DEPARTMENT OF THE NAVY
NAVY PUBLIC WORKS CENTER
SAN FRANCISCO BAY
P.O. BOX 24003
OAKLAND, CALIFORNIA 94623-1003

IN REPLY REFER TO:
5090
Ser 950/265
12 JUL 1994

Alameda County Health Care Service Agency
Department of Environmental Health
Hazardous Material Division
Attn: Eva Chu
80 Swan Way, Room 200
Oakland, CA 94621

Dear Ms. Chu:

We are forwarding the tank closure summary report for the removal of one underground storage tank at Parks Reserve Forces Training Area (Camp Parks). As requested by your office we have enclosed copies of all Hazardous Waste Manifests and copies of all related analytical work.

Based on our findings, Tank 109-1 showed signs of leakage. Further investigation of the site will be conducted by the Army under a separate contract action. This correspondence concludes the Navy Public Works Center's participation in this project. The point of contact at PWCSFB in this matter is Hemant Patel, (510) 302-5417.

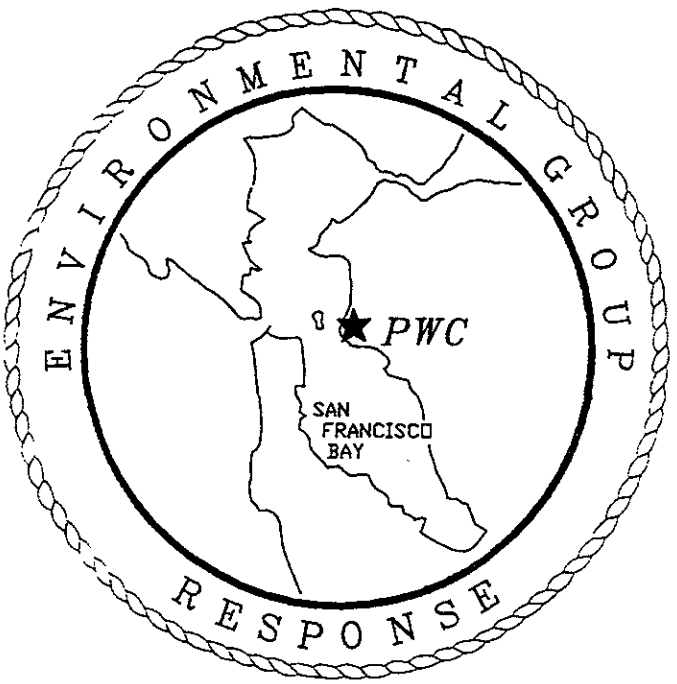
Sincerely,

For D. S. LENT.
Director, Environmental Department
By direction of the
Commanding Officer

Enclosure:
(1) Summary Report for the Removal of Tank 109, Parks Reserve Forces Training Area

ALCO HAZMAT
94 JUL 12 PM 2:11

TANK CLOSURE SUMMARY REPORT FOR THE REMOVAL OF TANK 109-1 AT THE PARKS, RESERVE FORCES TRAINING AREA



Prepared by:

Navy Public Works Center, San Francisco Bay
Environmental Engineering/Services Branch, Code 950
Oakland, California
July 7, 1994

PUBLIC WORKS CENTER

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TANK CLOSURE SUMMARY REPORT FOR THE REMOVAL OF TANK 109-1 AT THE PARKS, RESERVE FORCES TRAINING AREA

I. TANK CLOSURE SUMMARY REPORT:

A. Closure Activities: The closure activities were performed in accordance with the tank closure plan and site specific Health and Safety Plan approved on June 8, 1994. Tank Nos. 109-1 was removed on June 10, 1994. The Alameda County Department of Environmental Health inspector's records are included as Appendix A.

B. Conditions of Tanks, Fittings and Piping:

Tank #	Size (GAL)	Previous Content	Tank Material	Piping Cond.	Tank Cond.
B-109-1	3,000	Diesel	Steel	None	Corroded with some pit holes

Table 1 Summary of Tank and Piping Conditions

1. It is unknown when the tank was installed. Some corrosion pit holes were observed upon removal (approximate diameter of 0.5" maximum). The fittings and piping were not observed because they had been removed by a previous contractor.

C. Site Excavation:

1. Prior to the work conducted by the Navy Public Works Center, a contractor had exposed the tanks. The excavation measured approximately 20 ft x 15 ft x 10 ft. An excavator was used to lift the tank from the excavation pit.

2. The native soil was composed of a clay silt.

3. There were no root holes or potential contaminant pathway encountered during the excavation.

4. No groundwater was observed in the excavation.

5. Some streaks of green, odor bearing soil were observed on the east end of the tank.

D. Sampling Methods:

1. Soil samples were collected by carefully driving a brass tube measuring 2 x 6 inches into the soil contained in the excavator bucket. Both ends of the tube were capped with plastic end covers and sealed. All samples were stored in a chilled cooler and transported under chain of custody to a state certified laboratory.

2. All samples were collected by the Navy Public Work Center and analyzed by Sequoia Analytical. The results of the analysis are summarized in Table 2 and Table 3.

3. One sample was collected from soil beneath the east and west ends of the tank. Samples were collected within the first two feet of native soil. The sampling locations are illustrated in Figure 1, Appendix B. Sampling was witnessed by Ms. Eva Chu of the Alameda County Health Department. Samples were brought to the surface and collected from the excavator bucket.

	TRPH (PPM)	TPH-Motor Oil (PPM)	Benzene (PPM)	Toluene (PPM)	Ethyl-Benzene (PPM)	Xylene (PPM)
WEST	1400	320	N.D.	N.D.	N.D.	N.D.
EAST	2300	2000	N.D.	N.D.	.91	3.9

Table 2 Petroleum Soil Sampling Results for Tank 109

	Cadmium (PPM)	Chromium (PPM)	Lead (PPM)	Nickel (PPM)	Zinc (PPM)
WEST	.72	38	11	44	55
EAST	.65	36	11	45	61

Table 3 Metals Soil Sampling Results for Tank 109

E. Remedial Measures Conducted At The Time of Tank Removals:

No remedial measures were conducted, other than the removal of the underground storage tanks. The soil removed from the excavation by the previous contractor remains on site and will be appropriately handled under the site investigation and closure action. The Bay Area Air Quality Management District was also notified of our actions and the notification forms are enclosed in Appendix C.

F. To-Scale Figures of Excavation, Sample Locations, and Plot Plan:

1. Site Excavation, Appendix B, Figure 2.
2. Sampling Locations, Appendix B, Figure 2.
3. Plot Plan, Appendix B, Figure 1.

G. Copies of Signed Laboratory Reports and Chain of Custody Records: See Appendix D.

H. "TSDF to Generator" Manifests for all Hazardous Waste Hauled Offsite:

1. One drum of sludge was removed from the UST prior to inerting. This drum was transferred to the hazardous waste storage facility at Camp Parks and will be disposed within ninety days from the date of accumulation.

2. The UST was hauled offsite by Erickson Environmental. The manifest is enclosed in Appendix E.

I. Tabulation of the volume and final destination of all Non-Manifested Contaminated Soil Hauled Offsite:

No soil was removed offsite.

II. CONCLUSION AND RECOMMENDATIONS:

1. Based on the integrity of the tanks and sampling results, the site has been impacted by a release from Tank 109-1. Analytical data summarized in Table 1 indicate elevated levels of recoverable petroleum hydrocarbons as well as motor oil.

2. Future activities to determine the extent of soil contamination may include soil borings, a soil gas survey, and installation of monitoring wells. These activities will be described in detail in a soil sampling and groundwater monitoring plan to be prepared for the site in conjunction with the work plan for initial subsurface investigations.

APPENDIX A

Hazardous Materials Division Inspection Forms

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 _____ Today's Date ___/___/___

Site Address _____ EPA ID# _____

City _____ Zip 94 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)

I.A GENERATOR (Title 22)

	___ 1. Waste ID	* 66471
	___ 2. EPA ID	66472
	___ 3. > 90 days	66508
	___ 4. Label dates	66508
	___ 5. Biennial	66493
Manifest	___ 6. Records	66492
	___ 7. Correct	66484
	___ 8. Copy sent	66492
	___ 9. Exception	66484
	___ 10. Copies Rec'd	66492
	___ 11. Treatment	66371
	___ 12. On-site Disp. (H.S.&C.)	26189.5
	___ 13. Ex Haz. Waste	66570
Prevention	___ 14. Communications	67121
	___ 15. Aisle Space	67124
	___ 16. Local Authority	67126
	___ 17. Maintenance	67120
	___ 18. Training	67105
Contin. gency	___ 19. Prepared	67140
	___ 20. Name List	67141
	___ 21. Copies	67141
	___ 22. Emg. Coord. Trng.	67144
Containers, Tanks	___ 23. Condition	67241
	___ 24. Compatibility	67242
	___ 25. Maintenance	67243
	___ 26. Inspection	67244
	___ 27. Buffer Zone	67246
	___ 28. Tank Inspection	67259
	___ 29. Containment	67245
	___ 30. Safe Storage	67261
	___ 31. Freeboard	67257

I.B TRANSPORTER (Title 22)

	___ 32. Applic./Insurance	66428
	___ 33. Comp. Cert./CHP Insp.	66448
	___ 34. Containers	66465
Manifest	___ 35. Vehicles	66465
	___ 36. EPA ID #s	66531
	___ 37. Correct	66541
	___ 38. HW Delivery	66543
	___ 39. Records	66544
Cont'rs	___ 40. Name/ Covers	66545
	___ 41. Recyclables	66800

Comments:

Contact: _____

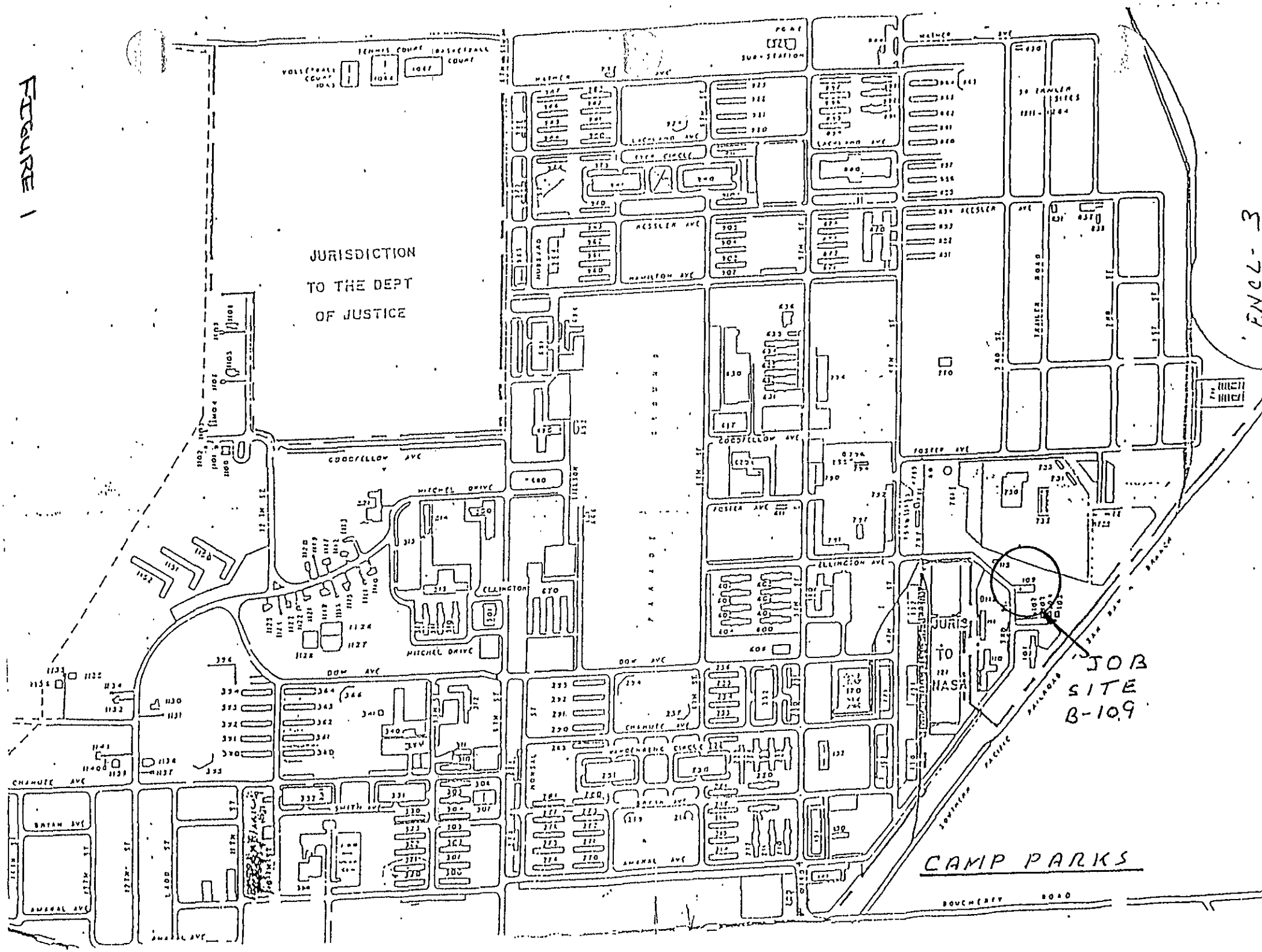
Title: _____ Inspector: _____

Signature: _____ Signature: _____

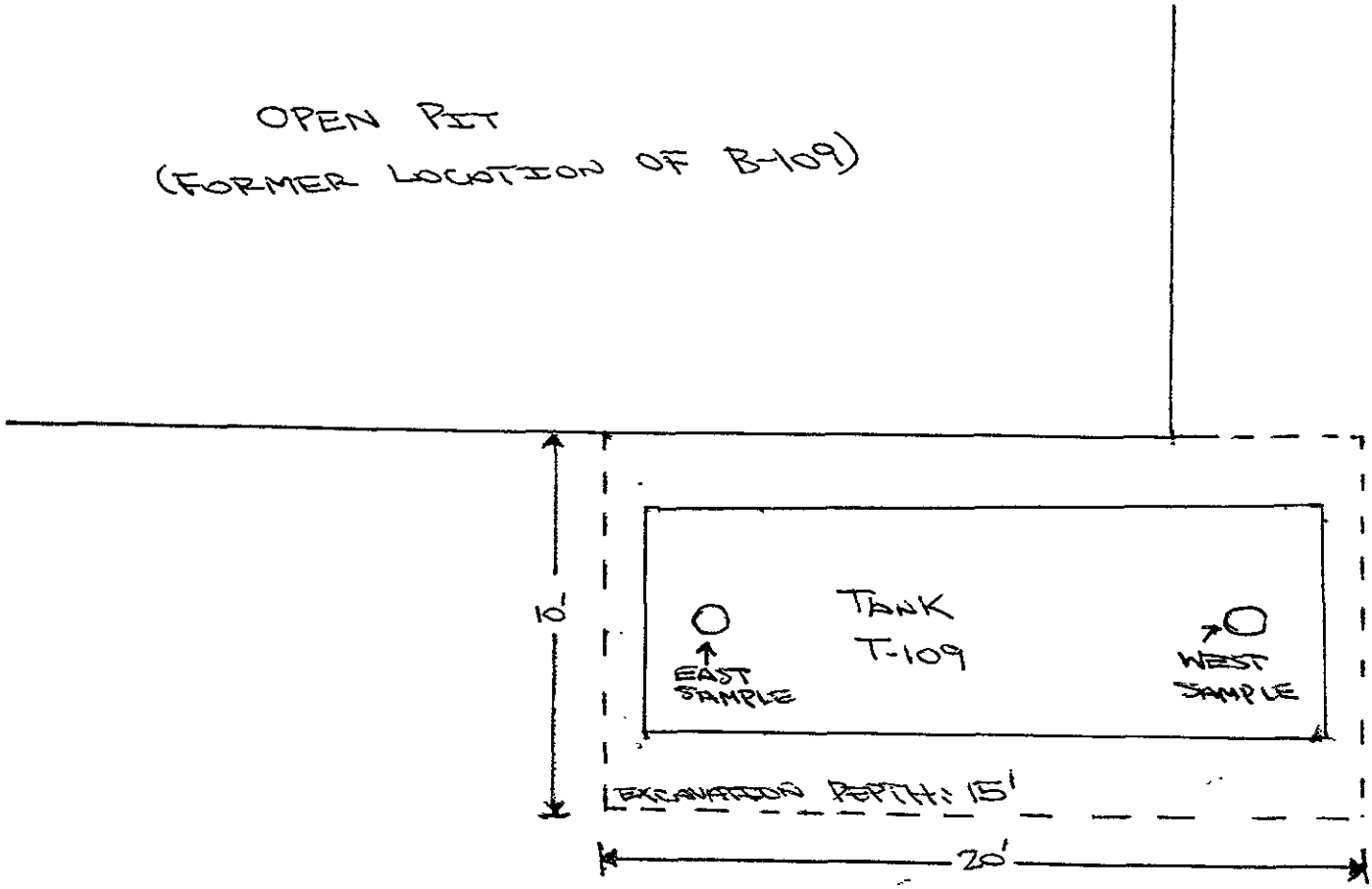
APPENDIX B

Figures and Sketches

FIGURE 1



ENCL-3



SAMPLING LOCATIONS FOR T-109, PARKS REFTA.

N

SCALE: 1" = 5 FEET

FIGURE 2

APPENDIX C

Bay Area Air Quality Management District
Notification Form

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

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

LEFT MSG ON 6/7/94 TO CHANGE DATE TO 6/9/94 @ 1:30PM.

NOTIFICATION FORM

____ Removal or Replacement of Tanks
____ Excavation of Contaminated Soil

SITE INFORMATION

SITE ADDRESS BUILDING 109 CAMP PARKS
CITY, STATE DUBLIN, CA. ZIP 94568
OWNER NAME U.S. ARMY (12th ARCOM)
SPECIFIC LOCATION OF PROJECT B-109 NW SIDE OF BUILDING

TANK REMOVAL

SCHEDULED STARTUP DATE 6-3-94
VAPORS REMOVED BY:
[ ] WATER WASH
[X] VAPOR FREEING (CO^2)
[ ] VENTILATION

CONTAMINATED SOIL EXCAVATION

SCHEDULED STARTUP DATE 6-3-94
STOCKPILES WILL BE COVERED? YES X NO ____
ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):
_____
(MAY REQUIRE PERMIT)

CONTRACTOR INFORMATION

NAME NAVY PUBLIC WORKS CENTER CONTACT HEMANT PATEL
ADDRESS P.O. BOX 24003 PHONE (510) 302-5417
CITY, STATE, ZIP OAKLAND CA. 94623

CONSULTANT INFORMATION
(IF APPLICABLE)

NAME _____ CONTACT _____
ADDRESS _____ PHONE ( ) _____
CITY, STATE, ZIP _____

FOR OFFICE USE ONLY

DATE RECEIVED FAX _____ BY _____ (init.)
DATE POSTMARKED _____ BY _____ (init.)
CC: INSPECTOR NO. _____ DATE _____ BY _____ (init.)
DATE: CONTACT NAME _____ DATE _____ BY _____ (init.)
BAAQMD N # _____ DATA ENTRY _____

: 91

• See reverse for instructions

INSTRUCTIONS

Specific Location of Project: Indicate where the tank removal or soil excavation is taking place.

Examples: -Northwest corner of Gas Station lot
-Pit D of South Excavation area
-Fuel storage area north of Auxiliary Road

Scheduled Startup Date: **Indicate a correct and accurate startup date.** If this date is delayed (by no more than **five** working days) telephone the District at (415) 771-6000, extension 128, to report the new startup date. If the project is delayed for more than five days, submit a new form and indicate the status of your previous notification.

Tank Removal: Indicate what type method will be used to remove vapors after tank is emptied of product. (Tanks must have all liquids and sludges removed to the extent possible before decommissioning.)

Soil Excavation: Indicate whether contaminated soil stockpile will be covered. If an alternative method of aeration will be used (e.g., forced air), briefly describe.

Contractor Information: Indicate the name, address, appropriate contact person and phone number of the contractor performing and responsible for the tank removal and/or soil excavation.

Consultant Information: If applicable, indicate the name, address, appropriate contact person and phone number of any environmental consultant used.

NOTE

- Notification must be postmarked **at least five days prior** to startup of **tank removal** and/or **soil excavation.**
- *Aeration* of contaminated soil shall be reported to the District by telephone no less than 24 hours prior to the spreading or heating of any contaminated soil.
- Return this form by FAX (415) 928-0338 or mail to:

  Bay Area Air Quality Management District
  939 Ellis Street
  San Francisco, CA 94109
  Attn: Enforcement Division

- Soil aeration operations do not require a BAAQMD permit **unless**:

  1. The project exceeds three months time or,
  2. An alternative method other than spreading the soil for evaporation will be used, or
  3. Tanks are being replaced (new installation).

- *Use this form to meet the reporting requirements of Regulation 8, Rule 40, Section 400.*

APPENDIX D

Copies of Analytical Results and Chain of Custody Reports

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled:	Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Matrix Descript:	Soil	Received:	Jun 13, 1994
Oakland, CA 94623-1003	Analysis Method:	SM 5520 E&F (Gravimetric)		
Attention: Mona McCarty	First Sample #:	4F77701	Analyzed:	Jul 1, 1994
		T-109 Camp Parks	Reported:	Jul 6, 1994

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
4F77701 COC #1	T-109 West	1,400
4F77702 COC #2	T-109 East	2,300

Detection Limits:	50

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled:	Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Sample Descript:	Soil,T-109 West	Received:	Jun 13, 1994
Oakland, CA 94623-1003		T-109 Camp Parks	Analyzed:	see below
Attention: Mona McCarty	Lab Number:	4F77701 COC #1	Reported:	Jul 6, 1994

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit mg/kg	Sample Result mg/kg
Cadmium	7/1/94	0.50	0.72
Chromium	7/1/94	0.50	38
Lead	7/1/94	5.0	11
Nickel	7/1/94	2.5	44
Zinc	7/1/94	0.50	55

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

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Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled:	Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Sample Descript:	Soil,T-109 East	Received:	Jun 13, 1994
Oakland, CA 94623-1003		T-109 Camp Parks	Analyzed:	see below
Attention: Mona McCarty	Lab Number:	4F77702 COC #2	Reported:	Jul 6, 1994

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit mg/kg	Sample Result mg/kg
Cadmium	7/1/94	0.50	0.65
Chromium	7/1/94	0.50	36
Lead	7/1/94	5.0	11
Nickel	7/1/94	2.5	45
Zinc	7/1/94	0.50	61

Analytes reported as N.D. were not present above the stated limit of detection.

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Mario A. Balatti
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Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled:	Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Sample Descript:	Soil, T-109 West, T-109 Camp Parks	Received:	Jun 13, 1994
Oakland, CA 94623-1003	Analysis Method:	EPA 5030/8010	Analyzed:	Jun 30, 1994
Attention: Mona McCarty	Lab Number:	4F77701 COC #1	Reported:	Jul 6, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
[illegible]-Dichlorobenzene	5.0	N.D.
[illegible]-Dichloroethane	5.0	N.D.
[illegible]-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Mario A. Balatti
Project Manager

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Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled:	Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Sample Descript:	Soil, T-109 East, T-109 Camp Parks	Received:	Jun 13, 1994
Oakland, CA 94623-1003	Analysis Method:	EPA 5030/8010	Analyzed:	Jun 30, 1994
Attention: Mona McCarty	Lab Number:	4F77702 COC #2	Reported:	Jul 6, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
-Dichlorobenzene	5.0	N.D.
-Dichloroethane	5.0	N.D.
,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

QUOIA ANALYTICAL

Mario A. Balatti
Project Manager

Sequoia Analytical

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Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled:	Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Sample Matrix:	Soil	Received:	Jun 13, 1994
Oakland, CA 94623-1003	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jul 6, 1994
Attention: Mona McCarty	First Sample #:	4F77701		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 4F77701 T-109 West COC #1	Sample I.D. 4F77702 T-109 East COC #2
Purgeable Hydrocarbons	1.0	4.9	490
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	0.91
Total Xylenes	0.0050	N.D.	3.9
Chromatogram Pattern:		Non Gas Mix >C8	Non Gas Mix >C7

Quality Control Data

Report Limit Multiplication Factor:	1.0	50
Date Analyzed:	6/14/94	6/30/94
Instrument Identification:	GCHP-06	GCHP-18
Surrogate Recovery, %: (QC Limits = 70-130%)	90	94

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

Sequoia Analytical

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Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled:	Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Sample Matrix:	Soil	Received:	Jun 13, 1994
Oakland, CA 94623-1003	Analysis Method:	EPA 3550/8015	Reported:	Jul 6, 1994
Attention: Mona McCarty	First Sample #:	4F77702		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 4F77701 T-109 West COC #1	Sample I.D. 4F77702 T-109 East COC #2
Extractable Hydrocarbons	1.0	69	2,200
Chromatogram Pattern:		Non Diesel Mix>c14	Diesel

Quality Control Data

Report Limit Multiplication Factor:	1.0	100
Date Extracted:	6/14/94	6/29/94
Date Analyzed:	6/14/94	6/30/94
Instrument Identification:	GCHP-4B	GCHP-5A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

Sequoia Analytical

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Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled: Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Sample Matrix:	Soil	Received: Jun 13, 1994
Oakland, CA 94623-1003	Analysis Method:	EPA 3550/8015 Mod.	Reported: Jul 6, 1994
Attention: Mona McCarty	First Sample #:	4F77701	

FUEL FINGERPRINT: Jet Fuel

Analyte	Reporting Limit mg/kg	Sample I.D. 4F77701 T-109 West COC #1	Sample I.D. 4F77702 T-109 East COC #2
Extractable Hydrocarbons	5.0	N.D.	740
Chromatogram Pattern:			C10-C18

Quality Control Data

Report Limit Multiplication Factor:	5.0	100
Date Extracted:	6/14/94	6/29/94
Date Analyzed:	6/14/94	6/30/94
Instrument Identification:	GCHP-4B	GCHP-5A

Extractable Hydrocarbons are quantitated against a fresh jet fuel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Navy Public Works Center	Client Project ID:	H02958, Chit #542	Sampled: Jun 10, 1994
NPWC-Code 613, P.O. Box 24003	Sample Matrix:	Soil	Received: Jun 13, 1994
Oakland, CA 94623-1003	Analysis Method:	EPA 3550/8015 Mod.	Reported: Jul 6, 1994
Attention: Mona McCarty	First Sample #:	4F77701	

FUEL FINGERPRINT: Motor Oil

Analyte	Reporting Limit mg/kg	Sample I.D. 4F77701 T-109 West COC #1	Sample I.D. 4F77702 T-109 East COC #2
Extractable Hydrocarbons	5.0	320	2,000
Chromatogram Pattern:		Motor Oil	Motor Oil

Quality Control Data

Report Limit Multiplication Factor:	10	50
Date Extracted:	6/14/94	6/29/94
Date Analyzed:	6/17/94	6/30/94
Instrument Identification:	GCHP-4A	GCHP-4B

Extractable Hydrocarbons are quantitated against a fresh motor oil standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

Sequoia Analytical

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Navy Public Works Center
NPWC-Code 613, P.O. Box 24003
Oakland, CA 94623-1003
Attention: Mona McCarty

Client Project ID: H02958, Chit #542
Matrix: Liquid
QC Sample Group: 4F77701-02

Reported: Jul 6, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Beryllium	Cadmium	Chromium	Nickel	Total Oil & Grease
Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	SM 5520EFF
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser	A. Pina
MS/MSD Batch#:	4FD0301	4FD0301	4FD0301	4FD0301	4F77701
Date Prepared:	6/28/94	6/28/94	6/28/94	6/28/94	7/5/94
Date Analyzed:	6/28/94	6/28/94	6/28/94	6/28/94	7/5/94
Instrument I.D.#:	MTJA-4	MTJA-4	MTJA-4	MTJA-4	-
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg	1000 mg/L
Matrix Spike % Recovery:	98	101	100	90	100
Matrix Spike Duplicate % Recovery:	96	101	90	90	110
Relative % Difference:	2.1	0.0	11	0.0	9.5
LCS Batch#:	BLK062894	BLK062894	BLK062894	BLK062894	BLK070594
Date Prepared:	6/28/94	6/28/94	6/28/94	6/28/94	7/5/94
Date Analyzed:	6/28/94	6/28/94	6/28/94	6/28/94	7/5/94
Instrument I.D.#:	MTJA-4	MTJA-4	MTJA-4	MTJA-4	-
LCS % Recovery:	110	110	110	110	78
% Recovery Control Limits:	75-125	75-125	75-125	75-125	70-110

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

4F77701.NPW <10>

Sequoia Analytical

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Navy Public Works Center
NPWC-Code 613, P.O. Box 24003
Oakland, CA 94623-1003
Attention: Mona McCarty

Client Project ID: H02958, Chit #542
Matrix: Solid
QC Sample Group: 4F77701-02

Reported: Jul 6, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Benzene	Toluene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8020	EPA 8020	EPA 8020
Analyst:	T. Costello	T. Costello	T. Costello	T. Costello	T. Costello	T. Costello
MS/MSD Batch#:	V4FC9604	V4FC9604	V4FC9604	V4FC9604	V4FC9604	V4FC9604
Date Prepared:	6/28/94	6/28/94	6/28/94	6/28/94	6/28/94	6/28/94
Date Analyzed:	6/28/94	6/28/94	6/28/94	6/28/94	6/28/94	6/28/94
Instrument I.D.#:	GCHP09	GCHP09	GCHP09	GCHP09	GCHP09	GCHP09
Conc. Spiked:	25 µg/kg	25 µg/kg	25 µg/kg	25 µg/kg	25 µg/kg	25 µg/kg
Matrix Spike % Recovery:	48	92	92	88	104	92
Matrix Spike Duplicate % Recovery:	48	84	84	92	100	92
Relative % Difference:	0.0	9.1	9.1	4.4	3.9	0.0

LCS Batch#:						
Date Prepared:						
Date Analyzed:						
Instrument I.D.#:						
LCS % Recovery:						
% Recovery Control Limits:	28-167	35-146	38-150	39-150	46-148	55-135

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

Please Note:
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Sequoia Analytical

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Navy Public Works Center
NPWC-Code 613, P.O. Box 24003
Oakland, CA 94623-1003
Attention: Mona McCarty

Client Project ID: H02958, Chit #542
Matrix: Solid
QC Sample Group: 4F77702

Reported: Jul 6, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler	AN
MS/MSD Batch#:	4FE4015	4FE4015	4FE4015	4FE4015	4FB1112
Date Prepared:	6/30/94	6/30/94	6/30/94	6/30/94	6/23/94
Date Analyzed:	6/30/94	6/30/94	6/30/94	6/30/94	6/24/94
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18	GCHP-4B
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg	15 mg/kg
Matrix Spike % Recovery:	105	110	110	108	100
Matrix Spike Duplicate % Recovery:	100	105	105	103	73
Relative % Difference:	4.9	4.7	4.7	4.7	31

LCS Batch#:					
Date Prepared:					
Date Analyzed:					
Instrument I.D.#:					
LCS % Recovery:					
% Recovery Control Limits:	55-145	47-149	47-155	56-140	38-122

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Mario A. Balatti
Project Manager

PUBLIC WORKS

NAVY PUBLIC WORKS CENTER
SAN FRANCISCO BAY
P.O. BOX 24003
OAKLAND, CA. 94623

CHEMICAL ANALYSIS CHAIN OF CUSTODY FORM

H 7958

CUSTOMER: 124th ARCOM / ARMY CORPS

PROJECT # 078-400018

CHIT#

LOCATION/SITE: T-109 CAMP PARKS

DATE: 6-10-94

PERMIT #

JON: 1586125

SAMPLE ID	DESCRIPTION MATRIX	DATE/TIME	PRESERVATIVE HNO_3	NAOH	H_2SO_4	HCL	NONE	CONTAINER TYPE	ANALYSIS REQUIRED
T-109 West	SOIL	6/10/94					X	BRASS TUBE	TPH FULL (DIESEL, GASOLINE, ETC.) W/ BTEX
T-109 East	SOIL	6/10/94					X	"	~~METALS~~, OIL & GREASE, CHLORINATED HYDROCARBONS
									→ CR, CD, PB, ZN, NI.

COMMENTS:

TURN AROUND TIME:

ROUTINE	X
24 HR.	
WEEKEND	

RELINQUISHED BY: D. Tuttle 6/10/94

DELIVERED BY: D. Tuttle 6/10/94

RECEIVED IN OFFICE BY: Th. Faulkner 6/13/94 0, 155

RECEIVED BY LAB REP:

RECEIVED IN LAB BY:

COPY TO CUSTOMER

SAMPLER SIGN:

DATE/TIME:

RETURN TO H. Dixon

PWCSFB 5600/1 (Rev. 4-93)

APPENDIX E

Hazardous Waste Manifests

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

85220

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAL000121364
Manifest Document No.: 37636
2. Page 1 of 1

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

3. Generator's Name and Mailing Address: CDR Parks Reserve Forces Training Area, Bldg. 790 Dublin, Ca. 94568-5201
4. Generator's Phone: (510 829-8780
5. Transporter 1 Company Name: Erickson Inc.
6. US EPA ID Number: CAD009466392
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address:
Erickson, Inc.
255 Parr Blvd.
Richmond, CA. 94801
10. US EPA ID Number: CAD009466392

[illegible] (510)235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON-RCRA Hazardous Waste Solid Waste Empty Storage Tank.	001	TP	03000	P	State [illegible] EPA/Other [illegible]
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
Qty. 1 Empty Storage Tank(s) [illegible]
Tank(s) have been [illegible]
lbs Dry Ice Per 1000 Gallon Capacity [illegible]

K. Handling Codes for Wastes Listed Above
a. b.
c. d.

15. Special Handling Instructions and Additional Information
Keep away from sources of ignition. Always wear hardhats when working around U.G.S.T.'s 24 Hr. Contact Name. FIRE DEPT & Phone (510) 828-2057

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: MERVIN ALLEY
Signature: Mervin Alley
Month/Day/Year: 06 10 94

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Steve Fleming
Signature: Steve Fleming
Month/Day/Year: 06 10 94

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:

GENERATOR / TRANSPORTER / FACILITY

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

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (7/92)
EPA 8700—22

Blue: GENERATOR SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 400, Sacramento, CA 95812-0400