 WATER	**	16,000	50

\*Reporting limit applies to all analytes.

\*\*Kerosene range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY

RPD, %

7

RECOVERY, %

94



Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 110179  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: 2901 GLASCOCK AVE TANK REMOVAL

DATE SAMPLED: 02/26/93  
DATE RECEIVED: 02/26/93  
DATE EXTRACTED: 03/05/93  
DATE ANALYZED: 03/06/93  
DATE REPORTED: 03/10/93

Extractable Petroleum Hydrocarbons in Soils & Waters  
California DOHS Method  
LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
110179-3	1 SOIL	**	2,800	10
110179-4	2 SOIL	**	3,800	100
110179-5	3 SOIL	**	1,200	10
110179-6	4 SOIL	**	1,300	10

Jack 2

\*Reporting limit applies to all analytes.

\*\*Kerosene range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY

LCS RECOVERY, %

118



Curtis & Tompkins Ltd

LABORATORY NUMBER: 110179-3  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICE  
PROJECT ID: 6983  
LOCATION: 2901 GLASCOCK AVE TANK REMOVAL  
SAMPLE ID: 1 SOIL

DATE SAMPLED: 02/26/93  
DATE RECEIVED: 02/26/93  
DATE ANALYZED: 03/08/93  
DATE REPORTED: 03/10/93

EPA 8020: Volatile Aromatic Hydrocarbons in Soils & Wastes  
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/Kg	Reporting Limit ug/Kg
Benzene.....	ND	30
Toluene.....	ND	30
Ethyl Benzene.....	490	30
Total Xylenes.....	90	30
Chlorobenzene.....	ND	30
1,3-Dichlorobenzene.....	ND	30
1,4-Dichlorobenzene.....	ND	30
1,2-Dichlorobenzene.....	ND	30

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

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% SURROGATE RECOVERY	122
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Curtis &amp; Tompkins Ltd

LABORATORY NUMBER: 110179-4  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICE  
PROJECT ID: 6983  
LOCATION: 2901 GLASCOCK AVE TANK REMOVAL  
SAMPLE ID: 2 SOIL

DATE SAMPLED: 02/26/93  
DATE RECEIVED: 02/26/93  
DATE ANALYZED: 03/08/93  
DATE REPORTED: 03/10/93

EPA 8020: Volatile Aromatic Hydrocarbons in Soils & Wastes  
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/Kg	Reporting Limit ug/Kg
Benzene.....	ND	30
Toluene.....	ND	30
Ethyl Benzene.....	90	30
Total Xylenes.....	ND	30
Chlorobenzene.....	ND	30
1,3-Dichlorobenzene.....	ND	30
1,4-Dichlorobenzene.....	ND	30
1,2-Dichlorobenzene.....	ND	30

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

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% SURROGATE RECOVERY	110
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=====



Curtis & Tompkins Ltd

LABORATORY NUMBER: 110179-5  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICE  
PROJECT ID: 6983  
LOCATION: 2901 GLASCOCK AVE TANK REMOVAL  
SAMPLE ID: 3 SOIL

DATE SAMPLED: 02/26/93  
DATE RECEIVED: 02/26/93  
DATE ANALYZED: 03/08/93  
DATE REPORTED: 03/10/93

EPA 8020: Volatile Aromatic Hydrocarbons in Soils & Wastes  
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/Kg	Reporting Limit ug/Kg
Benzene.....	ND	30
Toluene.....	ND	30
Ethyl Benzene.....	ND	30
Total Xylenes.....	ND	30
Chlorobenzene.....	ND	30
1,3-Dichlorobenzene.....	ND	30
1,4-Dichlorobenzene.....	ND	30
1,2-Dichlorobenzene.....	ND	30

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

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% SURROGATE RECOVERY	104
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=====





Curtis &amp; Tompkins Ltd

LABORATORY NUMBER: 110179-6  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICE  
PROJECT ID: 6983  
LOCATION: 2901 GLASCOCK AVE TANK REMOVAL  
SAMPLE ID: 4 SOIL

DATE SAMPLED: 02/26/93  
DATE RECEIVED: 02/26/93  
DATE ANALYZED: 03/08/93  
DATE REPORTED: 03/10/93

EPA 8020: Volatile Aromatic Hydrocarbons in Soils & Wastes  
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/Kg	Reporting Limit ug/Kg
Benzene.....	ND	30
Toluene.....	ND	30
Ethyl Benzene.....	ND	30
Total Xylenes.....	ND	30
Chlorobenzene.....	ND	30
1,3-Dichlorobenzene.....	ND	30
1,4-Dichlorobenzene.....	ND	30
1,2-Dichlorobenzene.....	ND	30

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

=====

% SURROGATE RECOVERY

=====

102



Curtis &amp; Tompkins Ltd

LABORATORY NUMBER: 110179-METHOD BLANK  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICE  
PROJECT ID: 6983  
LOCATION: 2901 GLASCOCK AVE TANK REMOVAL

DATE ANALYZED: 03/08/93  
DATE REPORTED: 03/10/93

EPA 8020: Volatile Aromatic Hydrocarbons in Soils & Wastes  
Extraction Method: EPA 5030 - Purge & Trap

COMPOUND	Result ug/Kg	Reporting Limit ug/Kg
Benzene.....	ND	5
Toluene.....	ND	5
Ethyl Benzene.....	ND	5
Total Xylenes.....	ND	5
Chlorobenzene.....	ND	5
1,3-Dichlorobenzene.....	ND	5
1,4-Dichlorobenzene.....	ND	5
1,2-Dichlorobenzene.....	ND	5

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

=====

% SURROGATE RECOVERY

=====

101



Curtis &amp; Tompkins, Ltd

## MS/MSD SUMMARY SHEET FOR EPA 8020

Laboratory Number: 110179  
Analysis date: 03/08/93  
Sample type: Water

Spike file: CST\_011.RST  
Spike dup file: CST\_012.RST

## 8020 MS/MSD DATA (spiked at 5 ppb)

SPIKE COMPOUNDS	READING	RECOVERY	STATUS	LIMITS
Benzene	4.59	92 %	OK	39 - 150
Toluene	6.76	135 %	OK	46 - 148
Chlorobenzene	4.83	97 %	OK	55 - 135

SPIKE DUP COMPOUNDS	READING	RECOVERY	STATUS	LIMITS
Benzene	4.60	92 %	OK	39 - 150
Toluene	4.94	99 %	OK	46 - 148
Chlorobenzene	4.53	91 %	OK	55 - 135

SURROGATES	READING	RECOVERY	STATUS	LIMITS
BROMOFLUOROBENZENE (MS)	54.53	109 %	OK	75 - 125
BROMOFLUOROBENZENE (MSD)	49.83	100 %	OK	75 - 125

## MATRIX RESULTS:

Benzene	0
Toluene	0
Chlorobenzene	0

## RPD DATA

8020 COMPOUNDS	READING	READING	RECOVERY	STATUS	LIMITS
Benzene	4.59	4.60	0 %	OK	<= 11
Toluene	6.76	4.94	31 %	NOT OK	<= 13
Chlorobenzene	4.83	4.53	6 %	OK	<= 13

## LCS SUMMARY SHEET FOR EPA 8020

Laboratory Number: 110179  
Analysis date: 03/08/93  
Sample type: WATER

LCS file: CST-004.RST

## 8020 LCS DATA (spiked at 5 ppb)

SPIKE COMPOUNDS	READING	RECOVERY	STATUS	LIMITS
Benzene	4.73	95 %	OK	39 - 150
Toluene	5.08	102 %	OK	46 - 148
Chlorobenzene	4.82	96 %	OK	55 - 135

SURROGATES	READING	RECOVERY	STATUS	LIMITS
BROMOFLUOROBENZENE	49.57	99 %	OK	75 - 125



Curtis & Tompkins, Ltd

Client: Pacific Rim Environmental Services

Laboratory Login Number: 110179

Project Name: Glascock

Report Date: 10 March 93

Project Number: 6983

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
110179-003	1 SOIL	Soil	26-FEB-93	26-FEB-93	03-MAR-93	1400	mg/Kg	50	TR	8478
110179-004	2 SOIL	Soil	26-FEB-93	26-FEB-93	03-MAR-93	1900	mg/Kg	50	TR	8478
110179-005	3 SOIL	Soil	26-FEB-93	26-FEB-93	03-MAR-93	390	mg/Kg	50	TR	8478
110179-006	4 SOIL	Soil	26-FEB-93	26-FEB-93	03-MAR-93	520	mg/Kg	50	TR	8478

Tank 2 <sup>3</sup>/<sub>4</sub>

ND = Not Detected at or above Reporting Limit (RL).



Curtis & Tompkins Ltd

# Q C Batch Report

Client: Pacific Rim Environmental Services Laboratory Login Number: 110179  
Project Name: Glascock Report Date: 10 March 93  
Project Number: 6983

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 8478

## Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	03-MAR-93

## Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520EF	03-MAR-93
BSD	84%	SMWW 17:5520EF	03-MAR-93

Average Spike Recovery	85%	Control Limits
Relative Percent Difference	3.3%	80% - 120%
		< 20%



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley CA 94710, Phone (510) 486-0900

DATE RECEIVED: 03/02/93  
DATE REPORTED: 03/11/93

LABORATORY NUMBER: 110207

CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES

PROJECT ID: 6983

LOCATION: GLASCOCK AVE.

RESULTS: SEE ATTACHED

Teresa K. Morrison  
Reviewed by

[Signature]  
Reviewed by

This report may be reproduced only in its entirety.



Curtis & Tompkins Ltd

LABORATORY NUMBER: 110207-1  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: GLASCOCK AVE  
SAMPLE ID: 4 WATER

DATE SAMPLED: 03/01/93  
DATE RECEIVED: 03/02/93  
DATE ANALYZED: 03/07/93  
DATE REPORTED: 03/11/93

EPA 8020: Volatile Aromatic Hydrocarbons in Water

COMPOUND	RESULT ug/L	REPORTING LIMIT ug/L
Benzene.....	ND	1
Toluene.....	ND	1
Ethyl Benzene.....	ND	1
Total Xylenes.....	ND	1
Chlorobenzene.....	ND	1
1,3-Dichlorobenzene.....	ND	1
1,4-Dichlorobenzene.....	ND	1
1,2-Dichlorobenzene.....	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

=====

Surrogate Recovery, %

=====

99





Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 110207-METHOD BLANK  
CLIENT: PACIFIC RIM ENVIRONMENTAL SERVICES  
PROJECT ID: 6983  
LOCATION: GLASCOCK AVE

DATE ANALYZED: 03/07/93  
DATE REPORTED: 03/11/93

EPA 8020: Volatile Aromatic Hydrocarbons in Water

COMPOUND	RESULT ug/L	REPORTING LIMIT ug/L
Benzene.....	ND	1
Toluene.....	ND	1
Ethyl Benzene.....	ND	1
Total Xylenes.....	ND	1
Chlorobenzene.....	ND	1
1,3-Dichlorobenzene.....	ND	1
1,4-Dichlorobenzene.....	ND	1
1,2-Dichlorobenzene.....	ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY

=====

Surrogate Recovery, %	110
-----------------------	-----

=====



Curtis &amp; Tompkins Ltd

## MS/MSD SUMMARY SHEET FOR EPA 8020

Laboratory Number: 110207  
Analysis date: 03/08/93  
Sample type: Water

Spike file: 065W028  
Spike dup file: 065W029

## 8020 MS/MSD DATA (spiked at 20 ppb)

=====					
SPIKE COMPOUNDS	READING	RECOVERY	STATUS	LIMITS	
Benzene	24.17	121 %	OK	76 -	130
Toluene	25.00	123 %	OK	76 -	125
Chlorobenzene	24.12	121 %	OK	75 -	127
SPIKE DUP COMPOUNDS					
Benzene	23.27	116 %	OK	76 -	130
Toluene	24.03	118 %	OK	76 -	125
Chlorobenzene	23.59	118 %	OK	75 -	127
SURROGATES					
BROMOBENZENE (MS)	93.36	93 %	OK	75 -	125
BROMOBENZENE (MSD)	90.48	90 %	OK	75 -	125

## MATRIX RESULTS:

Benzene	0
Toluene	0.485
Chlorobenzene	0

## RPD DATA

=====					
8020 COMPOUNDS					
Benzene	24.17	23.27	4 %	OK	<= 11
Toluene	25.00	24.03	4 %	OK	<= 13
Chlorobenzene	24.12	23.59	2 %	OK	<= 13

Client: Pacific Rim Environmental Services

Laboratory Login Number: 110207

Project Name: Glascock

Report Date: 11 March 93

Project Number: 6983

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520BF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
110207-001	3,4 WATER	Water	01-MAR-93	02-MAR-93	08-MAR-93	26.	mg/L	5	TR	8513

ND = Not Detected at or above Reporting Limit (RL).



Curtis & Tompkins Ltd

# Q C Batch Report

Client: Pacific Rim Environmental Services Laboratory Login Number: 110207  
Project Name: Glascock Report Date: 11 March 93  
Project Number: 6983

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 8513

## Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	08-MAR-93

## Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	87%	SMWW 17:5520BF	08-MAR-93
BSD	88%	SMWW 17:5520BF	08-MAR-93

Average Spike Recovery  
Relative Percent Difference

88%  
1.2%

Control Limits  
80% - 120%  
< 20%

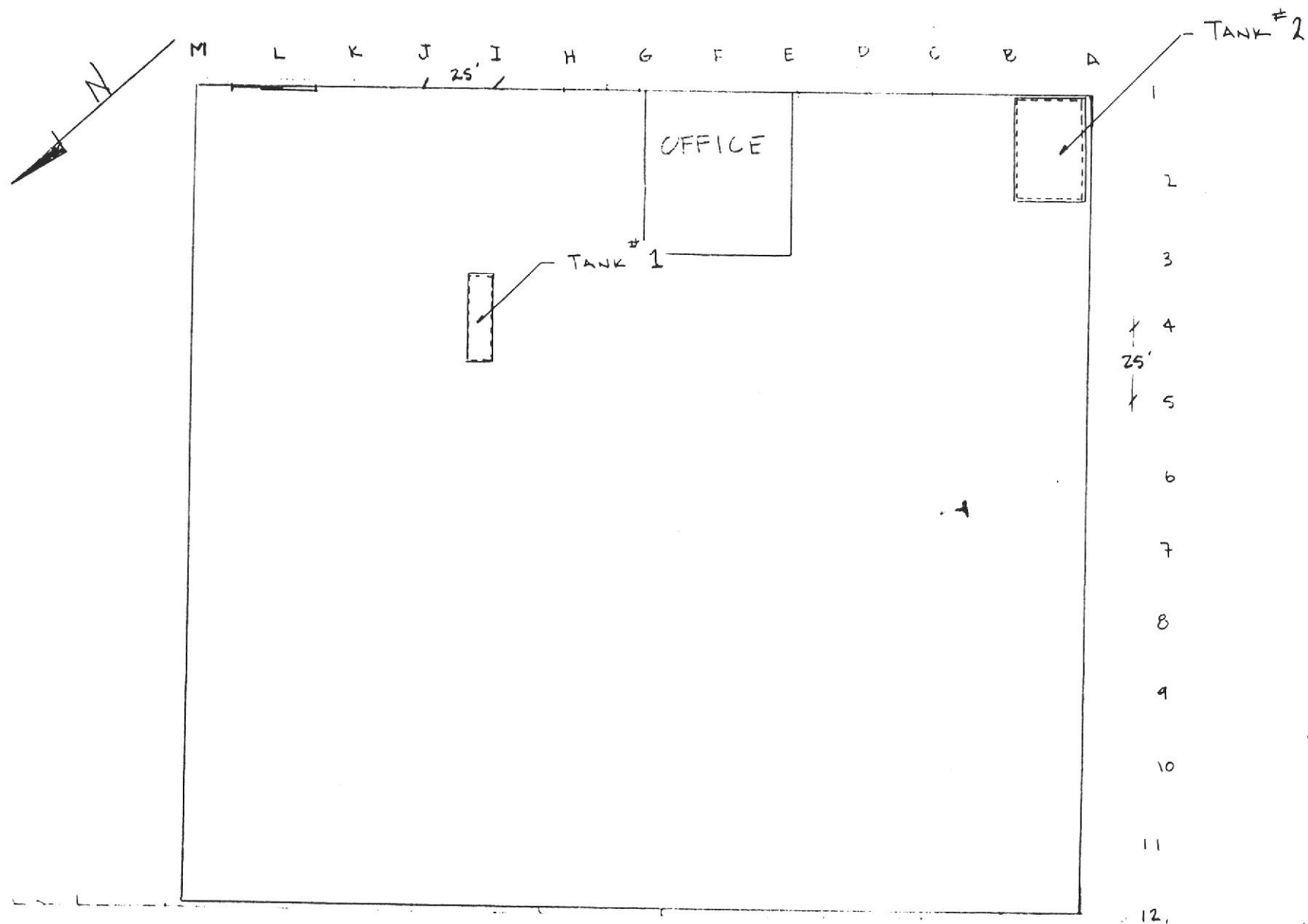
**APPENDIX D**  
**(Tank # 2 Disposal Manifest)**

# GENERATOR

DO NOT WRITE BELOW THIS LINE.

**APPENDIX E**  
**(Expanded Excavation Plot Plans)**

GLASSCOCK STREET



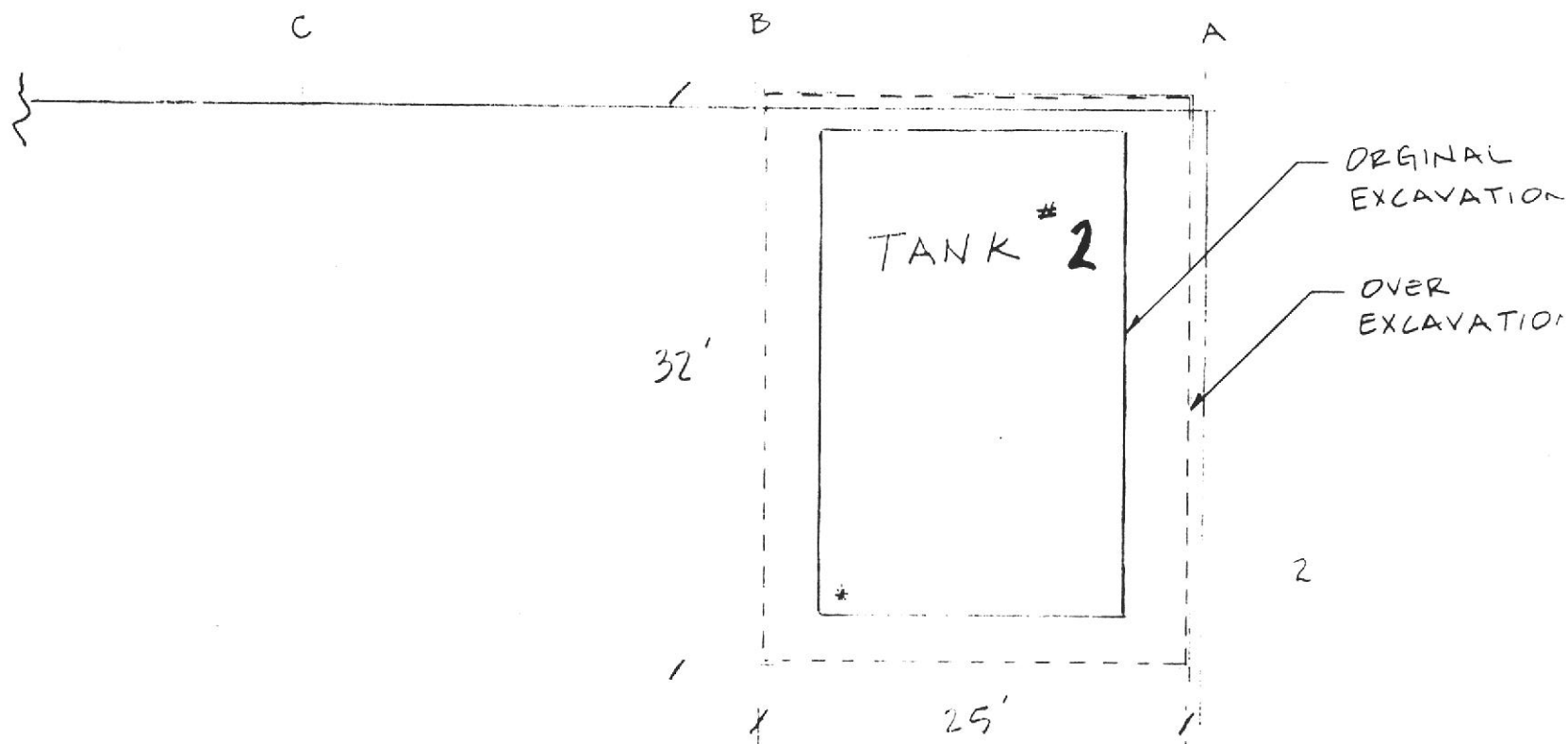
OAKLAND ESTUARY

DIAGRAM # 1

NOT TO SCALE



# GLASS LOCK LINE 1



NOT TO SCALE

DIAGRAM #2

K J I H 3

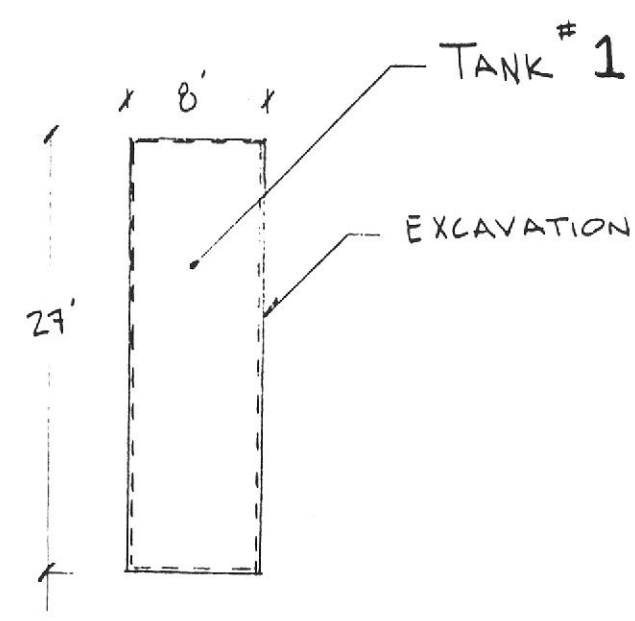


DIAGRAM # 3

SAMPLE #	VERT DEPTH	HORIZ DEPTH
1	12'	3'
2	12'	3'
3	12'	3'
4	12'	3'
5	12'	3'
6	12'	3'
7	12'	3'
8	12'	3'

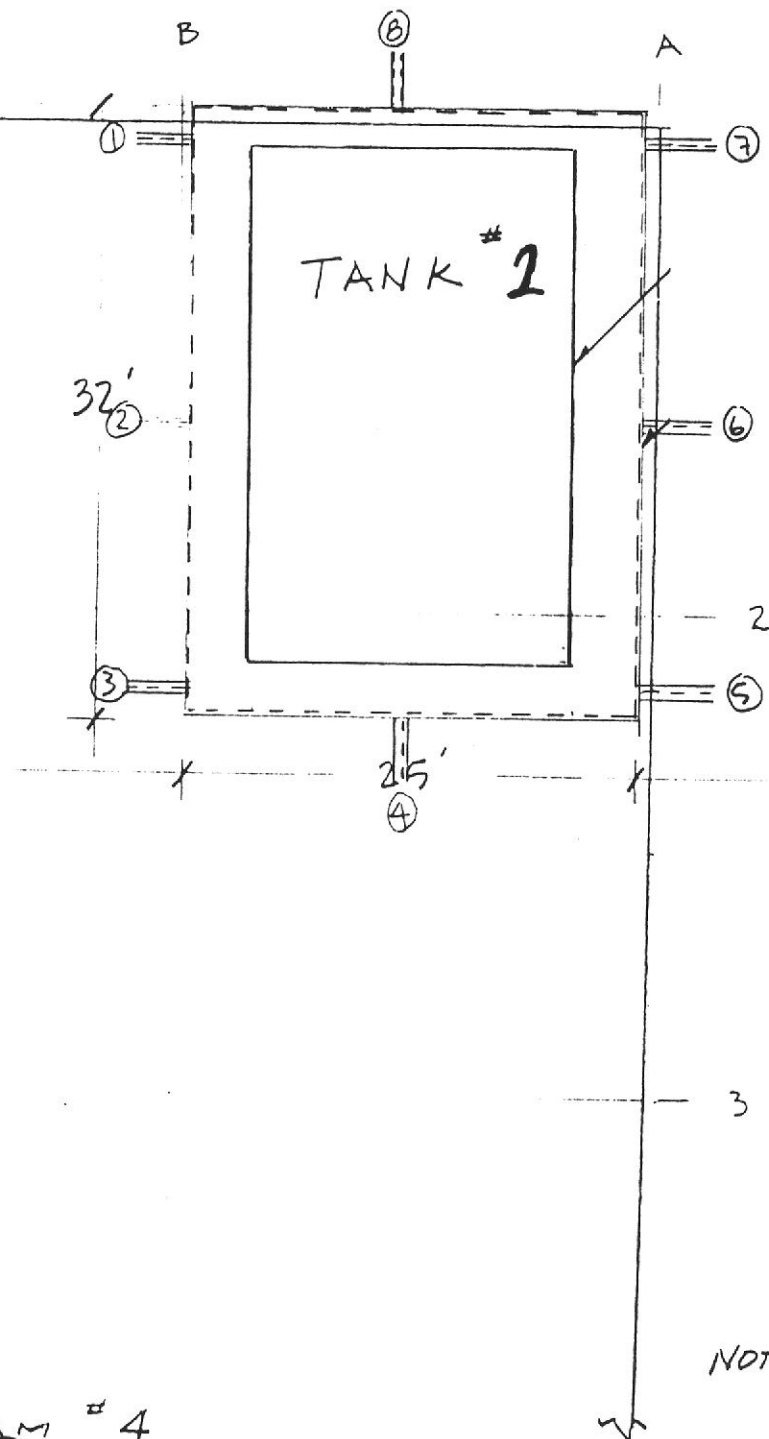


DIAGRAM # 4

SAMPLE #	FEET	
	VERT DEPTH	HORZ DEPTH
1	10 1/2'	0'
2	7 1/2'	3'
3	7 1/2'	3'
4	7 1/2'	3'
5	7 1/2'	3'

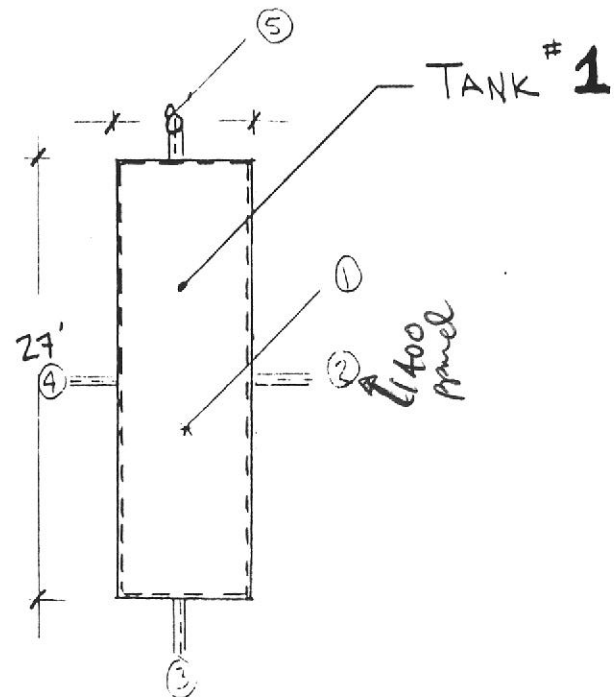


DIAGRAM <sup>11</sup> S

**APPENDIX F**  
**(Stock Pile Removal Manifest)**



Hazardous Waste Hauler (Registration #2843)

8896 Elder Creek Rd. • Sacramento, CA 95828 • FAX (916) 381-1573

GLASCOCK STREET OWNERS  
425 MARKET STREET  
OAKLAND, CA 94607

DATE: 12/06/93

INVOICE: 1525

JOB: 2901 GLASCOCK AVE., OAKLAND, CA

DATE	TRUCK#	TAG	JOB DESCRIPTION	HR/TN/YD	RATE	AMOUNT
12/01/93	S-15	18600	MOVE IN LOADER	BID		
12/01/93	936	21182	CLEAN UP OF JOBSITE	BID		
12/01/93	M-10	17086	SOIL TO BFI	18.00 YARD	43.50	783.00
12/01/93	M-10	17087	CONCRETE TO AVILA	36.00 YARD	28.46	1,024.56
12/01/93	M-11	17107	SOIL TO BFI	36.00 YARD	43.50	1,566.00
			CONCRETE TO AVILA	36.00 YARD	28.46	1,024.56
			BRIDGE TOLLS	1	8.25	8.25
12/01/93	M-3	17131	SOIL TO BFI	36.00 YARD	43.50	1,566.00
12/01/93	M-3	17132	CONCRETE TO AVILA	36.00 YARD	28.46	1,024.56
			BRIDGE TOLLS	1	8.25	8.25
12/01/93	S-50	17201	CONCRETE TO AVILA	18.00 YARD	28.46	512.28
			BRIDGE TOLLS	1	8.25	8.25
12/01/93	M-19	17202	SOIL TO BFI	18.00 YARD	43.50	783.00
12/01/93	M-7	17203	CONCRETE TO AVILA	36.00 YARD	28.46	1,024.56



Hazardous Waste Hauler (Registration #2843)

8896 Elder Creek Rd. • Sacramento, CA 95828 • FAX (916) 381-1573

PAGE: 2

GLASCOCK STREET OWNERS

DATE: 12/06/93

INVOICE: 1525

DATE	TRUCK#	TAG	JOB DESCRIPTION	HR/TN/YD	RATE	AMOUNT
12/01/93	S-50	17462	SOIL TO BFI	36.00 YARD	43.50	1,566.00
12/01/93	S-20	17522	SOIL TO BFI	18.00 YARD	43.50	783.00
12/01/93	S-20	17524	CONCRETE TO AVILA	72.00 YARD	28.46	2,049.12
			HOLDOVER CHARGE	3.00 HRS	60.00	180.00
			BRIDGE TOLLS	2	8.25	16.50
12/01/93	M-7	17615	SOIL TO BFI	18.00 YARD	43.50	783.00
			BRIDGE TOLLS	1	8.25	8.25
12/01/93	M-18	17642	SOIL TO BFI	18.00 YARD	43.50	783.00
12/01/93	M-19	21361	CONCRETE TO AVILA	54.00 YARD	28.46	1,536.84
			BRIDGE TOLLS	1	8.25	8.25

\*\*\*TOTAL DUE\*\*\*

\$17,047.23

BFI - 11 LOADS @ 18 YARDS PER LOAD=  
198 YARDS x \$43.50 = \$8,613.00

AVILA - 16 LOADS @ 18 YARDS PER LOAD=  
288 YARDS x \$28.46 = \$8,196.48

BRIDGE TOLLS - 7 @ \$8.25 = \$57.75

HOLDOVER CHARGE - 3 HOURS @ \$60.00 = \$180.00

\*\*\* PAYMENT DUE UPON RECEIPT \*\*\*

TOTAL AMOUNT DUE \$17,047.23

4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : AOB718 12/01/93 09:01 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 1026346  
P.O. No : GLASSCOCK  
Checker : MARK

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

UUUU  
NNNN

Volume	Contents	Rate	Charge
10.00	YD SPECIAL		

TOTAL

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

THANK YOU FOR YOUR BUSINESS!!!

61020  
70UUUU  
NNNN  
DRIVER

DRIVER



# NON-HAZARDOUS SPECIAL WASTE MANIFEST

## GENERATOR

Generator Name CLIFFORD A. BROWN & SONS, INC. Generating Location 2001 CLAYTON AVENUE

Address 2001 CLAYTON AVENUE Address 2001 CLAYTON AVENUE

OAKLAND, CA 94612 OAKLAND, CA 94612

Phone No. 415-255-0860 Phone No. 415-255-0860

BFI Waste Code CA 405 112693 64475 Containers 1 Type Y

Description of Waste

SOIL

Quantity	Units	No.	Type
<u>1</u>	<u>Y</u>	<u>1</u>	<u>Y</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>

Type  
D - Drum  
C - Cart  
B - Bag  
T - Truck  
P - Pouch  
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 LEONARD R. BROWN Signature [Signature] Shipment Date 1-17-93

## TRANSPORTER

Truck No. 21-11 Phone No.  

Transporter Name HANLEY & SONS TRUCKING, INC. Driver Name (Print) Tim Schlosa

Address 2001 ELDER STREET ROAD Vehicle License No./State 9C06234

SACRAMENTO, CA 95834

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 Tim R. Schlosa Shipment Date 120193 Driver Signature Tim R. Schlosa Delivery Date 120193

## DESTINATION

Site Name   Phone No. 510-447-0491

Address 4001 N. VALCO ROAD, 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 120193

PASS CODE

A DIVISION OF



BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A08794 12/01/93 11:11 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 956191  
P.O. No : GLASSCOCK  
Checker : MIKE

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
18.00	YD SPECIAL		

TOTAL

THANK YOU FOR YOUR BUSINESS!!!

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

DRIVER

DRIVER

64,240  
32

## NON-HAZARDOUS SPECIAL WASTE MANIFEST

### GENERATOR

Generator Name GLASSBORO A. FERRIS Generating Location GLASSBORO A. FERRIS  
 Address 2001 GLASSBORO AVENUE Address 2001 GLASSBORO AVENUE  
OAKLAND, CA 94612 OAKLAND, CA 94612

Phone No. 4 1 5 - 2 5 5 0 8 6 0 Phone No. 4 1 5 - 2 5 5 0 8 6 0  
 BFI Waste Code C A 4 0 5 1 1 2 6 9 3 6 4 4 7 5 Containers 1 Type D  
 Description of Waste

SOIL

Quantity	Units	No.	Type
<u>18</u>	<u>X</u>	<u>1</u>	<u>D</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.

Generator Authorized Agent Name [Signature] Signature [Signature] Shipment Date 12 0 1 9 3

### TRANSPORTER

Truck No. 11-11 Phone No. \_\_\_\_\_  
 Transporter Name HERBERT S. LONG TRUCKING, INC. Driver Name (Print) TIM SCHLOSSER  
 Address 3000 BLOOMINGDALE ROAD Vehicle License No./State 7115 1 CA  
SACRAMENTO, CA 95833 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 with out incident to the destination listed below.

Driver Signature [Signature] Shipment Date 12 0 1 9 3 Driver Signature [Signature] Delivery Date 12 0 1 9 3

### DESTINATION

Site Name LOT Phone No. 5 1 0 - 4 4 4 7 0 4 9 1  
 Address 1001 N. VASCO BLVD. 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 12 0 1 9 3

PASS CODE \_\_\_\_\_

# VASCO ROAD SANITARY LANDFILL No: 562455

A DIVISION OF  BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A08735 12/01/93 09:48 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 956189  
P.O. No : GLASSCOCK  
Checker : MIKE

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
18.00 YD	SPECIAL		

TOTAL

THANK YOU FOR YOUR BUSINESS!!!

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

*St*  
71,400  
3,000

  
DRIVER

DRIVER

## TRANSPORTER RETAIN

# VASCO ROAD SANITARY LANDFILL No: 562432

A DIVISION OF  BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A08712 12/01/93 08:52 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 1026347  
P.O. No : GLASSCOCK  
Checker : MARK

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
--------	----------	------	--------

18.00	YD SPECIAL		
-------	------------	--	--

TOTAL

THANK YOU FOR YOUR BUSINESS

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

  
DRIVER

DRIVER



# NON-HAZARDOUS SPECIAL WASTE MANIFEST

## GENERATOR

Generator Name ALCOA OF CALIFORNIA, INC. Generating Location ALCOA OF CALIFORNIA, INC.  
Address 3901 GLASSCOCK AVENUE Address 3901 GLASSCOCK AVENUE  
OAKLAND, CA 94612 OAKLAND, CA 94612  
Phone No. 4 1 5 - 2 5 5 0 8 6 0 Phone No. 4 1 5 - 2 5 5 0 8 6 0

BFI Waste Code C A 4 0 5 1 1 2 6 9 3 6 4 4 7 5 Containers 1 Type D - Drum  
Description of Waste SOIL Quantity 18 Units 1 No. 1 Type D - Drum  
C - Cart  
B - Bag  
T - Truck  
P - Pouch  
Y - Yard  
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.

K. C. Cooper K. C. Cooper 12 1 85  
Generator Authorized Agent Name Signature Shipment Date

## TRANSPORTER

Truck No. S20 Phone No. 916 447 0491  
Transporter Name HANLEY & SONS TRUCKING, INC. Driver Name (Print) MIKE MORRIS  
Address 3600 ELDER CREEK ROAD Vehicle License No./State 9A66674  
SACRAMENTO, CA 95821 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.

Mike Morris 12 0 1 9 3 Mike Morris 12 0 1 9 3  
Driver Signature Shipment Date Driver Signature Delivery Date

## DESTINATION

Site Name 111 Phone No. 8 1 0 - 4 4 7 0 4 9 1  
Address 4001 N. VASCO ROAD, 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

MF 12 0 1 9 3  
Name of Authorized Agent Signature Receipt Date

PASS CODE



4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A08802 12/01/93 11:23 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 1026345  
P.O. No : GLASSCOCK  
Checker : MIKE

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
--------	----------	------	--------

18.00 YD	SPECIAL		
----------	---------	--	--

TOTAL

114

THANK YOU FOR YOUR BUSINESS!!!

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

64,500  
- 32,180

DRIVER

DRIVER



## GENERATOR

## TRANSPORTER

## Vehicle Certification

**DESTINATION**

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

Receipt Date

**PASS CODE**



4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket: A08829 12/01/93 12:30 pm  
Customer: MANLEY & SONS  
Account: 1008754 LMS #754  
Truck: 1  
Manifest: 1026343  
P.O. No: GLASSCOCK  
Checker: MIKE

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
18.00	YD SPECIAL		

TOTAL

THANK YOU FOR YOUR BUSINESS!!!

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

65,450  
30

  
DRIVER

DRIVER



**Waste Systems™**

BROWNING-FERRIS INDUSTRIES

No. 1026343

# NON-HAZARDOUS SPECIAL WASTE MANIFEST

## GENERATOR

Generator Name GLASSCOCK AT EARTHLINE Generating Location GLASSCOCK AT EARTHLINE  
 Address 2001 GLASSCOCK AVENUE Address 2001 GLASSCOCK AVENUE  
OAKLAND, CA 94612 OAKLAND, CA 94612

Phone No. 415-550-6600 Phone No. 415-550-6600  
 BFI Waste Code 4111112600 Containers 1 Type D - Drum

Description of Waste

SOIL

Quantity

Units

No.

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 N. C. Krap Signature [Signature] Shipment Date 120193

## TRANSPORTER

Truck No. 550 Phone No. 916-441-7701  
 Transporter Name HANLEY & SONS TRUCKING, INC Driver Name (Print) Bob Winters  
 Address 9896 ELDER CREEK ROAD Vehicle License No./State 9C06255 / CA  
SACRAMENTO, CA 95833 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 B. Winters Shipment Date 120193 Driver Signature B. Winters Delivery Date 120193

## DESTINATION

Site Name 101 Phone No. 916-441-7701  
 Address 4001 N. VALCO ROAD, 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 [Signature] Receipt Date 120193

PASS CODE \_\_\_\_\_

# VASCO ROAD SANITARY LANDFILL No: 562445

A DIVISION OF  BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A08725 . 12/01/93 09:20 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 102634B  
P.O. No : GLASSCOCK  
Checker : MARK

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
18.00	YD SPECIAL		

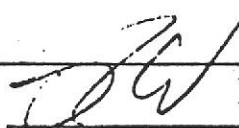
TOTAL

THANK YOU FOR YOUR BUSINESS!!!

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros a todas horas.

No se permite llevar cosas del dompo absolutamente.



DRIVER

DRIVER

# NON-HAZARDOUS SPECIAL WASTE MANIFEST

## GENERATOR

Generator Name GLASSBORO SY. PARTIAL Generating Location GLASSBORO SY. PARTIAL  
Address 2001 GLASSBORO AVENUE Address 2001 GLASSBORO AVENUE  
OAKLAND, CA 94612 OAKLAND, CA 94612

Phone No. 4 1 5 — 2 5 5 0 8 6 0

Phone No. 4 1 5 — 2 5 5 0 8 6 0

BFI Waste Code C A 4 0 5 1 1 2 6 9 3

6 4 4 7 5

Description of Waste

SOIL

Quantity	Units	No.	Type
<u>18</u>			

Containers  
Type  
D - Drum  
C - Cart  
B - Bag  
T - Truck  
P - Pallet  
Y - Yard  
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 A. C. Cooper Signature A. C. Cooper Shipment Date 1 2 0 1 9 3

## TRANSPORTER

Truck No. S50 Phone No. 4 1 5  
Transporter Name HANLEY & SONS TRUCKING, INC. Driver Name (Print) Robert Winters  
Address 5006 ELLER CREEK ROAD Vehicle License No./State 9C06255  
SACRAMENTO, CA 95821 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 R. Winters Shipment Date 1 2 0 1 9 3 Driver Signature R. Winters Delivery Date 1 2 0 1 9 3

## DESTINATION

Site Name \_\_\_\_\_ Phone No. 5 1 0 — 4 4 7 0 4 9  
Address 4001 H. VADON ROAD, 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 1 2 0 1 9 3

PASS CODE \_\_\_\_\_

# VASCO ROAD SANITARY LANDFILL No: 562444

A DIVISION OF



BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A06724 12/01/93 09:18 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 956187  
P.O. No : GLASSCOCK  
Checker : MARK

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
18.00	YD SPECIAL		

TOTAL

THANK YOU FOR YOUR BUSINESS!!

*Handwritten signature and initials*

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros a todas horas.

No se permite llevar cosas del dompo absolutamente.

*J. Mosley*  
DRIVER

DRIVER



## NON-HAZARDOUS SPECIAL WASTE MANIFEST

### GENERATOR

Generator Name Waste Systems, Inc. Generating Location Waste Systems, Inc.  
 Address 3001 HILLCREST AVENUE Address 3001 HILLCREST AVENUE  
OAKLAND, CA 94612 OAKLAND, CA 94612

Phone No. 415-255-0860 Phone No. 415-255-0860

BFI Waste Code CA 405 112693 64475

Description of Waste		Quantity	Units	No.	Type
SOIL		<u>18</u>	<u>1</u>	<u>1</u>	<u>1</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.

Generator Authorized Agent Name W. C. Keop Signature W. C. Keop Shipment Date 12/17/93

### TRANSPORTER

Truck No. 2119 Phone No. 916-447-0491  
 Transporter Name HARLEY & JONES TRUCKING, INC. Driver Name (Print) James M. Moley  
 Address 8000 ELDER CREEK ROAD Vehicle License No./State 9C411654  
SACRAMENTO, CA 95826 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 James M. Moley Shipment Date 12/01/93 Driver Signature James M. Moley Delivery Date 12/01/93

### DESTINATION

Site Name \_\_\_\_\_ Phone No. 510-447-0491  
 Address 1001 W. VANDERBILT AVENUE, S.F.

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 James M. Moley Receipt Date 12/01/93

PASS CODE \_\_\_\_\_

TRANSPORTER RETAIN



4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A08787 12/01/93 11:00 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 956190  
P.O. No : GLASSCOCK  
Checker : MIKE

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
18.00	YD SPECIAL		

TOTAL

THANK YOU FOR YOUR BUSINESS!!!

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

57,600  
30

DRIVER

*B. J. O. G. M.*

DRIVER



## NON-HAZARDOUS SPECIAL WASTE MANIFEST

### GENERATOR

Generator Name PLANNING & ENVIRONMENTAL Generating Location 1001 GLASSCOCK AVENUE  
 Address 2001 GLASSCOCK AVENUE Address 1001 GLASSCOCK AVENUE  
OAKLAND, CA 94612 OAKLAND, CA 94612

Phone No. 415-255-0860 Phone No. 415-255-0860

BFI Waste Code CA 405112693 64475 Containers 1 Type D - Drum  
 Description of Waste Quantity Units No. Type  
SOIL 18 Y 1 D - Drum  
6 4 4 7 5 1 Y 1 D - Drum  
6 4 4 7 5 1 Y 1 D - Drum

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 LE CLOFF Signature [Signature] Shipment Date 12/1/93

### TRANSPORTER

Truck No. 7113 Phone No. [Blank]  
 Transporter Name HANLEY & SONS TRUCKING, INC. Driver Name (Print) BILL FRANCE  
 Address 1306 FLORENCE STREET ROAD Vehicle License No./State 7C06229 / CA  
SACRAMENTO, CA 95829 Vehicle Certification [Blank]

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 Bill France Shipment Date 12/1/93 Driver Signature Bill France Delivery Date 12/1/93

### DESTINATION

Site Name [Blank] Phone No. 510-447-0491  
 Address 1001 N. LAMAR ROAD, 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 12/01/93

PASS CODE [Blank]



4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A08707 12/01/93 08:46 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 956197  
P.O. No : GLASSCOCK  
Checker : MARK

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
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18.00	YD SPECIAL		
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TOTAL

THANK YOU FOR YOUR BUSINESS!!!

6-7760  
30 600

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

Bird Lane  
DRIVER

DRIVER

## NON-HAZARDOUS SPECIAL WASTE MANIFEST

### GENERATOR

Generator Name GLASSCOCK & ASSOCIATES Generating Location GLASSCOCK & ASSOCIATES  
 Address 2001 GLASSCOCK AVENUE Address 2001 GLASSCOCK AVENUE  
OAKLAND, CA 94612 OAKLAND, CA 94612

Phone No. 415-245-5086 Phone No. 415-245-5086

BFI Waste Code C A 405112693 64475 Containers 1 Type D - Drum  
 Description of Waste SOIL Quantity 1 Units 1 No. 1 Type D - Drum  
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.

Generator Authorized Agent Name [Signature] Signature [Signature] Shipment Date 12/18/92

### TRANSPORTER

Truck No. 11-3 Phone No. [Blank]  
 Transporter Name HAULEY & SONS TRUCKING, INC. Driver Name (Print) BILL FRANCE  
 Address 4000 ELDER STREET ROAD Vehicle License No./State 12-19  
SAN FRANCISCO, CA 94109 Vehicle Certification [Blank]

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 12/19/92 Driver Signature [Signature] Delivery Date 12/19/92

### DESTINATION

Site Name [Blank] Phone No. 510-447-0491  
 Address 4001 N. VANDERBILT, LIVERMORE, CA 94551

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 12/19/92

PASS CODE [Blank]



4001 VASCO ROAD  
LIVERMORE, CA 94550  
(510) 447-0491

Ticket : A00750 12/01/93 10:10 am  
Customer: MANLEY & SONS  
Account : 1008754 LMS #754  
Truck : 1  
Manifest: 956188  
P.O. No : GLASSCOCK  
Checker : MIKE

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

Volume	Contents	Rate	Charge
18.00	YD SPECIAL		

TOTAL

THANK YOU FOR YOUR BUSINESS!!!

All children must remain in vehicles.  
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros  
a todas horas.

No se permite llevar cosas del dompo  
absolutamente.

60 900  
30 —

  
DRIVER

DRIVER

# NON-HAZARDOUS SPECIAL WASTE MANIFEST

## GENERATOR

Generator Name GLASSCOCK INDUSTRIES Generating Location GLASSCOCK INDUSTRIES

Address 1901 GLASSCOCK AVENUE Address 1901 GLASSCOCK AVENUE

OAKLAND, CA 94612 OAKLAND, CA 94612

Phone No. 415-255-0860 Phone No. 415-255-0860

BFI Waste Code C A 405 112693 64475 Containers            Type           

Description of Waste

SOIL

Quantity

Units

No.

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

Signature

Shipment Date

## TRANSPORTER

Truck No. 7110 Phone No.           

Transporter Name HANLEY & SONS TRUCKING, INC. Driver Name (Print) Richard Brown

Address 8808 ELDER WEEB ROAD Vehicle License No./State 4T1027

SACRAMENTO, CA 95828

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

Shipment Date

Driver Signature

Delivery Date

## DESTINATION

Site Name            Phone No. 510-447-0491

Address 1901 N. VAN DYKE BLVD. BIRMINGHAM, AL 35203

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

Receipt Date

PASS CODE

**APPENDIX G**  
**(Health & Safety Plan)**

# **HEALTH & SAFETY PLAN**

**FOR**

**Underground Tank Removal**

**At**

**Buran Partners Warehouse**

**2901 Glascock Avenue**

## **HEALTH & SAFETY PLAN**

### **1.0 SITE HEALTH AND SAFETY OFFICER**

The site Health and Safety Officer is Donald W. James Jr.. He is in charge of briefing all employees and subcontractors on the following Health and Safety issues on a daily basis.

### **2.0 PHYSICAL HAZARDS ASSESSMENT**

The site facility includes physical hazards associated with industrial facilities. In field activities, potential physical hazards may include:

- Heavy Equipment
- Vehicular traffic
- Holes or uneven pavement
- Precariously positioned objects (drums, unused equipment, etc.)
- Sharp objects such as nails, metal shards, and broken glass
- Slippery surfaces
- Overhead power lines
- Electrically powered hand tools
- Flammable materials
- High noise levels
- Sudden and startling noises
- Strain/over exertion
- Heat stress



### **3.0 EDUCATION AND TRAINING**

Each Pacific Rim employee assigned to participate in field activities will complete a health and safety training course before work begins. As a minimum the training program shall address the following:

- Chemical toxicity
- Personnel safety equipment
- Decontamination procedures
- Medical examinations
- Hazard recognition
- Hazard avoidance
- Questions and answers

Upon completion of the training, each employee will sign a training record. Additional training will be provided on an annual basis and as necessary for this project.

### **4.0 SAFETY PRACTICES**

While working around any hazardous or potentially hazardous substance or situation, site personnel should plan all activities before starting any task. Site personnel should identify health and safety hazards involved with the planned work, and consult with the PSO or SSO as to how the task can be performed in the safest manner. Prior to initiation of field activities, the SSO or PSO shall conduct a health and safety briefing so that field staff are informed of potential hazards and required personal protective equipment and questions can be answered. After completion of the briefing, the SSO or PSO will complete a briefing form and field staff will initial that form. Appendix B contains an example Health and Safety briefing form.

For chemical hazards, all routes of excessive exposure must be protected. Protection of the four basic routes of exposure (inhalation, skin adsorption, ingestion, and eye contact) and adherence to general safety practices shall be required.

#### **4.1 Ingestion**

Because the hands can be a carrier of hazardous materials to the mouth when eating, drinking, chewing or smoking, these activities are prohibited during and after work until decontamination procedures have been completed. No food or liquids shall be consumed in the hazard area. Furthermore, liquids shall not be piped or siphoned by mouth under any circumstances. The hands and face should be thoroughly washed upon leaving the work areas, and before eating, drinking, or any other ingestion occurs.

#### **4.2 Eye Contact**

The following precautions shall be taken to avoid eye injury while working on the site:

- Wear appropriate safety goggles or glasses
- Do not rub eyes while working
- Do not wear contact lenses when working in areas where hazardous materials may be encountered. OSHA regulations do not allow contact lenses to be worn while using a respirator.

#### **5.0 GENERAL SAFETY**

Field personnel shall observe the following general safety practices during field activities at the site.

- Wear protective equipment and clothing provided, when required.
- Wear approved hard hats in all construction areas and during drilling activities.
- Wear safety glasses or face shields whenever the situation may pose an eye hazard.
- Wear hearing protection when performing tasks around heavy equipment which emits noise levels greater than 85 dBA, such as soil compacting equipment, drilling equipment, excavators, vapor blowers, etc..
- Wear sturdy work boots or shoes at the site. Steel-toed boots are required during drilling and excavation activities.
- Prevent spillage of hazardous materials.
- Prevent splashing of hazardous materials.
- Prevent back injury by never lifting or carrying a load that is more than you can comfortably handle. When lifting heavy objects, use a truck-mounted hoist, or lift by bending the knees and using leg muscles.
- Keep heat sources away from combustible liquids, gases or any flammable materials. When working in areas where combustible gases are present, use only intrinsically safe equipment (non-sparking).

- Field personnel should be familiar with the physical characteristics of field activities including wind direction, accessibility to safety equipment and vehicles, areas of known contamination, access routes and nearest water source.
- The number of field personnel and equipment should be minimized to the extent necessary to perform the task at hand and in accordance with good safety practices.
- All wastes generated during field activities shall be disposed of as directed by the PM.
- Inspect power cords for damage (cuts, frays, etc.).
- When in doubt, it is better over-protected.
- A first aid kit and a type-ABC fire extinguisher shall be kept on-site in a field vehicle when performing field work.
- Adequate toilet facilities and water supplies shall be located near the site. If not available, a drinking water supply and a portable toilet facility shall be made available.

## **6.0 HEAT STRESS**

Heat stress is a major hazard, especially for workers wearing protective clothing in hot weather. The same protective materials that shield a body from chemical exposure also limit the dissipation of body heat and moisture. Personal protective clothing can, therefore, create a hazardous situation. Depending on the ambient conditions and the work activities, heat stress can occur rapidly - within as little as 15 minutes. It can pose as great a danger to worker health as chemical exposure.

To avoid heat stress, replace liquids frequently by drinking water. Drinking water supplies shall be stored away from the field activity area, preferably upwind. Take rests periodically and at the first sign of heat stress ( rashes, cramps, discomfort, drowsiness, etc.), remove the affected personnel from hazard area and evaluate the need for medical attention and/or modifications to the field activities and schedule.

## **7.0 PERSONNEL PROTECTIVE EQUIPMENT**

Personnel protective equipment required for field activities will be as follows:

- Normal work uniform
- Hard leather shoes or boots
- Hard hat
- Safety goggles or glasses

Additional personnel protective equipment shall be worn when noise exposure exceeds 85 dBA, such as during drilling, excavation, or vapor sampling activities, as follows:

- Ear Plugs

Additional personnel protective equipment shall be worn when contaminated materials may come in contact with skin, such as during soil logging, soil sampling, water sampling, or vapor sampling, as follows:

- Gloves ( Edmont Solvex or equivalent)
- Face shield when splash hazard exists

Additional personnel protective equipment shall be worn when volatile organic chemical concentration in ambient air exceed 10 ppm as measured by an OVM capable of detecting 1.0 ppm, as follows:

- Respirator with an organic vapor adsorption cartridge
- Disposable coveralls (Tyvec or Saranax)

Should volatile organic vapors in ambient air exceed 100 ppm as measured by an OVM:

- Field activities will be ceased, field staff will evacuate to a safe location, and the SSO will control access to the field activity area. The SSO or designee will also contact the PSO and/or PM for instructions on how to proceed.

## **8.0 EMERGENCIES**

In the event of an accident, the procedures listed below are to be followed immediately. Emergency conditions are considered if:

- Any member of the field crew is involved in an accident (physical or chemical), or experiences adverse effects or symptoms of exposure while on-site.
- A condition is discovered suggesting a situation more hazardous than anticipated.

## **9.0 EMERGENCY PROCEDURES**

The following emergency procedures will be followed in the order indicated:

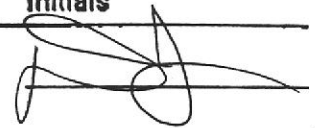
1. Remove the injured or exposed person from immediate danger, if possible without endangering rescuing staff.
2. If a serious or life-threatening condition exists, **CALL PARAMEDICS (911)** that an injury has occurred. The location, injury, and conditions shall be clearly described to the ambulance dispatcher. The SSO will designate a person to direct emergency equipment to the injured persons.

3. If there is any question as to the nature of injury, or what should be done, call the emergency number below:
4. Call the PSO/PM Office (415) 255-0860  
PM Home (415) 928-4941  
PSO Home (415) 695-2704
5. Evacuate other on-site personnel to a safe place until PSO determines that it is safe for work to resume.
6. Steps to prevent a reoccurrence of the accident should be implemented immediately.

#### **10.0 EMERGENCY TELEPHONE NUMBERS**

When emergency condition occurs at the site, the following telephone numbers should be used to notify emergency response personnel:

- Paramedics, Ambulance, Fire Department, and Police Department  
Dial 911.
- If unable to get an immediate response using 911
  - Fire Department (415) 444-3322
  - Police Department (415) 238-3481
  - Alameda Hospital (415) 522-3700

**HEALTH AND SAFETY BRIEFING FORM**Project No. 6983Project Name: GLASCOCK TANK REMOVALProject Manager: DON JAMESProject Manager: ABOVESite Safety Officer: DON JAMESDate of H & S Plan: 1-28-92Copy of Plan On-Site? ☒ Yes ☐ NoRequired Level of Protection: LISTEDAir Sampling Equipment/Methods: N/ARespirator Cartridges: N/AStaff In  
AttendanceRead H & S  
PlanHas H & S  
EquipmentStaff Members  
InitialsDON JAMES☒ Yes ☐ No☒ Yes ☐ No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

SUBCONTRACTORS

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

## HAZARDOUS MATERIALS HANDLING & RESPONSE COURSE

*This is to certify that*

DON W. JAMES, JR.

*has completed the requirements under OSHA 1910.120, topics included:*

- Site Layout
- Site Safety Plans
- Monitoring Equipment
- "Right to Know" Laws
- Medical Monitoring/Heat Stress
- Decontamination Procedures
- UST Removal Procedures
- Hazardous Materials ID Systems

<u>Course Dates</u>	<u>Expiration Date</u>	<u>Examination Date</u>	<u>Certificate#</u>
10/28-31/92	10/31/93	10/31/92	JH92-1003

AMERICAN ENVIRONMENTAL TRAINING INSTITUTE  
1-800-995-1435

## HAZARDOUS MATERIALS HANDLING & RESPONSE COURSE

*This is to certify that*

PETER A. SCHAFFER

*has completed the requirements under OSHA 1910.120, topics included:*

- Site Layout
- Site Safety Plans
- Monitoring Equipment
- "Right to Know" Laws
- Medical Monitoring/Heat Stress
- Decontamination Procedures
- UST Removal Procedures
- Hazardous Materials ID Systems

<u>Course Dates</u>	<u>Expiration Date</u>	<u>Examination Date</u>	<u>Certificate#</u>
10/28-31/92	10/31/93	10/31/92	JH92-1002

AMERICAN ENVIRONMENTAL TRAINING INSTITUTE  
1-800-995-1435



## HAZARDOUS MATERIALS HANDLING & RESPONSE COURSE

*This is to certify that*

**TIM J. PETERSON**

*has completed the requirements under OSHA 1910.120, topics included:*

- Site Layout
- Site Safety Plans
- Monitoring Equipment
- "Right to Know" Laws
- Medical Monitoring/Heat Stress
- Decontamination Procedures
- UST Removal Procedures
- Hazardous Materials ID Systems

<u>Course Dates</u>	<u>Expiration Date</u>	<u>Examination Date</u>	<u>Certificate#</u>
10/28-31/92	10/31/93	10/31/92	JH92-1001

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## HAZARDOUS MATERIALS HANDLING & RESPONSE COURSE

*This is to certify that*

**MICHAEL D.K. MULLIN**

*has completed the requirements under OSHA 1910.120, topics included:*

- Site Layout
- Site Safety Plans
- Monitoring Equipment
- "Right to Know" Laws
- Medical Monitoring/Heat Stress
- Decontamination Procedures
- UST Removal Procedures
- Hazardous Materials ID Systems

<u>Course Dates</u>	<u>Expiration Date</u>	<u>Examination Date</u>	<u>Certificate#</u>
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