

20 2443

SITE CHARACTERIZATION REPORT

TANK #K01

U.S. COAST GUARD

COAST GUARD ISLAND

ALAMEDA, CA

RAH Environmental, Inc.

3310 Swetzer Road

Loomis, CA 95650

October 23, 1997

**ENCLOSURE(1)**

## I. INTRODUCTION

RAH Environmental, Inc. was contracted by the United States Coast Guard under contract #DTCG88-97-B-623174 to perform underground storage tank and piping removal operations at Building 51 on Coast Guard Island in Alameda, CA. The project included the removal of one five hundred fifty gallon diesel storage tank and related piping.

## II. SITE DESCRIPTION

The project site is on Coast Guard Island, located in Alameda, CA. The underground storage tank was located to the rear of Building 51, and formerly stored diesel fuel to power an emergency generator. The tank had a small 4" thick concrete slab above it, and approximately 20 feet of piping which was connected to a small pump.

## III. SOIL SAMPLING AND ANALYSIS

On August 28, 1997, following the removal of the tank, at approximately 1:00 PM, one soil sample was collected from the base of the tank excavation, one sample from beneath the piping next to the pump, and one sample from the soil stockpile. No groundwater was encountered during the tank removal or sampling operations. The sample from the excavation (BLDG. 51 TANK) was collected from 4.5' below ground surface on the east wall using a 2"x6" brass tube and sampling the native soil directly from the backhoe bucket. The sample from beneath the piping (BLDG. 51 PUMP) was collected from 2' below ground surface using a drive sampler with a 2"x6" brass tube. A single sample (BLDG. 51 PILE) was collected from the stockpile, also in a 2"x6" brass tube. The samples were preserved on ice at 4°C and transported under chain of custody to NEI/GTEL for analysis. NEI/GTEL is state certified under #1845 and is located at 4080-C Pike Lane in Concord, CA 94520. The following table summarizes the conditions under which the samples were taken:

Table 1

Sample ID#	Time	Temperature	Weather	Tide
BLDG.51 TANK	1:00 PM	78°	Clear, Sunny	-2.0
BLDG.51 PUMP	1:30 PM	78°	Clear, Sunny	-2.5
BLDG.51 PILE	2:30 PM	78°	Clear, Sunny	-2.6

Results of the soil sampling indicate that the subsurface soil was not impacted by significant concentrations of petroleum hydrocarbons. The sample collected from the base of the excavation contained no detectable levels of TPH-diesel or BTEX. The sample collected from beneath the piping at the pump did contain 31 ppm of TPH-as-diesel, but no benzene, toluene, ethylbenzene, or xylene. The stockpile sample contained 150 ppm of TPH-as-diesel, but also contained no benzene, toluene, ethylbenzene, or xylene. The analytical results are summarized in Table 2 below, and the full laboratory

reports are included as an attachment.

Table 2

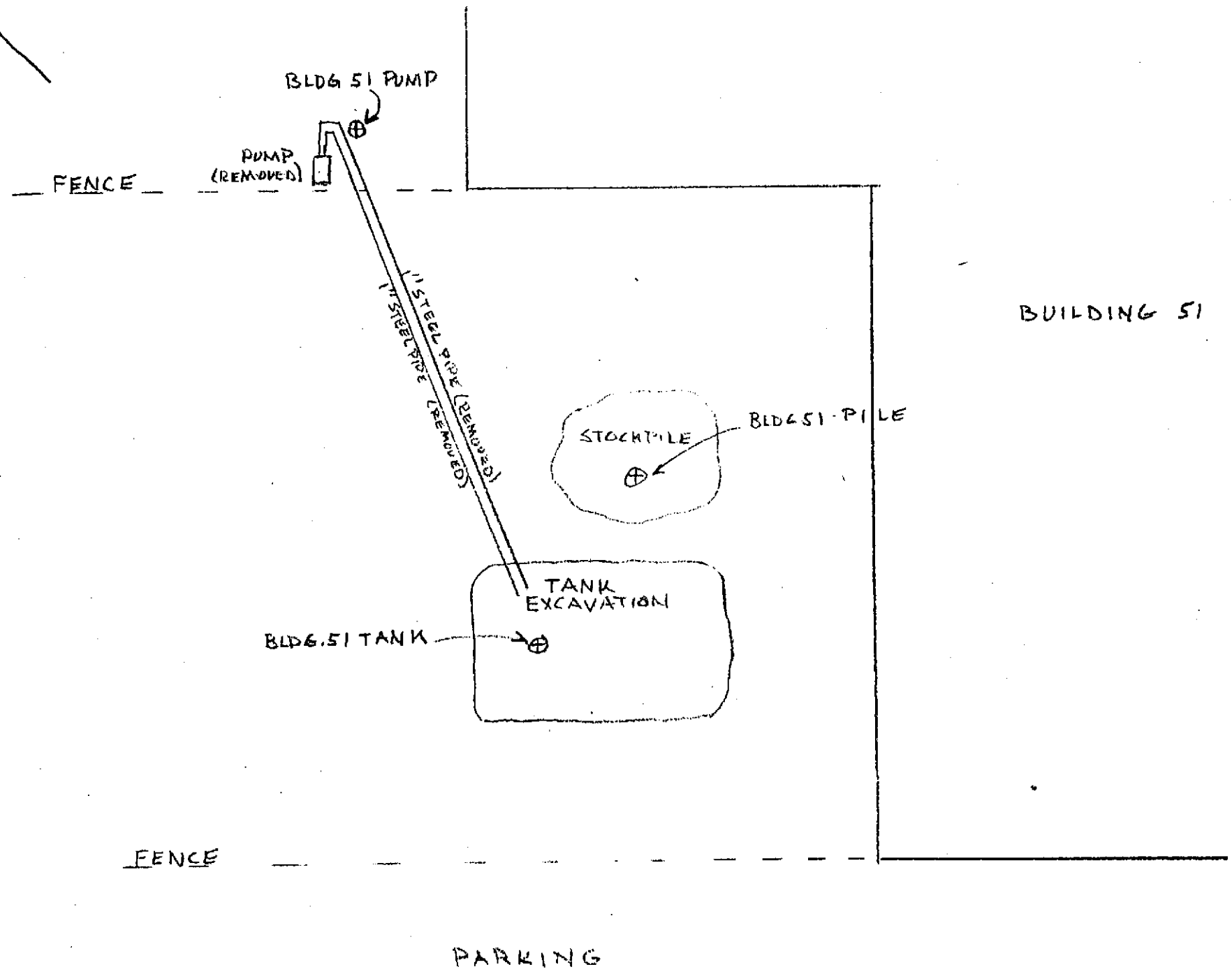
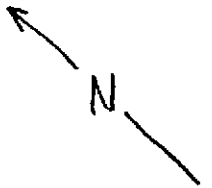
Sample ID	TPHdiesel	Benzene	Toluene	Ethylbenzene	Xylene
BLDG. 51 TANK	<10	<0.05	<0.10	<0.10	<0.20
BLDG. 51 PUMP	31	<0.05	<0.10	<0.10	<0.20
BLDG. 19 PILE	150	<0.05	<0.10	<0.10	<0.20

All results reported in **parts per million(mg/kg)**, unless otherwise indicated.

#### IV. RECOMMENDATIONS

Based on the results of the soil sampling and analysis, there are no significant concentrations of petroleum hydrocarbons in the soil, and the site should be eligible for regulatory closure.

FIGURE 1  
USCB - ISC ALAMEDA  
TANK # KOI REMOVAL (8-28-97)





**Midwest Region**

4211 May Avenue  
Wichita, KS 67209  
(316) 945-2624  
(800) 633-7936  
(316) 945-0506 (FAX)

September 12, 1997

Scott Vickers  
RAH Environmental Inc.  
3310 Swetzer Road  
Loomis, CA 95650

---

RE: NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number):  
Project ID (name): USCG/ALAMEDA/AFB

---

Dear Scott Vickers:

Enclosed please find the analytical results for the samples received by NEI/GTEL Environmental Laboratories, Inc. on 08/30/97 under Chain-of-Custody Number(s) 36374.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by NEI/GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes. This report is to be reproduced only in full.

NEI/GTEL is certified by the California Department of Health Service under Certification Number 2147.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,  
NEI/GTEL Environmental Laboratories, Inc.

Terry R. Loucks  
Laboratory Director

ANALYTICAL RESULTS

Metals

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 7421  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-04	W7080571-05	W7080571-06	W7080571-07
Client ID	BLDG 19 WEST	BLDG 19 EAST	BLDG 19 PILE	BLDG 15 NORTH
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Prepared	09/12/97	09/12/97	09/12/97	09/12/97
Date Analyzed	09/12/97	09/12/97	09/12/97	09/12/97
Dilution Factor	20.0	10.0	10.0	5.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Lead	0.40	mg/kg	62	26	24	6.5
Percent Solids	--	%	79.3	78.5	83.2	90.8

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 7421:

Digestion by EPA Method 3050A. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods". SW-846. Third Edition including Update 2.

**ANALYTICAL RESULTS**  
Metals

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 7421  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-08	--	--	--
Client ID	BLDG 15 SOUTH	--	--	--
Date Sampled	08/28/97	--	--	--
Date Prepared	09/12/97	--	--	--
Date Analyzed	09/12/97	--	--	--
Dilution Factor	10.0	--	--	--

Analyte	Reporting Limit	Units	Concentration	Wet Weight
Lead	0.40	mg/kg	31.	--
Percent Solids	--	%	87.2	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 7421:

Digestion by EPA Method 3050A. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods". SW-846. Third Edition including Update 2.

**ANALYTICAL RESULTS**  
**Total Petroleum Hydrocarbons By GC**

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: GC  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-01	W7080571-02	W7080571-03	--
Client ID	BLDG 51 TANK	BLDG 51 PUMP	BLDG 51 PILE	--
Date Sampled	08/28/97	08/28/97	08/28/97	--
Date Prepared	09/04/97	09/04/97	09/04/97	--
Date Analyzed	09/06/97	09/06/97	09/06/97	--
Dilution Factor	1.00	1.00	1.00	--

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
TPH as Diesel	10	mg/kg	< 10	31	150	--
Percent Solids	--	%	97.5	85.3	100	--

**Notes:**

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

**GC:**

Extraction by EPA Method 3550 (sonication). ASTM Method D3328(modified) is used for qualitative identification of fuel patterns. The method has been modified to include quantitation by applying calibration and quality assurance guidelines outlined in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. This method is equivalent to the California LUFT manual DHS method for diesel fuel.

**W7080571-02:**

The material present is qualitatively uncertain. Therefore, all material in the C9 to C22 range was quantitated against diesel fuel without respect to pattern. Chromatographic data indicates the presence of material, which is heavier than diesel fuel, in this sample.

**W7080571-03:**

The material present is qualitatively uncertain. Therefore, all material in the C9 to C22 range was quantitated against diesel fuel without respect to pattern. Chromatographic data indicates the presence of material, which is heavier than diesel fuel, in this sample.



NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Conformance/Non-Conformance Summary

(X = Requirements Met \* = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	--	--	--
Surrogate Recovery	--	*	NA
Holding Time	--	X	--
Method Accuracy	--	X	--
Method Precision	--	X	--
Blank Contamination	--	X	--

Comments:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Surrogate Results

QC Batch No.	Reference	Sample ID	OTP
Method: GC			Acceptability Limits: 43.7-111%
090497TPHS-1	BS090497TPH	Method Blank Soil	43.6*
090497TPHS-2	LS090497TPH	Laboratory control	69.3
090497TPHS-3	LSD090497TPH	LCS Soil Duplicate	69.3
090497TPHS-4	MS08054501	Matrix Spike	73.0
090497TPHS-5	MO08054501	Matrix Spike Dupl1	65.7
--	08057101	BLDG 51 TANK	66.1
--	08057102	BLDG 51 PUMP	78.0
--	08057103	BLDG 51 PILE	73.8

Notes:

\*: Indicates values outside of acceptability limits. See Sample Report.  
Acceptability limits are derived from statistical analysis of laboratory samples.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Method Blank Results

QC Batch No: 090497TPHS-1  
Date Analyzed: 05-SEP-97

Analyte	Method:GC	Concentration: mg/kg
Diesel Range Organics		< 10.0

Notes:

090497TPHS-1: Surrogate spike recovery is outside of acceptability limits. The reported concentration for this sample should be considered as an estimate.

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
 Method: GC  
 Matrix: Solids

Matrix Spike(MS) and Matrix Spike Duplicate(MSD) Results

GTEL Sample ID:W7080545-01		MS ID:MS08054501		MSD ID:MD08054501					
Analysis Date: 06-SEP-97		05-SEP-97		05-SEP-97					
Units: ug/ml	Sample	Spikes Added		MS	MS	MSD	MSD	Acceptability Limits	
Analyte	Conc.	MS	MSD	Conc.	% Rec.	Conc.	% Rec.	RPD	RPD %Rec.
Diesel Range Organics	< 10.0(0.190)	66.4	65.3	47.9	71.9	41.0	62.5	14.0	29.2 34.3-121

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.  
 Acceptability limits are derived from statistical analysis of laboratory samples.

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
 Method: GC  
 Matrix: Solids

Laboratory Control Sample (LCS) and Laboratory Control Duplicate Results

Analyte	Spike Amount	LCS Concentration	LCS Recovery, %	LCS Duplicate Concentration	LCS Duplicate Recovery, %	Acceptability Limits	
						RPD, %	Recovery, %
GC	Units: mg/kg	QC Batch: 090497TPHS-3					
Diesel Range Organics	66.7	47.4	72.3	47.8	72.3	0.00	30.4 - 39.8-115%

Notes:  
 Acceptability limits are derived from statistical analysis of laboratory samples.

**ANALYTICAL RESULTS**  
Volatile Organics

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 8020A  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-01	W7080571-02	W7080571-03	W7080571-04
Client ID	BLDG 51 TANK	BLDG 51 PUMP	BLDG 51 PILE	BLDG 19 WEST
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Analyzed	09/04/97	09/04/97	09/04/97	09/04/97
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Benzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.35
Toluene	0.10	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10
Ethylbenzene	0.10	mg/kg	< 0.10	< 0.10	< 0.10	14.
Xylenes (total)	0.20	mg/kg	< 0.20	< 0.20	< 0.20	11.
TPH as Gasoline	10.	mg/kg	--	--	--	3000
Percent Solids	--	%	97.5	85.3	100.	79.3

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods", SW-846. Third Edition including promulgated Update II.

**ANALYTICAL RESULTS**  
**Volatile Organics**

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 8020A  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-05	W7080571-06	W7080571-07	W7080571-08
Client ID	BLDG 19 EAST	BLDG 19 PILE	BLDG 15 NORTH	BLDG 15 SOUTH
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Analyzed	09/04/97	09/04/97	09/05/97	09/05/97
Dilution Factor	1.00	1.00	5.00	5.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Benzene	0.05	mg/kg	0.10	< 0.05	3.2	7.0
Toluene	0.10	mg/kg	< 0.10	< 0.10	38.	23.
Ethylbenzene	0.10	mg/kg	4.2	1.3	81.	55.
Xylenes (total)	0.20	mg/kg	2.7	2.5	270	190
TPH as Gasoline	10.	mg/kg	730	230	6000	4100
Percent Solids	--	%	78.5	83.2	90.8	87.2

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Conformance/Non-Conformance Summary

(X = Requirements Met \* = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	X	--	--
Surrogate Recovery	X	--	NA
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments:



NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT
Method: EPA 8020A Acceptability Limits:			43-136%
090497GC10-1	CV0904972010	Calibration Verifi	88.2
090497GC10-2	BW09049710	Method Blank Water	91.1
090497GC10-3	BS09049710	Method Blank Soil	107
090497GC10-4	MS08057101	Matrix Spike	111.
090497GC10-5	MD08057101	Matrix Spike Dupl1	114.
090497GC10-6	LS09049710	Laboratory control	115.
--	08057101	BLDG 51 TANK	109
--	08057102	BLDG 51 PUMP	106.
--	08057103	BLDG 51 PILE	84.6
--	08057104	BLDG 19 WEST	132.
--	08057105	BLDG 19 EAST	129
--	08057106	BLDG 19 PILE	66.2
--	08057107	BLDG 15 NORTH	93.2
--	08057108	BLDG 15 SOUTH	73.4

Notes:

\*: Indicates values outside of acceptability limits. See Sample Report.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Method Blank Results

QC Batch No: 090497GC10-2  
Date Analyzed: 04-SEP-97

Analyte	Method: EPA 8020A	Concentration: ug/L
Benzene	< 0.400	
Toluene	< 0.500	
Ethylbenzene	< 0.400	
Xylenes (Total)	< 0.800	
TPH as Gasoline	< 50.0	

Notes:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Method Blank Results

QC Batch No: 090497GC10-3  
Date Analyzed: 04-SEP-97

Analyte	Method: EPA 8020A	Concentration: mg/kg
Benzene	< 0.0500	
Toluene	< 0.100	
Ethylbenzene	< 0.100	
Xylenes (Total)	< 0.200	
TPH as Gasoline	< 10.0	

Notes:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Calibration Verification Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:ug/L	QC Batch:090497GC10-1		
Benzene	20.0	16.1	80.5	77-123%
Toluene	20.0	16.0	80.0	77.5-122.5%
Ethylbenzene	20.0	17.1	85.5	63-137%
Xylenes (Total)	60.0	55.1	91.8	85-115%
TPH as Gasoline	500	580	116	80-120%

Notes:

QC check source: Supelco #LA12389

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Laboratory Control Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:mg/kg	QC Batch:090497GC10-6		
Benzene	5.00	4.06	81.2	39-150%
Toluene	5.00	4.21	84.2	46-148%
Ethylbenzene	5.00	4.25	85.0	32-160%
Xylenes (Total)	15.0	13.0	86.7	41-155%
TPH as Gasoline	100	63.9	63.9*	80-120%

Notes:

SITE CHARACTERIZATION REPORT

TANK #K05

U.S. COAST GUARD

COAST GUARD ISLAND

ALAMEDA, CA

Prepared By:

Scott Vickers

RAH Environmental, Inc.

3310 Swetzer Road

Loomis, CA 95650

October 23, 1997

**ENCLOSURE(3)**

## I. INTRODUCTION

RAH Environmental, Inc. was contracted by the United States Coast Guard under contract #DTCG88-97-D-623174 to perform underground storage tank assessment and closure operations at Building 15 on Coast Guard Island in Alameda, CA. The project included the closure-in-place of Tank #K05, a one thousand gallon gasoline storage tank.

## II. SITE DESCRIPTION

The project site is on Coast Guard Island, located in Alameda, CA. The underground storage tank is located under the floor of the maintenance shop in Building 15, and formerly stored gasoline. The tank is immediately inside of the south wall of the building and the only access to the tank was a four inch fill pipe located outside of the wall, and a one inch pipe inside of the building in a covered 2' X 2' access vault.

## III. SOIL SAMPLING AND ANALYSIS

On August 28, 1997, two samples were collected from the soil immediately adjacent to and below tank #K05 as shown in Figure 1. One sample was collected from below the north end of the tank at a depth of 8.5' below ground surface and labeled BLDG. 15 NORTH. The other sample was collected from below the south end of the tank at a depth of 8.0' below ground surface and labeled BLDG. 15 SOUTH. The soil samples were collected by hand augering to the depth indicated and using a drive sampler with 2"x6" brass tubes. The soil at approximately 8.5' below ground surface was saturated, indicating the presence of groundwater. Groundwater could not be sampled, however, due to the small size of the borings. Once collected, the soil samples were capped, preserved on ice at 4°C and transported under chain of custody to NEI/GTEL for analysis. NEI/GTEL is state certified under #1845 and is located at 4080-C Pike Lane in Concord, CA 94520. The following table summarizes the conditions under which the samples were taken:

Table 1

Sample ID#	Time	Temperature	Weather	Tide
BLDG.15 NORTH	3:30 PM	78°	Clear, Sunny	-1.9
BLDG.15 SOUTH	3:45 PM	78°	Clear, Sunny	-1.5

Results of the soil sampling indicate that the subsurface soil has been impacted by petroleum hydrocarbons below the bottom of the tank. The samples both contained detectable concentrations of TPH-as-gas, benzene, toluene, ethylbenzene, and xylene. Concentrations of TPH-as-gas were 6,000 and 4,100 ppm; benzene - 3.2 and 7.0 ppm; toluene - 38 and 23 ppm; ethylbenzene - 81 and 55 ppm; and xylene - 270 and 190 ppm. The analytical results are summarized in Table 2 below, and the full analytical report is included as an attachment.

Table 2

Sample ID	Lead	TPHgas	Benzene	Toluene	Ethylbenzene	Xylene
BLDG. 15 NORTH	6.5	6,000	3.2	38	81	270
BLDG. 15 SOUTH	31	4,100	7.0	23	55	190

All results reported in **parts per million(mg/kg)**, unless otherwise indicated.

## V. RECOMMENDATIONS

Based on the results of the soil sampling and analysis, there are significant concentrations of petroleum hydrocarbons in soil and additional assessment activities may be required before this site can be closed.



U.S. COAST GUARD - ISC ALAMEDA  
TANK #K05 - BLDG. 15  
CLOSURE IN PLACE - 1,000 GALLON GASOLINE

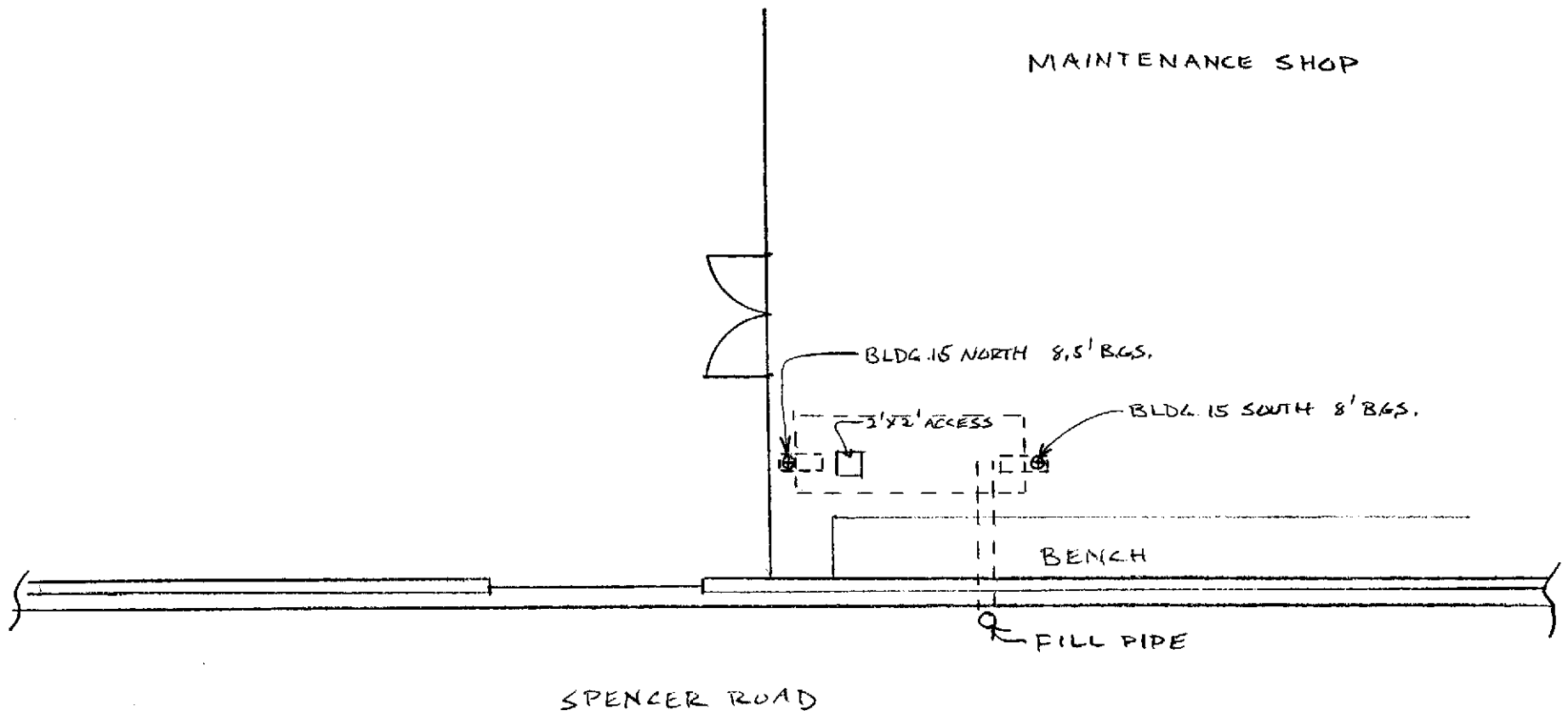


FIGURE 1



**Midwest Region**

4211 May Avenue  
Wichita, KS 67209  
(316) 945-2624  
(800) 633-7936  
(316) 945-0506 (FAX)

September 12, 1997

Scott Vickers  
RAH Environmental Inc.  
3310 Swetzer Road  
Loomis, CA 95650

---

RE: NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number):  
Project ID (name): USCG/ALAMEDA/AFB

---

Dear Scott Vickers:

Enclosed please find the analytical results for the samples received by NEI/GTEL Environmental Laboratories, Inc. on 08/30/97 under Chain-of-Custody Number(s) 36374.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by NEI/GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes. This report is to be reproduced only in full.

NEI/GTEL is certified by the California Department of Health Service under Certification Number 2147.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,  
NEI/GTEL Environmental Laboratories, Inc.

A handwritten signature in black ink, appearing to read "Terry R. Loucks".

Terry R. Loucks  
Laboratory Director

ANALYTICAL RESULTS  
Metals

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 7421  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-04	W7080571-05	W7080571-06	W7080571-07
Client ID	BLDG 19 WEST	BLDG 19 EAST	BLDG 19 PILE	BLDG 15 NORTH
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Prepared	09/12/97	09/12/97	09/12/97	09/12/97
Date Analyzed	09/12/97	09/12/97	09/12/97	09/12/97
Dilution Factor	20.0	10.0	10.0	5.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Lead	0.40	mg/kg	62.	26.	24.	6.5
Percent Solids	--	%	79.3	78.5	83.2	90.8

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 7421:

Digestion by EPA Method 3050A. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods", SW-846, Third Edition including Update 2.

ANALYTICAL RESULTS  
Metals

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 7421  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-08	--	--	--
Client ID	BLDG 15 SOUTH	--	--	--
Date Sampled	08/28/97	--	--	--
Date Prepared	09/12/97	--	--	--
Date Analyzed	09/12/97	--	--	--
Dilution Factor	10.0	--	--	--

Analyte	Reporting		Concentration:Wet Weight		
	Limit	Units			
Lead	0.40	mg/kg	31.	--	--
Percent Solids	--	%	87.2	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 7421:

Digestion by EPA Method 3050A. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods", SW-846. Third Edition including Update 2.

ANALYTICAL RESULTS  
Total Petroleum Hydrocarbons By GC

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

Method: GC  
Matrix: Solids

NEI/GTEL Sample Number	W7080571-01	W7080571-02	W7080571-03	--
Client ID	BLDG 51 TANK	BLDG 51 PUMP	BLDG 51 PILE	--
Date Sampled	08/28/97	08/28/97	08/28/97	--
Date Prepared	09/04/97	09/04/97	09/04/97	--
Date Analyzed	09/06/97	09/06/97	09/06/97	--
Dilution Factor	1.00	1.00	1.00	--

Analyte	Reporting		Concentration:Wet Weight		
	Limit	Units			
TPH as Diesel	10	mg/kg	< 10	31	150
Percent Solids	--	%	97.5	85.3	100

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

GC:

Extraction by EPA Method 3550 (sonication). ASTM Method D3328(modified) is used for qualitative identification of fuel patterns. The method has been modified to include quantitation by applying calibration and quality assurance guidelines outlined in "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. This method is equivalent to the California LUFT manual DHS method for diesel fuel.

W7080571-02:

The material present is qualitatively uncertain. Therefore, all material in the C9 to C22 range was quantitated against diesel fuel without respect to pattern. Chromatographic data indicates the presence of material, which is heavier than diesel fuel, in this sample.

W7080571-03:

The material present is qualitatively uncertain. Therefore, all material in the C9 to C22 range was quantitated against diesel fuel without respect to pattern. Chromatographic data indicates the presence of material, which is heavier than diesel fuel, in this sample.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Conformance/Non-Conformance Summary

(X = Requirements Met \* = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT. WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	--	--	--
Surrogate Recovery	--	*	NA
Holding Time	--	X	--
Method Accuracy	--	X	--
Method Precision	--	X	--
Blank Contamination	--	X	--

Comments:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Surrogate Results

QC Batch No.	Reference	Sample ID	OTP
Method: GC			Acceptability Limits: 43.7-111%
090497TPHS-1	BS090497TPH	Method Blank Soil	43.6*
090497TPHS-2	LS090497TPH	Laboratory control	69.3
090497TPHS-3	LSD090497TPH	LCS Soil Duplicate	69.3
090497TPHS-4	MS08054501	Matrix Spike	73.0
090497TPHS-5	MD08054501	Matrix Spike Dupli	65.7
--	08057101	BLDG 51 TANK	66.1
--	08057102	BLDG 51 PUMP	78.0
--	08057103	BLDG 51 PILE	73.8

Notes:

\*: Indicates values outside of acceptability limits. See Sample Report.  
Acceptability limits are derived from statistical analysis of laboratory samples.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Method Blank Results

QC Batch No: 090497TPHS-1  
Date Analyzed: 05-SEP-97

Analyte	Method:GC	Concentration: mg/kg
Diesel Range Organics		< 10.0

Notes:

090497TPHS-1: Surrogate spike recovery is outside of acceptability limits. The reported concentration for this sample should be considered as an estimate.



NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
 Method: GC  
 Matrix: Solids

Matrix Spike(MS) and Matrix Spike Duplicate(MSD) Results

GTEL Sample ID:W7080545-01		MS ID:MS08054501		MSD ID:MD08054501				Acceptability Limits		
Analysis Date: 06-SEP-97		05-SEP-97		05-SEP-97				RPD	RPD	%Rec.
Units: ug/ml	Sample	Spikes Added		MS	MS	MSD	MSD			
Analyte	Conc.	MS	MSD	Conc.	% Rec.	Conc.	% Rec.	RPD	RPD	%Rec.
Diesel Range Organics	< 10.0(0.190)	66.4	65.3	47.9	71.9	41.0	62.5	14.0	29.2	34.3-121

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.  
 Acceptability limits are derived from statistical analysis of laboratory samples.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Laboratory Control Sample (LCS) and Laboratory Control Duplicate Results

Analyte	Spike Amount	LCS		LCS Duplicate		Acceptability Limits			
		Concentration	Recovery, %	Concentration	Recovery, %	RPD, %	RPD, %	Recovery, %	
GC	Units: mg/kg	QC Batch:090497TPHS-3							
Diesel Range Organics	66.7	47.4	72.3	47.8	72.3	0.00	30.4	39.8-115%	

Notes:

Acceptability limits are derived from statistical analysis of laboratory samples.

**ANALYTICAL RESULTS**  
**Volatile Organics**

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 8020A  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-01	W7080571-02	W7080571-03	W7080571-04
Client ID	BLDG 51 TANK	BLDG 51 PUMP	BLDG 51 PILE	BLDG 19 WEST
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Analyzed	09/04/97	09/04/97	09/04/97	09/04/97
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Benzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.35
Toluene	0.10	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10
Ethylbenzene	0.10	mg/kg	< 0.10	< 0.10	< 0.10	14.
Xylenes (total)	0.20	mg/kg	< 0.20	< 0.20	< 0.20	11.
TPH as Gasoline	10	mg/kg	--	--	--	3000
Percent Solids	--	%	97.5	85.3	100.	79.3

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods". SW-846, Third Edition including promulgated Update II.

ANALYTICAL RESULTS  
Volatile Organics

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 8020A  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-05	W7080571-06	W7080571-07	W7080571-08
Client ID	BLDG 19 EAST	BLDG 19 PILE	BLDG 15 NORTH	BLDG 15 SOUTH
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Analyzed	09/04/97	09/04/97	09/05/97	09/05/97
Dilution Factor	1.00	1.00	5.00	5.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Benzene	0.05	mg/kg	0.10	< 0.05	3.2	7.0
Toluene	0.10	mg/kg	< 0.10	< 0.10	38.	23.
Ethylbenzene	0.10	mg/kg	4.2	1.3	81.	55.
Xylenes (total)	0.20	mg/kg	2.7	2.5	270	190
TPH as Gasoline	10.	mg/kg	730	230	6000	4100
Percent Solids	--	%	78.5	83.2	90.8	87.2

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update II.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Conformance/Non-Conformance Summary

(X = Requirements Met    \* = See Comments    -- = Not Required    NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	X	--	--
Surrogate Recovery	X	--	NA
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT
Method: EPA 8020A Acceptability Limits:			43-136%
090497GC10-1	CV0904972010	Calibration Verifi	88.2
090497GC10-2	BW09049710	Method Blank Water	91.1
090497GC10-3	BS09049710	Method Blank Soil	107.
090497GC10-4	MS08057101	Matrix Spike	111.
090497GC10-5	MO08057101	Matrix Spike Dupl	114.
090497GC10-6	LS09049710	Laboratory control	115.
--	08057101	BLDG 51 TANK	109.
--	08057102	BLDG 51 PUMP	106.
--	08057103	BLDG 51 PILE	84.6
--	08057104	BLDG 19 WEST	132.
--	08057105	BLDG 19 EAST	129.
--	08057106	BLDG 19 PILE	66.2
--	08057107	BLDG 15 NORTH	93.2
--	08057108	BLDG 15 SOUTH	73.4

Notes:

\*: Indicates values outside of acceptability limits. See Sample Report.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Method Blank Results

QC Batch No: 090497GC10-2  
Date Analyzed: 04-SEP-97

Analyte	Method: EPA 8020A	Concentration: ug/L
Benzene	< 0.400	
Toluene	< 0.500	
Ethylbenzene	< 0.400	
Xylenes (Total)	< 0.800	
TPH as Gasoline	< 50.0	

Notes:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Method Blank Results

QC Batch No: 090497GC10-3  
Date Analyzed: 04-SEP-97

Analyte	Method: EPA 8020A	Concentration: mg/kg
Benzene	< 0.0500	
Toluene	< 0.100	
Ethylbenzene	< 0.100	
Xylenes (Total)	< 0.200	
TPH as Gasoline	< 10.0	

Notes:



NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Calibration Verification Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:ug/L	QC Batch:090497GC10-1		
Benzene	20.0	16.1	80.5	77-123%
Toluene	20.0	16.0	80.0	77.5-122.5%
Ethylbenzene	20.0	17.1	85.5	63-137%
Xylenes (Total)	60.0	55.1	91.8	85-115%
TPH as Gasoline	500	580	116	80-120%

Notes:

QC check source: Supelco #LA12389

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Laboratory Control Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:mg/kg	QC Batch:090497GC10-6		
Benzene	5.00	4.06	81.2	39-150%
Toluene	5.00	4.21	84.2	46-148%
Ethylbenzene	5.00	4.25	85.0	32-160%
Xylenes (Total)	15.0	13.0	86.7	41-155%
TPH as Gasoline	100	63.9	63.9*	80-120%

Notes:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Laboratory Control Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits
				Recovery
EPA 8020A	Units:mg/kg	QC Batch:090497GC10-6		
Benzene	5.00	4.06	81.2	39-150%
Toluene	5.00	4.21	84.2	46-148%
Ethylbenzene	5.00	4.25	85.0	32-160%
Xylenes (Total)	15.0	13.0	86.7	41-155%
TPH as Gasoline	100	63.9	63.9*	80-120%

Notes:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Matrix Spike(MS) Results

GTEL Sample ID:W7080571-01		MS ID:MS08057101			
Analysis Date: 04-SEP-97		04-SEP-97			
Units: mg/kg	Sample	Spike	MS	MS	Acceptability Limits
Analyte	Conc.	Added	Conc.	% Rec.	%Rec.
Benzene	< 0.05(0.000)	4.85	3.95	81.4	39-150
Toluene	< 0.10(0.000)	4.85	4.04	83.3	46-148
Ethylbenzene	< 0.10(0.000)	4.85	4.15	85.6	32-160
Xylenes (Total)	< 0.20(0.000)	14.6	12.9	88.4	41-155

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
 Method: EPA 8020A  
 Matrix: Solids

Matrix Spike(MS) and Matrix Spike Duplicate(MSD) Results

GTEL Sample ID:W7080571-01		MS ID:MS08057101		MSD ID:MD08057101						
Analysis Date: 04-SEP-97		04-SEP-97		04-SEP-97						
Units: mg/kg	Sample	Spikes Added		MS	MS	MSD	MSD	Acceptability Limits		
Analyte	Conc.	MS	MSD	Conc.	% Rec.	Conc.	% Rec.	RPD	RPD	%Rec.
Benzene	< 0.05(0.000)	4.85	5.05	3.95	81.4	4.13	81.8	0.500	28.3	39-150
Toluene	< 0.10(0.000)	4.85	5.05	4.04	83.3	4.22	83.6	0.400	30	46-148
Ethylbenzene	< 0.10(0.000)	4.85	5.05	4.15	85.6	4.24	84.0	1.90	30	32-160
Xylenes (Total)	< 0.20(0.000)	14.6	15.2	12.9	88.4	13.4	88.2	0.200	30	41-155

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.



SITE ASSESSMENT REPORT

TANK #K05

U.S. COAST GUARD

COAST GUARD ISLAND

ALAMEDA, CA

Prepared By:

Scott Vickers

RAH Environmental, Inc.

3310 Swetzer Road

Loomis, CA 95650

October 23, 1997

**ENCLOSURE(4)**

## **EXECUTIVE SUMMARY**

RAH Environmental, Inc. was contracted by the United States Coast Guard under contract #DTCG88-97-D-623174 to perform underground storage tank assessment and closure operations at Building 15, on Coast Guard Island in Alameda, CA. The project included the closure-in-place of Tank # K05, a one thousand gallon gasoline storage tank formerly used to fuel motor vehicles on the island. The necessary permits were obtained from the Alameda County Department of Environmental Health and on August 27, two hand auger borings were completed to sample the soil beneath each end of the tank. The soil samples did contain levels of TPHgas and BTEX as summarized in the following report, however, the tank was closed in-place on September 18 by filling it with cement slurry. Since the tank was located beneath the building, County Environmental Health officials agreed that the tank could be closed in-place instead of removed.

### **I. INTRODUCTION**

RAH Environmental, Inc. was contracted by the United States Coast Guard under contract #DTCG88-97-D-623174 to perform underground storage tank assessment and closure operations at Building 15, on Coast Guard Island in Alameda, CA. The project included the closure-in-place of Tank # K05, a one thousand gallon gasoline storage tank.

### **II. BACKGROUND**

The project site is on Coast Guard Island in Alameda, CA. The underground storage tank was formerly used to store gasoline to fuel motor vehicles on the island. A dispenser that was previously located near the tank had been removed as part of a modification to the interior of the building.

### **III. CONTRACTOR INFORMATION**

Prime Contractor: RAH Environmental, inc.  
3310 Swetzer Road  
Loomis, CA 95650  
(916)652-5777  
Contact: Ray Henry

Subcontractors: None

### **IV. SITE DESCRIPTION**

The project site is on Coast Guard Island, located in Alameda, CA. The underground storage tank is located under the floor of the maintenance shop in Building 15, and formerly stored gasoline. The tank is immediately inside of the west wall of the building and the only access to the tank was a four inch fill pipe located outside of the wall, and a one inch pipe inside of the building in a covered 2' X 2' access vault.



## V. CLOSURE ACTIVITIES

### Notifications and Permits

An Underground Tank Closure Plan was completed and filed with Alameda County Environmental Protection Division of The Department of Environmental Health, in addition to the State of California Form A and Form B. The inspector for the project is Ms. Eva Chu, who was on-site for inspection and sampling of the tank area. Copies of the permits are attached.

### Tank Rinsing and Water Removal

On August 27, 1997, the tank was rinsed by introducing approximately 100 gallons of water into the tank from the fill pipe. On August 28, 1997, the rinseate was pumped from the underground tank directly into a vacuum truck and transported under manifest #96700697 to Americlean, Inc. in Silver Springs, NV for recycling.

## VI. ANALYTICAL

### Soil Sampling and Analysis

On August 28, 1997, RAH Environmental, Inc. performed soil sampling operations in order to assess the tank area and determine if contamination is present in the soil around the tank. Two trenches were cut in the concrete floor in the approximate area of the ends of the tank as shown in Figure 1. The ends of the tank were located by hand augering down approximately four feet until the top of the tank was found. Additional holes were augered until the tank surface was missed and a depth of eight feet below ground surface was reached. The soil at approximately 8.5' below ground surface was saturated, indicating the presence of groundwater. Groundwater could not be sampled, however, due to the small size of the hand auger borings. One soil sample was collected from each end of the tank and labeled BLDG. 15 NORTH and BLDG. 15 SOUTH. Both samples were analyzed for TPHgas, BTEX, and total lead. The results are summarized in Table 1 below.

Table 1

Sample ID	Lead	TPHgas	Benzene	Toluene	Ethylbenzene	Xylene
BLDG. 15 NORTH	6.5	6,000	3.2	38	81	270
BLDG. 15 SOUTH	31	4,100	7.0	23	55	190

All results reported in parts per million(mg/kg), unless otherwise indicated.

## VII. TANK CLOSURE/SITE RESTORATION

On September 17, 1997, the tank was filled with approximately five cubic yards of cement slurry mix by pumping the mix directly into the fill pipe. The sawcut assessment holes and the vault were also filled and patched with concrete.

U.S. COAST GUARD - ISC ALAMEDA

TANK #K05 - BLDG. 15

CLOSURE IN PLACE - 1,000 GALLON GASOLINE

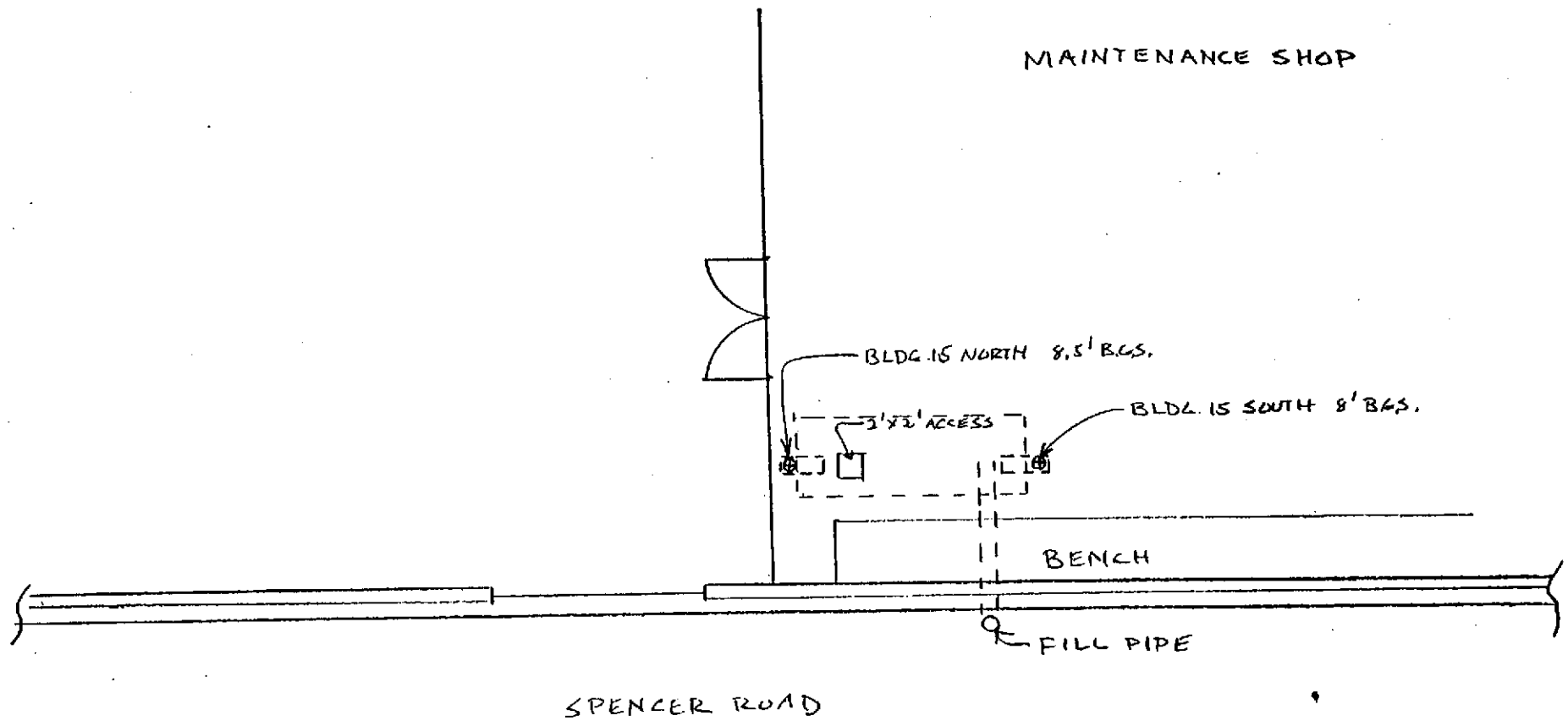


FIGURE 1

FROM : AMERICLEAN, INC.

PHONE NO. : 702 577 9199

Sep. 09 1997 07:22AM P2

See Instructions on back of page 6.

Department of Toxic Substances Control  
Sacramento, California

State of California—Environmental Management Agency  
Form Approved OMB No. 2050-0048 (Expires 9-30-98)  
Please print or type. Form designed for use on 112 g/m<sup>2</sup> paper.

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.

CA 469039003700697 1 of 1

86700697

3. Generator's Name and Mailing Address

ISC ALAMEDA COAST GUARD ISLAND  
2000 EMBURCLADERO SUITE 200  
ALAMEDA, CA 94501

4. Generator's Phone

510 535-7280

ATTN: T MADDEN

5. Transporter 1 Company Name

Americlean, Inc.

6. US EPA ID Number

MD98239843

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Americlean Inc  
550 Alameda Dr  
Silver Spring MD

10. US EPA ID Number

MD9162358482

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

NON REZA Hazardous Waste Liquid  
(Oil Water)

12. Container No.

001TT005506

13. Total Quantity

14. Unit Wt/Vol

15. Waste Name

223

EPA Code

R/A

15. Special Handling Instructions and Additional Information

24 hr Emergency # 800 4712105

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

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

Printed/Typed Name

TIM MADDEN

Signature

*Tim Madden*

Month Day Year  
08 28 1997

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Patrick M. Lach

Signature

*Patrick M. Lach*

Month Day Year  
08 28 1997

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

TERRY HANNEY

Signature

*Terry Hanney*

Month Day Year  
09 10 1997

DO NOT WRITE BELOW THIS LINE.

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

GENERATOR

PACIFIC

**RAH**  
**ENVIRONMENTAL, INC.**

December 29, 1997

Ms. Susanne Perkins  
U.S. Coast Guard  
CEU-Oakland  
2000 Embarcadero, Suite 200  
Oakland, CA 94606-5337

RE: Closure Reports

Dear Ms. Perkins:

Attached are the revised reports for Coast Guard Island and Pacific Strike Team. The manifest number for the rinseate was corrected, and a copy included. The rinseate from all three tanks at Alameda was transported under the same manifest, number 96700697, for a total quantity of 550 gallons.

Please call us if you have any questions or require additional information. Thank you very much.

Sincerely,



Scott Vickers

UST <sup>Romark</sup>  
HAZARDOUS WASTE GENERATOR INSPECTION REPORT

STID #: \_\_\_\_\_ FACILITY NAME: US Coast Guard - Coast Guard Island PG. 2 OF 2

SUPPLEMENTAL FORM  
BUILDING 19 - 1,000 gal steel UST for storage of gasoline

0% IEL 20.7% O<sub>2</sub>

3/19

③ ① The tank had not been in use ~ 30 yrs. Water in tank was pumped out. No dry ice used. Odor + stained soil in pit. Tank appeared in good condition. Digging around tank completely deteriorated.

① soil sample collected from 6.5' bgs. wet, stained clay - with mod odor (East)

② soil sample collected from 4' bgs <sup>from west sidewalk</sup> wet - sand clay w/ mod odor (west)

Analyze for TPH, BTEX and total lead

Building 15: 8% IEL 20.5% O<sub>2</sub>

Hand dug to 18' bgs. Soil sample collected from north + south end of 1-K gasoline UST

South sample mostly sand w/ mod. odor collect at 8.0' bgs

north sample " " " " " " 8.5' bgs

Analyze for TPH, BTEX, total lead

PRINT NAME: Scott Williams INSPECTED BY: P. Chiswick

SIGNATURE: Scott Williams DATE: \_\_\_\_\_

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
ENVIRONMENTAL PROTECTION DIVISION  
1131 HARBOR BAY PARKWAY, RM 250  
ALAMEDA, CA 94502-6577  
PHONE # 510/567-6700  
FAX # 510/337-9335

Project Specialist

CA 7690390037

UNDERGROUND TANK CLOSURE PLAN

\* \* \* Complete according to attached instructions \* \* \*

1. Name of Business US Coast Guard Integrated Support Command  
Business Owner or Contact Person (PRINT) US Coast Guard
2. Site Address ISL Alameda Coast Guard Island  
City Alameda Zip 94501 Phone 510 437-3272
3. Mailing Address 2000 Embarcadero, Suite 200  
City Oakland Zip 94606-5337 Phone (510) 535-7280
4. Property Owner US Coast Guard  
Business Name (if applicable) \_\_\_\_\_  
Address same  
City, State \_\_\_\_\_ Zip \_\_\_\_\_
5. Generator name under which tank will be manifested  
US coast Guard  
EPA ID# under which tank will be manifested CA 7690390037

6. Contractor RAH Environmental, Inc.  
Address 3310 Swatzer Road  
City Loomis CA 95650 Phone 916-652-5777  
License Type A-Haz ID# 592216

\*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board.

7. Consultant (if applicable) \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Phone \_\_\_\_\_

8. Main Contact Person for Investigation (if applicable)  
Name Ray Henry Title President  
Company RAH Environmental, Inc.  
Phone (916) 652-5777

9. Number of underground tanks being closed with this plan 3  
Length of piping being removed under this plan 100'  
Total number of underground tanks at this facility (\*\*confirmed with owner or operator) 3

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

\*\* Underground storage tanks must be handled as hazardous waste \*\*

a) Product/Residual Sludge/Rinsate Transporter  
Name Asbury Environmental Serv. EPA I.D. No. CA L000138484  
Hauler License No. 36453 License Exp. Date \_\_\_\_\_  
Address 100 W. Valpico  
City Tracy State CA Zip 95367

b) Product/Residual Sludge/Rinsate Disposal Site  
Name Asbury Environmental Serv. EPA ID# CA D026277036  
Address 2100 N. Alameda St.  
City Compton State CA Zip 90222

c) Tank and Piping Transporter

Name RAH Environmental, Inc. EPA I.D. No. CA048358201  
Hauler License No. 2965 License Exp. Date \_\_\_\_\_  
Address 3310 Swetzer Rd  
City Loomis State CA Zip 95650

d) Tank and Piping Disposal Site

Name Erickson, Inc. EPA I.D. No. CA0009466392  
Address 255 Parr Blvd.  
City Richmond State CA Zip 94801

11. Sample Collector

Name \_\_\_\_\_  
Company RAH Environmental, Inc.  
Address 3310 Swetzer Road  
City Loomis State CA Zip 95650 Phone (916)652-5027

12. Laboratory

Name NEL Laboratories  
Address 1030 Matley Lane  
City Reno State NV Zip 89502  
State Certification No. 1707

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

If yes, describe. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



14. Describe methods to be used for rendering tank(s) inert:

Pressure wash and dry ice

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

The Bay Area Air Quality Management District, 415/771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert.

15. Tank History and Sampling Information \*\*\* (see instructions) \*\*\*

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		

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

Excavated/Stockpiled Soil

Stockpiled Soil Volume (estimated)

Sampling Plan

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

Will the excavated soil be returned to the excavation immediately after tank removal? [ ] yes [X] no [ ] unknown

If yes, explain reasoning \_\_\_\_\_

If unknown at this point in time, please be aware that excavated soil may not be returned to the excavation without prior approval from Alameda County. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling operations.

16. Chemical methods and associated detection limits to be used for analyzing samples:  
 The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed.  
 See attached Table 2.

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

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
Diesel	TPH <sub>d</sub> BTEX	GC/FID (3550) 8020	
Gasoline	TPH <sub>g</sub> BTEX Total Lead	GC/FID (8030) 8020	

18. Submit Worker's Compensation Certificate copy  
 Name of Insurer State Compensation Insurance Fund
19. Submit Plot Plan **\*\*\* (See Instructions) \*\*\***
20. Enclose Deposit (See Instructions)
21. Report any leaks or contamination to this office within 5 days of discovery.  
 The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (ULR) form.
22. Submit a closure report to this office within 60 days of the tank removal. The report must contain all information listed in item 22 of the instructions.
23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)

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

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

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

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

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

CONTRACTOR INFORMATION

Name of Business RAM Environmental, Inc.  
 Name of Individual Scott Vickers  
 Signature Scott Vickers Date 7/7/92

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business U.S. Coast Guard  
 Name of Individual \_\_\_\_\_  
 Signature \_\_\_\_\_ Date \_\_\_\_\_

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
**UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A**  
COMPLETE THIS FORM FOR EACH FACILITY/SITE



MARK ONLY ONE ITEM	<input checked="" type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input type="checkbox"/> 7 PERMANENTLY CLOSED SITE
	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY SITE CLOSURE	

**I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)**

DBA OR FACILITY NAME <i>U.S. Coast Guard Integrated Support Command</i>		NAME OF OPERATOR	
ADDRESS <i>Coast Guard Island</i>		NEAREST CROSS STREET	PARCEL # (OPTIONAL)
CITY NAME <i>Alameda</i>	STATE <i>CA</i>	ZIP CODE	SITE PHONE # WITH AREA CODE
<input checked="" type="checkbox"/> BOX TO INDICATE <input type="checkbox"/> CORPORATION <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> LOCAL AGENCY DISTRICTS* <input type="checkbox"/> COUNTY AGENCY* <input type="checkbox"/> STATE AGENCY* <input checked="" type="checkbox"/> FEDERAL AGENCY*			
* If owner of UST is a public agency, complete the following: name of Supervisor of division, section, or office which operates the UST			
TYPE OF BUSINESS		<input type="checkbox"/> IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE
<input type="checkbox"/> 1 GAS STATION <input type="checkbox"/> 2 DISTRIBUTOR <input type="checkbox"/> 3 FARM <input type="checkbox"/> 4 PROCESSOR <input checked="" type="checkbox"/> 5 OTHER			<i>3</i>
		E. P. A. I. D. # (optional)	<i>CA 7690390037</i>

**EMERGENCY CONTACT PERSON (PRIMARY)**

**EMERGENCY CONTACT PERSON (SECONDARY) - optional**

DAYS: NAME (LAST, FIRST) <i>Henry, Raymond</i>	PHONE # WITH AREA CODE <i>(916) 652-5777</i>	DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE
NIGHTS: NAME (LAST, FIRST) <i>Same</i>	PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

**II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)**

NAME <i>U.S. Coast Guard</i>		CARE OF ADDRESS INFORMATION	
MAILING OR STREET ADDRESS <i>2000 Embarcadero, Suite 200</i>		<input checked="" type="checkbox"/> BOX TO INDICATE <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> STATE AGENCY <input type="checkbox"/> CORPORATION <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> COUNTY AGENCY <input checked="" type="checkbox"/> FEDERAL AGENCY	
CITY NAME <i>Oakland</i>	STATE <i>CA</i>	ZIP CODE <i>94606-5337</i>	PHONE # WITH AREA CODE <i>(510) 535-7280</i>

**III. TANK OWNER INFORMATION - (MUST BE COMPLETED)**

NAME OF OWNER <i>U.S. Coast Guard</i>		CARE OF ADDRESS INFORMATION	
MAILING OR STREET ADDRESS <i>2000 Embarcadero, Suite 200</i>		<input checked="" type="checkbox"/> BOX TO INDICATE <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> STATE AGENCY <input type="checkbox"/> CORPORATION <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> COUNTY AGENCY <input checked="" type="checkbox"/> FEDERAL AGENCY	
CITY NAME <i>Oakland</i>	STATE <i>CA</i>	ZIP CODE <i>94606-5337</i>	PHONE # WITH AREA CODE <i>(510) 535-7280</i>

**IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.**

TY (TK) HQ 44-032063

**V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) - IDENTIFY THE METHOD(S) USED**

<input checked="" type="checkbox"/> BOX TO INDICATE	<input type="checkbox"/> 1 SELF-INSURED	<input type="checkbox"/> 2 GUARANTEE	<input type="checkbox"/> 3 INSURANCE	<input type="checkbox"/> 4 SURETY BOND
	<input type="checkbox"/> 5 LETTER OF CREDIT	<input checked="" type="checkbox"/> 6 EXEMPTION	<input type="checkbox"/> 99 OTHER	

**VI. LEGAL NOTIFICATION AND BILLING ADDRESS** Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING:   
 I    
 II    
 III

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

OWNER'S NAME (PRINTED & SIGNED) <i>Scott Vickas Scott Vickas</i>	OWNER'S TITLE <i>Asst. Rep.</i>	DATE MONTH/DAY/YEAR <i>7/5/97</i>
---	------------------------------------	--------------------------------------

LOCAL AGENCY USE ONLY *Don Moore*

COUNTY # <input type="text"/>	JURISDICTION # <input type="text"/>	FACILITY # <input type="text"/>
LOCATION CODE - OPTIONAL	CENSUS TRACT # - OPTIONAL	SUPVISOR - DISTRICT CODE - OPTIONAL

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.  
OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM  1 NEW PERMIT  2 INTERIM PERMIT  3 RENEWAL PERMIT  4 AMENDED PERMIT  5 CHANGE OF INFORMATION  6 TEMPORARY TANK CLOSURE  7 PERMANENTLY CLOSED ON SITE  8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: U.S. Coast Guard ISC Command

I. TANK DESCRIPTION COMPLETE ALL ITEMS - SPECIFY IF UNKNOWN

A. OWNER'S TANK I.D.# Bldg. 15 B. MANUFACTURED BY:  
C. DATE INSTALLED (MO/DAY/YEAR) Link worn D. TANK CAPACITY IN GALLONS: 1,000 gal.

II. TANK CONTENTS IF A-1 IS MARKED, COMPLETE ITEM C.

A.  1 MOTOR VEHICLE FUEL  2 PETROLEUM  3 CHEMICAL PRODUCT  4 OIL  80 EMPTY  95 UNKNOWN B.  1 PRODUCT  2 WASTE C.  1a REGULAR UNLEADED  2 LEADED  3 DIESEL  4 GASAHOL  5 JET FUEL  6 AVIATION GAS  7 METHANOL  8 M85  99 OTHER (DESCRIBE IN ITEM D. BELOW)  
D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED C. A. S. #:

III. TANK CONSTRUCTION MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM  1 DOUBLE WALL  2 SINGLE WALL  3 SINGLE WALL WITH EXTERIOR LINER  4 SINGLE WALL IN A VAULT  5 INTERNAL BLADDER SYSTEM  95 UNKNOWN  99 OTHER  
B. TANK MATERIAL (Primary Tank)  1 BARE STEEL  5 CONCRETE  9 BRONZE  2 STAINLESS STEEL  6 POLYVINYL CHLORIDE  10 GALVANIZED STEEL  3 FIBERGLASS  7 ALUMINUM  95 UNKNOWN  4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC  8 100% METHANOL COMPATIBLE W/FRP  99 OTHER  
C. INTERIOR LINING OR COATING  1 RUBBER LINED  5 GLASS LINING  2 ALKYD LINING  6 UNLINED  95 UNKNOWN  3 EPOXY LINING  4 PHENOLIC LINING  99 OTHER  
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES \_\_\_ NO \_\_\_  
D. EXTERIOR CORROSION PROTECTION  1 POLYETHYLENE WRAP  5 CATHODIC PROTECTION  2 COATING  91 NONE  95 UNKNOWN  3 VINYL WRAP  4 FIBERGLASS REINFORCED PLASTIC  99 OTHER  
E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR)  
DROP TUBE YES \_\_\_ NO \_\_\_ STRIKER PLATE YES \_\_\_ NO \_\_\_ DISPENSER CONTAINMENT YES \_\_\_ NO \_\_\_

IV. PIPING INFORMATION CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE A U 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A U 4 FLEXIBLE PIPING A U 99 OTHER  
B. CONSTRUCTION A U 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A U 95 UNKNOWN A U 99 OTHER  
C. MATERIAL AND CORROSION PROTECTION A U 1 BARE STEEL A U 5 ALUMINUM A U 9 GALVANIZED STEEL A U 2 STAINLESS STEEL A U 8 CONCRETE A U 10 CATHODIC PROTECTION A U 3 POLYVINYL CHLORIDE (PVC) A U 7 STEEL W/ COATING A U 95 UNKNOWN A U 4 FIBERGLASS PIPE A U 6 100% METHANOL COMPATIBLE W/FRP A U 99 OTHER  
D. LEAK DETECTION  1 MECHANICAL LINE LEAK DETECTOR  2 LINE TIGHTNESS TESTING  3 CONTINUOUS INTERSTITIAL MONITORING  4 ELECTRONIC LINE LEAK DETECTOR  5 AUTOMATIC PUMP SHUTDOWN  99 OTHER

V. TANK LEAK DETECTION

1 VISUAL CHECK  7 CONTINUOUS INTERSTITIAL MONITORING  2 MANUAL INVENTORY RECONCILIATION  8 SIR  3 VADOZE MONITORING  9 WEEKLY MANUAL TANK GAUGING  4 AUTOMATIC TANK GAUGING  10 MONTHLY TANK TESTING  5 GROUND WATER MONITORING  95 UNKNOWN  6 ANNUAL TANK TESTING  99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR) 2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING \_\_\_\_\_ GALLONS 3. WAS TANK FILLED WITH INERT MATERIAL? YES  NO

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE) Don Moore Scott Vinkoes Scott Vinkoes DATE 7/10/97

LOCAL AGENCY USE ONLY THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.# COUNTY # JURISDICTION # FACILITY # TANK #  
PERMIT NUMBER PERMIT APPROVED BY/DATE PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

SITE CHARACTERIZATION REPORT

TANK #K06

U.S. COAST GUARD

COAST GUARD ISLAND

ALAMEDA, CA

Prepared By:

Scott Vickers

RAH Environmental, Inc.

3310 Swetzer Road

Loomis, CA 95650

October 23, 1997

**ENCLOSURE(5)**

## I. INTRODUCTION

RAH Environmental, Inc. was contracted by the United States Coast Guard under contract #DTCG88-97-B-623174 to perform underground storage tank and piping removal operations at Building 19 on Coast Guard Island in Alameda, CA. The project included the removal of one one thousand gallon gasoline storage tank and related piping.

## II. SITE DESCRIPTION

The project site is on Coast Guard Island, located in Alameda, CA. The underground storage tank was located to the northwest of Building 19, and formerly stored gasoline to fuel motor vehicles. The tank had a small concrete slab above it, which was surrounded by asphalt. There was no piping to be removed outside of the immediate excavation.

## III. SOIL SAMPLING AND ANALYSIS

On August 28, 1997, following the removal of the tank, at approximately 2:30 PM, two soil samples were collected from the base of the tank excavation, and four samples were collected from the soil stockpile to be composited by the laboratory. No groundwater was encountered during the tank removal or samplin operations. The samples from the excavation were collected using a drive sampler with 2"x6" brass tubes, and sampling native soil exposed by the backhoe bucket. The sample labeled BLDG. 19 EAST was collected from approximately 6.5' below ground surface, or 2' below the bottom of the tank. BLDG. 19 WEST was collected from the base of the west sidewall at approximately 4' below ground surface as shown in Figure 1. The samples were preserved on ice at 4°C and transported under chain of custody to NEI/GTEL for analysis. NEI/GTEL is state certified under #1845 and is located at 4080-C Pike Lane in Concord, CA 94520. The following table summarizes the conditions under which the samples were taken:

Table 1

Sample ID#	Time	Temperature	Weather	Tide
BLDG.19 EAST	2:30 PM	76°	Clear, Sunny	-2.6
BLDG.19 WEST	2:45 PM	76°	Clear, Sunny	-2.6
BLDG.19 PILE	3:15 PM	76°	Clear, Sunny	-2.6

Results of the soil sampling indicate that the subsurface soil has been impacted by petroleum hydrocarbons below the bottom of the tank. The samples both contained detectable concentrations of TPH-as-gas, benzene, ethylbenzene, and xylene. Concentrations of TPH-as-gas were 730 and 3,000 ppm; benzene - 0.10 and 0.35 ppm; ethylbenzene - 4.2 and 14 ppm; and xylene - 2.7 and 11 ppm. The analytical results are summarized in Table 2 below, and the full laboratory reports are included as an attachment.

Table 2

Sample ID	Lead	TPHgas	Benzene	Toluene	Ethylbenzene	Xylene
BLDG. 19 EAST	26	730	0.10	<0.10	4.2	2.7
BLDG. 19 WEST	62	3,000	.35	<0.10	14	11
BLDG. 19 PILE	24	230	<0.05	<0.10	1.3	2.5

All results reported in **parts per million(mg/kg)**, unless otherwise indicated.

#### V. RECOMMENDATIONS

Based on the results of the soil sampling and analysis, there are significant concentrations of petroleum hydrocarbons in soil and additional assessment activities may be required before this site can be closed.



USCG - ISC ALAMEDA  
TANK #K06 REMOVAL (8-28-97)

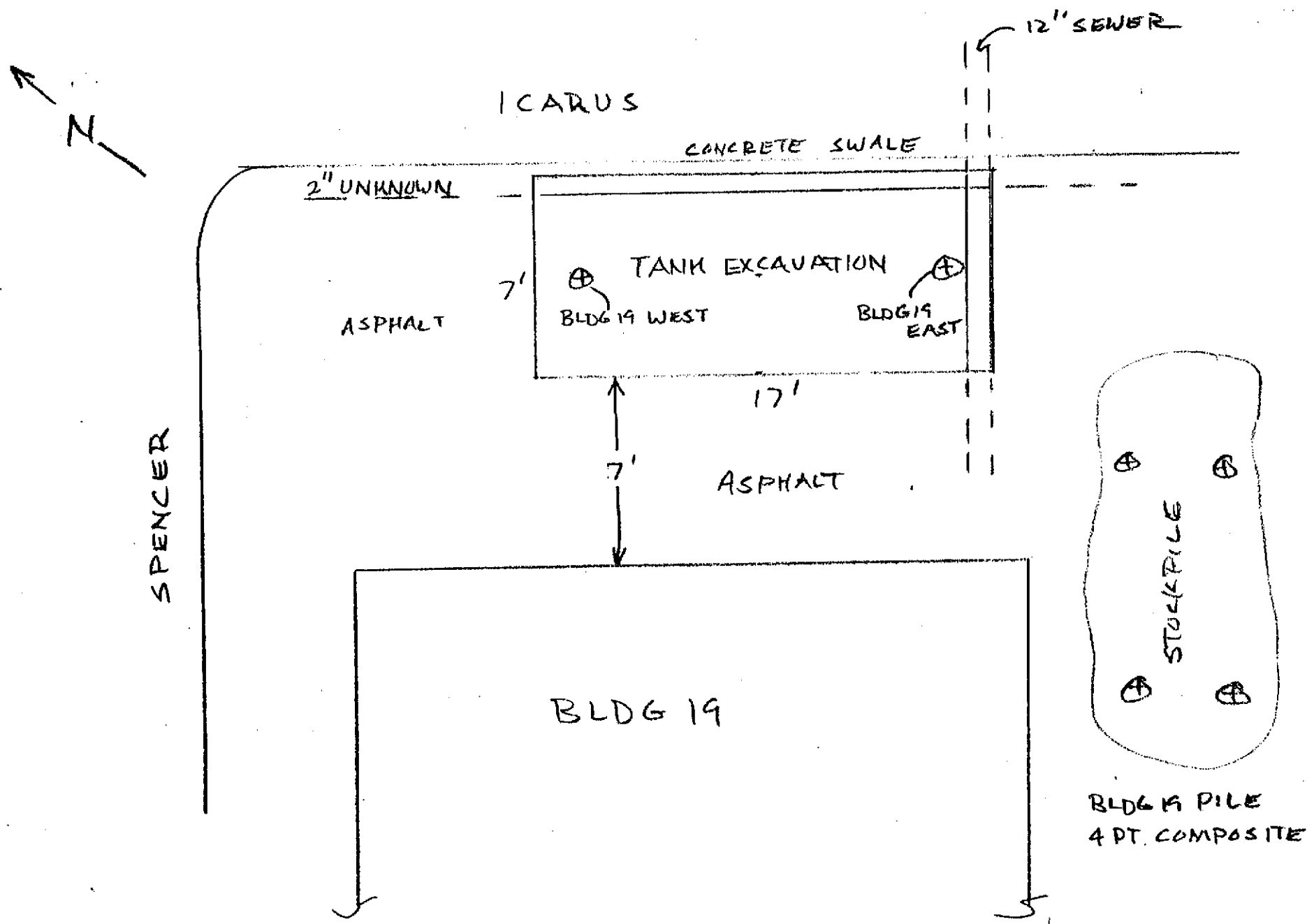


FIGURE 1



**Midwest Region**  
4211 May Avenue  
Wichita, KS 67209  
(316) 945-2624  
(800) 633-7936  
(316) 945-0506 (FAX)

September 12, 1997

Scott Vickers  
RAH Environmental Inc.  
3310 Swetzer Road  
Loomis, CA 95650

---

RE: NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number):  
Project ID (name): USCG/ALAMEDA/AFB

---

Dear Scott Vickers:

Enclosed please find the analytical results for the samples received by NEI/GTEL Environmental Laboratories, Inc. on 08/30/97 under Chain-of-Custody Number(s) 36374.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by NEI/GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes. This report is to be reproduced only in full.

NEI/GTEL is certified by the California Department of Health Service under Certification Number 2147.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,  
NEI/GTEL Environmental Laboratories, Inc.

A handwritten signature in black ink, appearing to read "Terry R. Loucks".

Terry R. Loucks  
Laboratory Director

## ANALYTICAL RESULTS

## Metals

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 7421  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-04	W7080571-05	W7080571-06	W7080571-07
Client ID	BLDG 19 WEST	BLDG 19 EAST	BLDG 19 PILE	BLDG 15 NORTH
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Prepared	09/12/97	09/12/97	09/12/97	09/12/97
Date Analyzed	09/12/97	09/12/97	09/12/97	09/12/97
Dilution Factor	20.0	10.0	10.0	5.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Lead	0.40	mg/kg	62.	26.	24.	6.5
Percent Solids	--	%	79.3	78.5	83.2	90.8

Notes:

## Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

## EPA 7421:

Digestion by EPA Method 3050A. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods". SW-846. Third Edition including Update 2.

ANALYTICAL RESULTS  
Metals

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 7421  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-08	--	--	--
Client ID	BLDG 15 SOUTH	--	--	--
Date Sampled	08/28/97	--	--	--
Date Prepared	09/12/97	--	--	--
Date Analyzed	09/12/97	--	--	--
Dilution Factor	10.0	--	--	--

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Lead	0.40	mg/kg	31.	--	--	--
Percent Solids	--	%	87.2	--	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 7421:

Digestion by EPA Method 3050A. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods". SW-846. Third Edition including Update 2.

ANALYTICAL RESULTS  
Total Petroleum Hydrocarbons By GC

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: GC  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-01	W7080571-02	W7080571-03	--
Client ID	BLDG 51 TANK	BLDG 51 PUMP	BLDG 51 PILE	--
Date Sampled	08/28/97	08/28/97	08/28/97	--
Date Prepared	09/04/97	09/04/97	09/04/97	--
Date Analyzed	09/06/97	09/06/97	09/06/97	--
Dilution Factor	1.00	1.00	1.00	--

Analyte	Reporting		Concentration:Wet Weight			--
	Limit	Units				
TPH as Diesel	10	mg/kg	< 10	31.	150	--
Percent Solids	--	%	97.5	85.3	100.	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

GC:

Extraction by EPA Method 3550 (sonication). ASTM Method D3328(modified) is used for qualitative identification of fuel patterns. The method has been modified to include quantitation by applying calibration and quality assurance guidelines outlined in "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods". SW-846, Third Edition including promulgated Update 1. This method is equivalent to the California LUFT manual DHS method for diesel fuel.

W7080571-02:

The material present is qualitatively uncertain. Therefore, all material in the C9 to C22 range was quantitated against diesel fuel without respect to pattern. Chromatographic data indicates the presence of material, which is heavier than diesel fuel, in this sample.

W7080571-03:

The material present is qualitatively uncertain. Therefore, all material in the C9 to C22 range was quantitated against diesel fuel without respect to pattern. Chromatographic data indicates the presence of material, which is heavier than diesel fuel, in this sample.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Conformance/Non-Conformance Summary

(X = Requirements Met \* = See Comments -- = Not Required NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	--	--	--
Surrogate Recovery	--	*	NA
Holding Time	--	X	--
Method Accuracy	--	X	--
Method Precision	--	X	--
Blank Contamination	--	X	--

Comments:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Surrogate Results

QC Batch No.	Reference	Sample ID	OTP
Method: GC			Acceptability Limits: 43.7-111%
090497TPHS-1	BS090497TPH	Method Blank Soil	43.6*
090497TPHS-2	LS090497TPH	Laboratory control	69.3
090497TPHS-3	LSD090497TPH	ECS Soil Duplicate	69.3
090497TPHS-4	MS08054501	Matrix Spike	73.0
090497TPHS-5	MD08054501	Matrix Spike Dupl1	65.7
--	08057101	BLDG 51 TANK	66.1
--	08057102	BLDG 51 PUMP	78.0
--	08057103	BLDG 51 PILE	73.8

Notes:

\*: Indicates values outside of acceptability limits. See Sample Report.  
Acceptability limits are derived from statistical analysis of laboratory samples.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
Method: GC  
Matrix: Solids

Method Blank Results

QC Batch No: 090497TPHS-1  
Date Analyzed: 05-SEP-97

Analyte	Method:GC	Concentration: mg/kg
Diesel Range Organics		< 10.0

Notes:

090497TPHS-1: Surrogate spike recovery is outside of acceptability limits. The reported concentration for this sample should be considered as an estimate.



NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
 Method: GC  
 Matrix: Solids

Matrix Spike(MS) and Matrix Spike Duplicate(MSD) Results

GTEL Sample ID:W7080545-01		MS ID:MS08054501		MSD ID:MD08054501				Acceptability Limits	
Analysis Date: 06-SEP-97		05-SEP-97		05-SEP-97				RPD	%Rec.
Units: ug/ml	Sample	Spikes Added		MS	MS	MSD	MSD	RPD	%Rec.
Analyte	Conc.	MS	MSD	Conc.	% Rec.	Conc.	% Rec.	RPD	%Rec.
Diesel Range Organics	< 10.0(0.190)	66.4	65.3	47.9	71.9	41.0	62.5	14.0	29.2 34.3-121

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.  
 Acceptability limits are derived from statistical analysis of laboratory samples.

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Total Petroleum Hydrocarbons By GC  
 Method: GC  
 Matrix: Solids

Laboratory Control Sample (LCS) and Laboratory Control Duplicate Results

Analyte	Spike Amount	LCS Concentration	LCS Recovery, %	LCS Duplicate Concentration	LCS Duplicate Recovery, %	Acceptability Limits	
						RPD, %	Recovery, %
GC	Units: mg/kg	QC Batch:090497TPHS-3					
Diesel Range Organics	66.7	47.4	72.3	47.8	72.3	0.00	30.4 39.8-115%

Notes:

Acceptability limits are derived from statistical analysis of laboratory samples.

ANALYTICAL RESULTS  
Volatile Organics

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 8020A  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-01	W7080571-02	W7080571-03	W7080571-04
Client ID	BLDG 51 TANK	BLDG 51 PUMP	BLDG 51 PILE	BLDG 19 WEST
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Analyzed	09/04/97	09/04/97	09/04/97	09/04/97
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Benzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.35
Toluene	0.10	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10
Ethylbenzene	0.10	mg/kg	< 0.10	< 0.10	< 0.10	14.
Xylenes (total)	0.20	mg/kg	< 0.20	< 0.20	< 0.20	11.
TPH as Gasoline	10.	mg/kg	--	--	--	3080
Percent Solids	--	%	97.5	85.3	100.	79.3

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. "Test Methods for Evaluating Solid Waste. Physical/Chemical Methods". SW-846. Third Edition including promulgated Update II.

**ANALYTICAL RESULTS**  
**Volatile Organics**

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

Method: EPA 8020A  
 Matrix: Solids

NEI/GTEL Sample Number	W7080571-05	W7080571-06	W7080571-07	W7080571-08
Client ID	BLDG 19 EAST	BLDG 19 PILE	BLDG 15 NORTH	BLDG 15 SOUTH
Date Sampled	08/28/97	08/28/97	08/28/97	08/28/97
Date Analyzed	09/04/97	09/04/97	09/05/97	09/05/97
Dilution Factor	1.00	1.00	5.00	5.00

Analyte	Reporting		Concentration:Wet Weight			
	Limit	Units				
Benzene	0.05	mg/kg	0.10	< 0.05	3.2	7.0
Toluene	0.10	mg/kg	< 0.10	< 0.10	38	23
Ethylbenzene	0.10	mg/kg	4.2	1.3	81	55
Xylenes (total)	0.20	mg/kg	2.7	2.5	270	190
TPH as Gasoline	10.	mg/kg	730	230	6000	4100
Percent Solids	--	%	78.5	83.2	90.8	87.2

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020A:

Gasoline range hydrocarbons (TPH) quantitated by GC/FID with purge and trap and modified EPA Method 8015. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods". SW-846. Third Edition including promulgated Update II.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Conformance/Non-Conformance Summary

(X = Requirements Met    \* = See Comments    -- = Not Required    NA = Not Applicable)

Conformance Item	Volatile Organics	Semi-Volatile Organics	Inorganics (MT, WC)
GC/MS Tune	--	--	NA
Initial Calibration	--	--	--
Continuing Calibration	X	--	NA
Surrogate Recovery	X	--	--
Holding Time	X	--	--
Method Accuracy	X	--	--
Method Precision	X	--	--
Blank Contamination	X	--	--

Comments:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Surrogate Results

QC Batch No.	Reference	Sample ID	TFT
Method: EPA 8020A Acceptability Limits:			43-136%
090497GC10-1	CV0904972010	Calibration Verifi	88.2
090497GC10-2	BW09049710	Method Blank Water	91.1
090497GC10-3	BS09049710	Method Blank Soil	107
090497GC10-4	MS08057101	Matrix Spike	111.
090497GC10-5	MD08057101	Matrix Spike Dupli	114.
090497GC10-6	LS09049710	Laboratory control	115.
--	08057101	BLDG 51 TANK	109
--	08057102	BLDG 51 PUMP	106.
--	08057103	BLDG 51 PILE	84.6
--	08057104	BLDG 19 WEST	132.
--	08057105	BLDG 19 EAST	129
--	08057106	BLDG 19 PILE	66.2
--	08057107	BLDG 15 NORTH	93.2
--	08057108	BLDG 15 SOUTH	73.4

Notes:

\*: Indicates values outside of acceptability limits. See Sample Report.

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Method Blank Results

QC Batch No: 090497GC10-2  
Date Analyzed: 04-SEP-97

Analyte	Method: EPA 8020A	Concentration: ug/L
Benzene	< 0.400	
Toluene	< 0.500	
Ethylbenzene	< 0.400	
Xylenes (Total)	< 0.800	
TPH as Gasoline	< 50.0	

Notes:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Method Blank Results

QC Batch No: 090497GC10-3  
Date Analyzed: 04-SEP-97

Analyte	Method: EPA 8020A	Concentration: mg/kg
Benzene		< 0.0500
Toluene		< 0.100
Ethylbenzene		< 0.100
Xylenes (Total)		< 0.200
TPH as Gasoline		< 10.0

Notes:



NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Calibration Verification Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:ug/L	QC Batch:090497GC10-1		
Benzene	20.0	16.1	80.5	77-123%
Toluene	20.0	16.0	80.0	77.5-122.5%
Ethylbenzene	20.0	17.1	85.5	63-137%
Xylenes (Total)	60.0	55.1	91.8	85-115%
TPH as Gasoline	500.	580.	116.	80-120%

Notes:

QC check source: Supelco #LA12389

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Laboratory Control Sample Summary

Analyte	Spike Amount	Check Sample Concentration	QC Percent Recovery	Acceptability Limits Recovery
EPA 8020A	Units:mg/kg	QC Batch:090497GC10-6		
Benzene	5.00	4.06	81.2	39-150%
Toluene	5.00	4.21	84.2	46-148%
Ethylbenzene	5.00	4.25	85.0	32-160%
Xylenes (Total)	15.0	13.0	86.7	41-155%
TPH as Gasoline	100	63.9	63.9*	80-120%

Notes:

NEI/GTEL Client ID: RAH01RAH01  
Login Number: W7080571  
Project ID (number): RAH01RAH01  
Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020A  
Matrix: Solids

Matrix Spike(MS) Results

GTEL Sample ID:W7080571-01		MS ID:MS08057101			
Analysis Date: 04-SEP-97		04-SEP-97			
Units: mg/kg	Sample	Spike	MS	MS	Acceptability Limits
Analyte	Conc.	Added	Conc.	% Rec.	%Rec.
Benzene	< 0.05(0.000)	4.85	3.95	81.4	39-150
Toluene	< 0.10(0.000)	4.85	4.04	83.3	46-148
Ethylbenzene	< 0.10(0.000)	4.85	4.15	85.6	32-160
Xylenes (Total)	< 0.20(0.000)	14.6	12.9	88.4	41-155

NEI/GTEL Client ID: RAH01RAH01  
 Login Number: W7080571  
 Project ID (number): RAH01RAH01  
 Project ID (name): USCG/ALAMEDA/AFB

QUALITY CONTROL RESULTS

Volatile Organics  
 Method: EPA 8020A  
 Matrix: Solids

Matrix Spike(MS) and Matrix Spike Duplicate(MSD) Results

GTEL Sample ID:W7080571-01		MS ID:MS08057101		MSD ID:MD08057101						
Analysis Date: 04-SEP-97		04-SEP-97		04-SEP-97						
Units: mg/kg	Sample	Spikes Added		MS	MS	MSD	MSD	Acceptability Limits		
Analyte	Conc.	MS	MSD	Conc.	% Rec.	Conc.	% Rec.	RPD	RPD	%Rec.
Benzene	< 0.05(0.000)	4.85	5.05	3.95	81.4	4.13	81.8	0.500	28.3	39-150
Toluene	< 0.10(0.000)	4.85	5.05	4.04	83.3	4.22	83.6	0.400	30	46-148
Ethylbenzene	< 0.10(0.000)	4.85	5.05	4.15	85.6	4.24	84.0	1.90	30	32-160
Xylenes (Total)	< 0.20(0.000)	14.6	15.2	12.9	88.4	13.4	88.2	0.200	30	41-155

Notes:

Values in parentheses in the sample concentration column are used for % recovery calculations.



SITE ASSESSMENT REPORT

TANK #K06

U.S. COAST GUARD

COAST GUARD ISLAND

ALAMEDA, CA

Prepared By:

Scott Vickers

RAH Environmental, Inc.

3310 Swetzer Road

Loomis, CA 95650

October 23, 1997

**ENCLOSURE(6)**

## **EXECUTIVE SUMMARY**

RAH Environmental, Inc. was contracted by the United States Coast Guard under contract #DTCG88-97-D-623174 to perform underground storage tank and piping removal operations at Building 19 on Coast Guard Island in Alameda, CA. The project included the removal of Tank #K06, a one thousand gallon gasoline storage tank and related piping, that were formerly used to fuel motor vehicles on the island. The necessary permits were obtained from the Alameda County Department of Environmental Health, and on August 27 and 28, the tank and related piping were rinsed and removed. Three soil samples were collected from the tank excavation and soil stockpile. The tank removal operations and the analytical results are described in detail in the following report.

### **I. INTRODUCTION**

RAH Environmental, Inc. was contracted by the United States Coast Guard under contract #DTCG88-97-D-623174 to perform underground storage tank and piping removal operations at Building 19 on Coast Guard Island in Alameda, CA. The project included the removal of Tank #K06, a one thousand gallon gasoline storage tank and related piping.

### **II. BACKGROUND**

The project site is on Coast Guard Island in Alameda, CA. The underground storage tank was located outside of Building 19 and was formerly used to store gasoline for fueling motor vehicles.

### **III. CONTRACTOR INFORMATION**

Prime Contractor: RAH Environmental, inc.  
3310 Swetzer Road  
Loomis, CA 95650  
(916)652-5777  
Contact: Ray Henry

Subcontractors: None

### **IV. SITE DESCRIPTION**

The project site is on Coast Guard Island, located in Alameda, CA. The underground storage tank was located to the northwest of Building 19, a former auto shop building. The tank had a small concrete slab above it, which was surrounded by asphalt. There was no piping to be removed outside of the immediate excavation.

## V. REMOVAL ACTIVITIES

### Notifications and Permits

An Underground Tank Closure Plan was completed and filed with Alameda County Environmental Protection Division of the Department of Environmental Health, in addition to the State of California Form A and Form B. The inspector for the project is Ms. Eva Chu, who was on-site for inspection and removal of the tank. Copies of permits are attached.

### Tank Preparation

On August 27, 1997, RAH Environmental, Inc. prepared to remove the underground tank by breaking up and removing the tank slab and excavating above the tank. The tank contained approximately 300 gallons of rainwater, and was pressure washed with an additional 50 gallons of water.

### Fuel and Water Removal

On August 28, 1997, approximately 350 gallons of rainwater and rinseate were pumped from the underground tank directly into a vacuum truck and transported under manifest #96700697 to Americlean, Inc. in Silver Springs, NV for recycling.

### Tank Removal Operations

The underground tank was removed on August 28 utilizing a backhoe and placing the tank directly on the Dexanna truck for transportation to Erickson Incorporated in Richmond under manifest #96412557 for destruction/recycling.

### Piping Removal Operations

The tank was situated directly below the 4" thick concrete slab and did not have any associated piping.

## VI. ANALYTICAL

### Soil Sampling and Analysis

On August 28, soil sampling operations were conducted at the site. One sample, labeled BLDG. 19 WEST was collected from the base of the west end of the tank excavation, and one sample, labeled BLDG. 19 EAST was collected from the base of the east end of the excavation as shown in Figure 1. One four point composite sample was also collected from the excavated soil stockpile and labeled BLDG. 19 PILE. All samples were analyzed for TPH as gas, BTEX, and total lead. The results are summarized in Table 1 below.



Table 1

Sample ID	Lead	TPHgas	Benzene	Toluene	Ethylbenzene	Xylene
BLDG. 19 EAST	26	730	0.10	<0.10	4.2	2.7
BLDG. 19 WEST	62	3,000	.35	<0.10	14	11
BLDG. 19 PILE	24	230	<0.05	<0.10	1.3	2.5

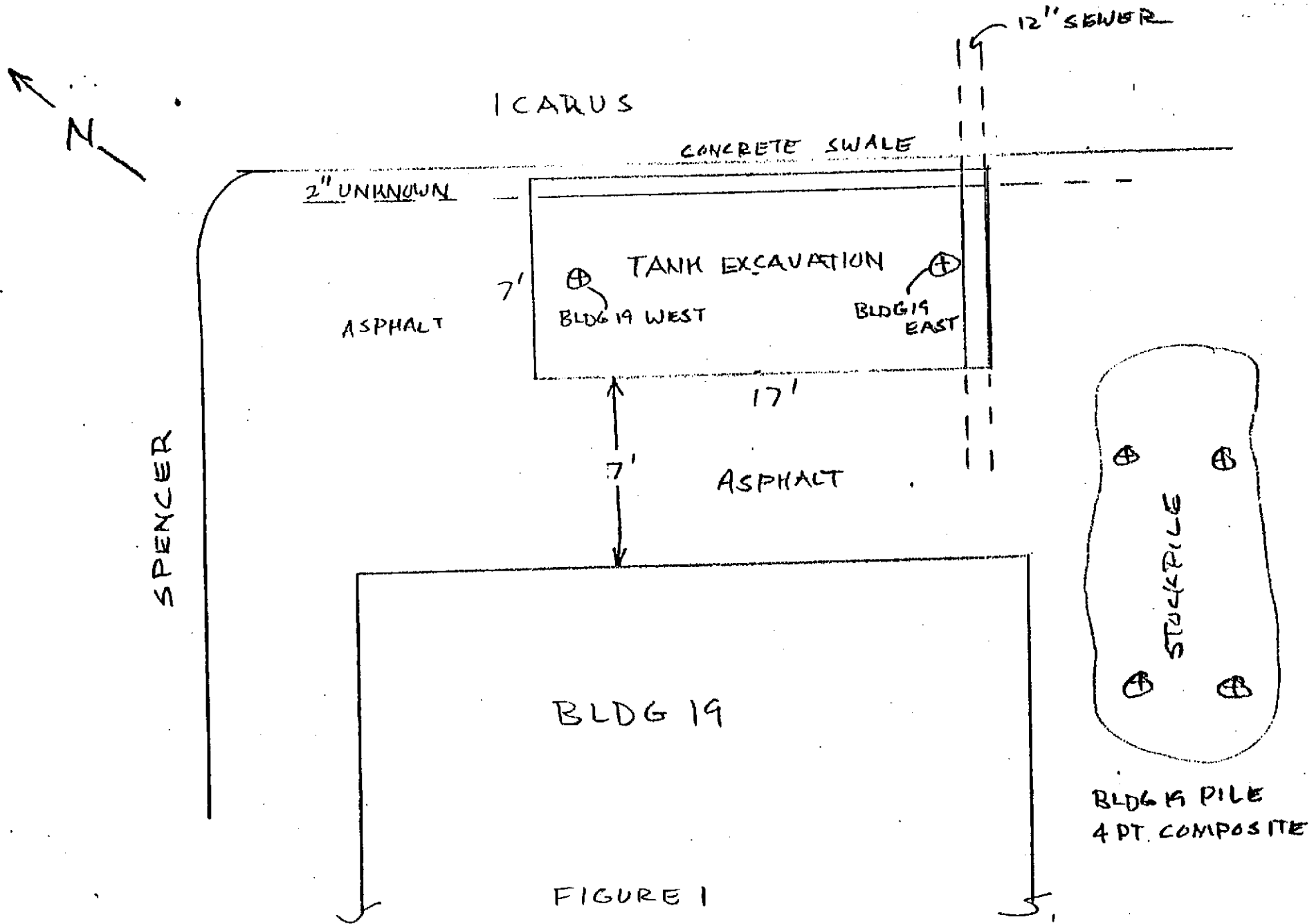
All results reported in **parts per million(mg/kg)**, unless otherwise indicated.

## VII. SITE RESTORATION

On August 29, all scrap material was removed from the site, and the excavation was left open pending analysis and remobilization to the site. The stockpile was covered with 6 mil visqueen. On September 17, the tank excavation was backfilled using pea gravel and Class II aggregate base rock. Prior to backfilling, the native soil in the base of the excavation was compacted with a vibratory plate, and Geotex filter fabric was used to line the excavation. Approximately 10 tons of pea gravel was used to fill the excavation to within 12" of the surface, and 9" of compacted Class II aggregate base rock was installed under 3" of asphalt.

14.31 tons of contaminated soil and debris were transported to Forward, Inc., a Class II nonhazardous landfill on September 17 under manifest #10862 for disposal. A copy of the manifest is included with this report.

USCG - ISC ALAMEDA  
TANK # K06 REMOVAL (8-28-97)



FROM : AMERICLEAN, INC.

PHONE NO. : 702 577 9199

Sep. 09 1997 07:22AM P2

See Instructions on back of page 6.

Department of Toxic Substances Control  
Sacramento, California

State of California—Environmental Resources Agency  
Form Approved OMB No. 2030-0036 (Expires 9-30-98)  
Please print or type. Form designed for use on office (12 x 3 1/2 inch) typewriter.

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

UNIFORM HAZARDOUS  
WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1

CA 469039003701016 97 1 of 1

96700697

3. Generator's Name and Mailing Address

ISC Alameda Coast General Is Land  
2000 E. M. BULLOCK BLVD, SUITE 200  
ALAMEDA, CA 94501

4. Generator's Phone (510) 535-7280

ATTN: T. MADDEN

5. Transporter 1 Company Name

Americlean, Inc.

6. US EPA ID Number

MD99239843

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Americlean Inc  
ASPHALT ROAD  
SILVER SPRING MD

10. US EPA ID Number

MD99235841R

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

a. NON REZA Hazardous Waste - Liquid  
(Oil Under)

12. Containers		13. Total Quantity	14. Unit We/Vol	Waste Name
No.	Type			
001	TT	00550	G	223 N/A

15. Special Handling Instructions and Additional Information

24 hr Emergency # 800 4712105

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

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

Printed/Typed Name: T. MADDEN Signature: [Signature] Month: 08 Day: 28 Year: 1997

17. Transporter 1 Acknowledgement of Receipt of Materials  
Printed/Typed Name: Patrick M. Lee Signature: [Signature] Month: 08 Day: 28 Year: 1997

18. Transporter 2 Acknowledgement of Receipt of Materials  
Printed/Typed Name: [Blank] Signature: [Blank] Month: [Blank] Day: [Blank] Year: [Blank]

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: Terry [Signature] Signature: [Signature] Month: 09 Day: 05 Year: 1997

DO NOT WRITE BELOW THIS LINE.

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

**RAH**   
**ENVIRONMENTAL, INC.**

December 29, 1997

Ms. Susanne Perkins  
U.S. Coast Guard  
CEU-Oakland  
2000 Embarcadero, Suite 200  
Oakland, CA 94606-5337

RE: Closure Reports

Dear Ms. Perkins:

Attached are the revised reports for Coast Guard Island and Pacific Strike Team. The manifest number for the rinseate was corrected, and a copy included. The rinseate from all three tanks at Alameda was transported under the same manifest, number 96700697, for a total quantity of 550 gallons.

Please call us if you have any questions or require additional information. Thank you very much.

Sincerely,

  
Scott Vickers

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

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <b>CA7690390037011517</b>	Manifest Document No.	2. Page 1 <b>at 1</b>	Information in the shaded areas is not required by Federal law. <b>FILE</b>
3. Generator's Name and Mailing Address <b>ISC Alameda Coast Guard Island, Alameda, Calif</b>		A. State Manifest Document Number <b>96412557</b>		B. State Generator's ID#	
4. Generator's Phone <b>510 437-5775 94501</b>		C. State Transporter's ID#		D. State Transporter's Phone <b>510-687-1200</b>	
5. Transporter 1 Company Name <b>DEXANNA</b>		6. US EPA ID Number <b>CAD982438566</b>		E. State Transporter's ID#	
7. Transporter 2 Company Name		8. US EPA ID Number		F. State Transporter's ID#	
9. Designated Facility Name and Site Address <b>ERICKSON, INC. 255 PARR BLVD. RICHMOND, CA 94801</b>		10. US EPA ID Number <b>CAD009466392</b>		G. State Facility ID# <b>CAD009466392</b>	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) <b>NON-RCRA HAZARDOUS WASTE SOLID WASTE EMPTY STORAGE TANK</b>		12. Containers No. <b>002</b> Type <b>TP</b>	13. Total Quantity <b>01300</b>	14. Unit Wt/Vol <b>P</b>	15. Waste Number <b>NONE</b>
Additional Descriptions for Materials Listed Above <b>EMPTY STORAGE TANK(S) 20865-20866 TANK(S) HAVE BEEN GENERALLY USED FOR DRY STORAGE. 100 GALLON CAPACITY.</b>		K. Handling Codes for Wastes Listed Above <b>01/99</b>			
15. Special Handling Instructions and Additional Information <b>KEEP AWAY FROM SOURCES OF IGNITION. ALWAYS WEAR HARDHATS WHEN WORKING AROUND UGST'S Job Site: Coast Guard Island OE job# Alameda, Calif.</b>		EMERGENCY RESPONSE CONTACT <b>Tim Madden</b> EMERGENCY RESPONSE PHONE <b>(510) 437-5775</b>			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.					
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name <b>TIM MADDEN</b>		Signature <i>[Signature]</i>		Month Day Year <b>08 28 97</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>James P. Cox</b>		Signature <i>[Signature]</i>		Month Day Year <b>08 28 97</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
Printed/Typed Name <b>KAREN RUFFIN</b>		Signature <i>[Signature]</i>		Month Day Year <b>08 28 97</b>	

DO NOT WRITE BELOW THIS LINE.

White: TSDf SENDS THIS COPY TO DTSC WITHIN 30 DAYS.  
 To: P.O. Box 3000, Sacramento, CA 95812



# FORWARD INCORPORATED

999 South Austin Road/WEIGHING LOCATION P.O. Box 6336  
 Manteca, CA 95336 Stockton, CA 95206  
 Landfill: (209) 982-4298 / WEIGHING LOCATION Main Office: (209) 466-4482  
 Resource Recovery: (209) 982-4936 Fax: (209) 465-0631

624272  
 R A H ENVIRONMENTAL, INC.  
 SCOTT VICKERS  
 3310 SWETZER ROAD  
 LOOMIS CA 95650

SITE	TICKET	GRID
02	026244	D-95
WEIGHMASTER		
S. MACIEL		
DATE IN	TIME IN	
09/18/97	14:09	
DATE OUT	TIME OUT	
09/18/97	14:11	

VEHICLE	ROLL OFF
BAUERLE	10

REFERENCE	ORIGIN
624272	

Manual Gross Weight 59500 LB Inbound - Charge ticket  
 Manual Tare Weight 30880 LB  
 Net Weight 28620 LB

QTY	DESCRIPTION	AMOUNT
14.31	Class II Soil by Ton per TONS	

**WEIGHMASTER CERTIFICATE** THIS IS TO CERTIFY That the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Manifest # 10862  
 Truck # CP63233  
 P.O. # NONE  
 Trailer # 9.16.97  
 Schedule 24 hours in advance directly with the landfill.  
 Call (209)982-4298 to schedule.  
 Drive Safely!!

NET AMOUNT
TENDERED
CHANGE

DRIVER'S SIGNATURE X \_\_\_\_\_





# FORWARD INCORPORATED

## NON-HAZARDOUS WASTE MANIFEST WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. **624272**

TO BE COMPLETED BY THE GENERATOR

GENERATOR: **USCB - ISC - Alameda**

MAILING ADDRESS: **Coast Guard Island**

CITY/STATE/ZIP: **Alameda, CA - 94501**

PHONE: **510-433-5775**

CONTACT PERSON: **Tim Madden**

SIGNATURE OF AUTHORIZED AGENT / TITLE: **\* Tim Madden**

DATE: **9/16/97**

REQUIRED PERSONAL PROTECTIVE EQUIPMENT:

GLOVES    GOGGLES    RESPIRATOR    HARD HAT

TY-VEK    OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE:

TREATMENT SOIL    SLUDGE

DISPOSAL SOIL    NON-FRIABLE ASBESTOS

CONSTRUCTION SOIL    WOOD

ASH

OTHER

GENERATING FACILITY: **ISC - Alameda**

RECEIVING FACILITY:

**FORWARD INC. LANDFILL**

**9999 SOUTH AUSTIN ROAD**

**MANTECA, CALIFORNIA 95336**

**(209) 982-4298 PHONE**

**(209) 982-1009 FAX**

TRANSPORTER  
HAULER MUST COMPLETE

NAME: **R. Baurle Trucking**

ADDRESS:

STATE/ZIP:

PHONE:

SIGNATURE OF AUTHORIZED AGENT OR DRIVER: **\* [Signature]**

DATE: **9/16/97**

NOTES: **1103233  
77524411**

TRUCK NUMBER: **RB111**

END DUMP:    BOTTLE/DUMP:    TRANSFER:

ROLL-OFF(S):    FLAT-BED:    VAN:    DRUMS:

FACILITY REQUIREMENTS

**FORWARD INC. LANDFILL**

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS:

FACILITY TICKET NUMBER:

SIGNATURE OF AUTHORIZED AGENT: **\* [Signature]**

DATE: **9/16/97**

CUBIC YARDS: **10**

DISPOSAL METHOD	TO BE COMPLETED BY FORWARD			
	DISPOSE	BIO	AERATE	STOCKPILE
<input checked="" type="checkbox"/> SOIL				
<input type="checkbox"/> SLUDGE				
<input type="checkbox"/> NON-FRIABLE ASBESTOS				
<input type="checkbox"/> WOOD				
<input type="checkbox"/> ASH				
<input type="checkbox"/> OTHER				

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE. TO SCHEDULE CALL (209) 982-4298

SALES COPY

MANIFEST # C **10862**

DAY OR NIGHT  
TELEPHONE  
(510) 235-1393

# CERTIFICATE CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

## NO. 25516

CUSTOMER
BAH ENVIRONMEN
JOB NO.
970902

FOR: ERICKSON, INC. TANK NO. 20866

LOCATION: RICHMOND DATE: 97/09/17 TIME: 14:17

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT LG

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

TANK SIZE 1000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 10%  
ERICKSON, INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN  
CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS  
WASTE FACILITY.  
ERICKSON, INC. HAS THE APPROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK  
SHIPPED TO US FOR PROCESSING.

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

### STANDARD SAFETY DESIGNATION

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

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

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

Francis Chyo  
REPRESENTATIVE

TITLE

Dave Salo  
INSPECTOR



This Memorandum is an acknowledgment that a bill of lading has been received and is intended solely for filing or record.

Shipper's No. 970902

ISC Alameda Coast Guard Island

Carrier

Agent's No.

1157

RECEIVED, subject to the classifications and tariffs in effect on the date of the receipt by the carrier of the property described in the Original Bill of Lading.

at Alameda Calif 8/28 1997 from RAH Environmental

\* Property described herein, as shipped and packed, is subject to the classification and condition of packages as shown on the bill of lading. The carrier is not responsible for any loss or damage to the property unless the carrier agrees to carry it in its usual class of delivery at said destination, if an its own receipt, under the highest rate or rates, or under the terms of its regular operations, otherwise to deliver to another carrier on the route to said destination, it is hereby agreed, as to each carrier at or any of said property over all or any portion of said route to destination, and to its agent carry it at any time covered by it or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including all conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his agents.

(Mail or street address of consignee—For purposes of notification only.)

Consigned to Erickson, Inc.

255 Parr Blvd.

Destination Richmond,

Street

City

State of Calif

Zip Code 94801

County of Contra Costa

Contra Costa

Routing Dexanna

Delivering Carrier

Dexanna

Vehicle

or Car Initial 2

No. T-1

Collect On Delivery

C. O. D. charge to be paid by

Shipper   
Consignee

and remit to:

Street

City

State

No. of Packages Description of Articles, Special Marks, and Exceptions

Weight (Sub. to Car.)

Class or Rate

Check Column

2

Waste Empty Storage Tank  
NON-RCRA Hazardous Waste Solid.

1300 lbs

Manifest # 96412557

Tank # 20865 + 20866

Loading Time: 13:00 to 15:15 = 2 1/4 Hrs.

1-1000 Steel  
1-550 Fiberglass

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor.)

If charges are to be prepaid, write or stamp here: "TO BE PREPAID."

Received \$ \_\_\_\_\_ to apply to prepayment of the charges on the property described hereon.

Agent or Cashier

Per \_\_\_\_\_ (the signature here acknowledges only the amount prepaid.)

Charges Advanced:

\$ \_\_\_\_\_

When the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." NOTE—Where the rate is dependent upon value, shippers are required to state specifically in writing the agreed or declared value of the property.

If agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

per

RAH Environmental

Shipper, Per

[Signature]

Dexanna

Agent, Per

[Signature]

Permanent post-office address of shipper.

(This Bill of Lading is to be signed by the shipper and agent of the carrier issuing same.)



ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
ENVIRONMENTAL PROTECTION DIVISION  
1131 HARBOR BAY PARKWAY, RM 250  
ALAMEDA, CA 94502-6577  
PHONE # 510/567-6700  
FAX # 510/337-9335

Project Specialist

CA 7690390037

UNDERGROUND TANK CLOSURE PLAN

\*\*\* Complete according to attached instructions \*\*\*

1. Name of Business US Coast Guard Integrated Support Command  
Business Owner or Contact Person (PRINT) US Coast Guard
2. Site Address ISL Alameda Coast Guard Island  
City Alameda Zip 94501 Phone 510-437-3172
3. Mailing Address 2000 Embarcadero, Suite 200  
City Oakland Zip 94606-5337 Phone (510) 535-7280
4. Property Owner US Coast Guard  
Business Name (if applicable) \_\_\_\_\_  
Address same  
City, State \_\_\_\_\_ Zip \_\_\_\_\_
5. Generator name under which tank will be manifested  
US coast Guard  
EPA ID# under which tank will be manifested CA 7690390037

6. Contractor RAH Environmental, Inc.  
Address 3310 Swetzer Road  
City Loomis CA 95650 Phone 916-652-5777  
License Type A-Haz ID# 592216

\*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board.

7. Consultant (if applicable) \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Phone \_\_\_\_\_

8. Main Contact Person for Investigation (if applicable)  
Name Ray Henry Title President  
Company RAH Environmental, Inc  
Phone (916) 652-5777

9. Number of underground tanks being closed with this plan 3  
Length of piping being removed under this plan 100'  
Total number of underground tanks at this facility (\*\*confirmed with owner or operator) 3

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

\*\* Underground storage tanks must be handled as hazardous waste \*\*

a) Product/Residual Sludge/Rinsate Transporter

Name Asbury Environmental Serv. EPA I.D. No. CA L000138484  
Hauler License No. 36453 License Exp. Date \_\_\_\_\_  
Address 100 W. Valpico  
City Tracy State CA Zip 95367

b) Product/Residual Sludge/Rinsate Disposal Site

Name Asbury Environmental Serv. EPA ID# CA D026277036  
Address 2100 N. Alameda St.  
City Compton State CA Zip 90222

c) Tank and Piping Transporter

Name RAH Environmental, Inc. EPA I.D. No. CAN983582701  
Hauler License No. 2965 License Exp. Date \_\_\_\_\_  
Address 3310 Swetzer Rd  
City Loomis State CA Zip 95650

d) Tank and Piping Disposal Site

Name Erickson, Inc. EPA I.D. No. CAD009466392  
Address 255 Parr Blvd.  
City Richmond State CA Zip 94801

11. Sample Collector

Name \_\_\_\_\_  
Company RAH Environmental, Inc.  
Address 3310 Swetzer Road  
City Loomis State CA Zip 95650 Phone (916) 652-5777

12. Laboratory

Name NEL Laboratories  
Address 1030 Matley Lane  
City Reno State NV Zip 89502  
State Certification No. 1707

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

If yes, describe. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. Describe methods to be used for rendering tank(s) inert:

Pressure wash and dry ice

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

The Bay Area Air Quality Management District, 415/771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert.

15. Tank History and Sampling Information \*\*\* (see instructions) \*\*\*

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		

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

**Excavated/Stockpiled Soil**

Stockpiled Soil Volume (estimated)

Sampling Plan:

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

Will the excavated soil be returned to the excavation immediately after tank removal? [ ] yes [X] no [ ] unknown

If yes, explain reasoning \_\_\_\_\_

If unknown at this point in time, please be aware that excavated soil may not be returned to the excavation without prior approval from Alameda County. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling operations.

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

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

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

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
Diesel	TPH <sub>d</sub> BTX	GLF10 (3550) 8020	
Gasoline	TPH <sub>g</sub> BTX Total Lead	GLF10 (6030) 8020	

18. Submit Worker's Compensation Certificate copy

Name of Insurer State Compensation Insurance Fund

19. Submit Plot Plan **\*\*\* (See Instructions) \*\*\***

20. Enclose Deposit (See Instructions)

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

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

23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)

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

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

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

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

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

CONTRACTOR INFORMATION

Name of Business RAY Environmental, Inc.

Name of Individual Scott Vickers

Signature [Signature] Date 7/7/92

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business U.S. Coast Guard

Name of Individual \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_



STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
**UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A**



COMPLETE THIS FORM FOR EACH FACILITY/SITE

<b>MARK ONLY ONE ITEM</b>	<input checked="" type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input type="checkbox"/> 7 PERMANENTLY CLOSED SITE
	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY SITE CLOSURE	

**I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)**

DBA OR FACILITY NAME <i>U.S. Coast Guard Integrated Support Command</i>		NAME OF OPERATOR			
ADDRESS <i>Coast Guard Island</i>		NEAREST CROSS STREET	PARCEL # (OPTIONAL)		
CITY NAME <i>Alameda</i>	STATE <i>CA</i>	ZIP CODE	SITE PHONE # WITH AREA CODE		
<input checked="" type="checkbox"/> BOX TO INDICATE <input type="checkbox"/> CORPORATION <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> LOCAL AGENCY DISTRICTS* <input type="checkbox"/> COUNTY AGENCY* <input type="checkbox"/> STATE AGENCY* <input checked="" type="checkbox"/> FEDERAL AGENCY*					
* If owner of UST is a public agency, complete the following: name of Supervisor of division, section, or office which operates the UST					
TYPE OF BUSINESS <input type="checkbox"/> 1 GAS STATION <input type="checkbox"/> 2 DISTRIBUTOR <input type="checkbox"/> 3 FARM <input type="checkbox"/> 4 PROCESSOR <input checked="" type="checkbox"/> 5 OTHER		<input type="checkbox"/> IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE <i>3</i>	E. P. A. I. D. # (optional) <i>CA7690390037</i>	

**EMERGENCY CONTACT PERSON (PRIMARY)**

**EMERGENCY CONTACT PERSON (SECONDARY) - optional**

DAYS: NAME (LAST, FIRST) <i>Henry, Raymond</i>	PHONE # WITH AREA CODE <i>(916) 652-5777</i>	DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE
NIGHTS: NAME (LAST, FIRST) <i>Same</i>	PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

**II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)**

NAME <i>U.S. Coast Guard</i>		CARE OF ADDRESS INFORMATION		
MAILING OR STREET ADDRESS <i>2000 Embarcadero, Suite 200</i>		<input checked="" type="checkbox"/> box to indicate	<input type="checkbox"/> INDIVIDUAL	<input type="checkbox"/> LOCAL AGENCY
CITY NAME <i>Oakland</i>		<input type="checkbox"/> CORPORATION	<input type="checkbox"/> PARTNERSHIP	<input type="checkbox"/> COUNTY AGENCY
STATE <i>CA</i>	ZIP CODE <i>94606-5337</i>	<input checked="" type="checkbox"/> FEDERAL AGENCY		
PHONE # WITH AREA CODE <i>(510) 535-7280</i>				

**III. TANK OWNER INFORMATION - (MUST BE COMPLETED)**

NAME OF OWNER <i>U.S. Coast Guard</i>		CARE OF ADDRESS INFORMATION		
MAILING OR STREET ADDRESS <i>2000 Embarcadero, Suite 200</i>		<input checked="" type="checkbox"/> box to indicate	<input type="checkbox"/> INDIVIDUAL	<input type="checkbox"/> LOCAL AGENCY
CITY NAME <i>Oakland</i>		<input type="checkbox"/> CORPORATION	<input type="checkbox"/> PARTNERSHIP	<input type="checkbox"/> COUNTY AGENCY
STATE <i>CA</i>	ZIP CODE <i>94606-5337</i>	<input checked="" type="checkbox"/> FEDERAL AGENCY		
PHONE # WITH AREA CODE <i>(510) 535-7280</i>				

**IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.**

TY (TK) HQ  -

**V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) - IDENTIFY THE METHOD(S) USED**

<input checked="" type="checkbox"/> box to indicate	<input type="checkbox"/> 1 SELF-INSURED	<input type="checkbox"/> 2 GUARANTEE	<input type="checkbox"/> 3 INSURANCE	<input type="checkbox"/> 4 SURETY BOND
	<input type="checkbox"/> 5 LETTER OF CREDIT	<input checked="" type="checkbox"/> 6 EXEMPTION	<input type="checkbox"/> 99 OTHER	

**VI. LEGAL NOTIFICATION AND BILLING ADDRESS** Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING:    I.     II.     III.

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

OWNER'S NAME (PRINTED & SIGNED) <i>Scott Vickers Scott Miller</i>	OWNER'S TITLE <i>Auth. Rep.</i>	DATE MONTH/DAY/YEAR <i>7/2/97</i>
--	------------------------------------	--------------------------------------

LOCAL AGENCY USE ONLY *Don Moore*

COUNTY # <input type="text" value="01"/>	JURISDICTION # <input type="text" value="01"/>	FACILITY # <input type="text" value="01"/>
LOCATION CODE - OPTIONAL	CENSUS TRACT # - OPTIONAL	SUPVISOR - DISTRICT CODE - OPTIONAL

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.  
OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
**UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B**



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM	<input type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input type="checkbox"/> 7 PERMANENTLY CLOSED ON SITE
	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY TANK CLOSURE	<input checked="" type="checkbox"/> 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: U.S. Coast Guard ISC Command

**I. TANK DESCRIPTION** COMPLETE ALL ITEMS - SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # <u>Bldg 19</u>	B. MANUFACTURED BY:
C. DATE INSTALLED (MO/DAY/YEAR) <u>Unknown</u>	D. TANK CAPACITY IN GALLONS: <u>500</u>

**II. TANK CONTENTS** IF A-1 IS MARKED, COMPLETE ITEM C.

A. <input checked="" type="checkbox"/> 1 MOTOR VEHICLE FUEL	<input type="checkbox"/> 4 OIL	B. <input type="checkbox"/> 1 PRODUCT	C. <input type="checkbox"/> 1a REGULAR UNLEADED	<input checked="" type="checkbox"/> 3 DIESEL	<input type="checkbox"/> 6 AVIATION GAS
<input type="checkbox"/> 2 PETROLEUM	<input type="checkbox"/> 80 EMPTY	<input type="checkbox"/> 2 WASTE	<input type="checkbox"/> 1b PREMIUM UNLEADED	<input type="checkbox"/> 4 GASAHOL	<input type="checkbox"/> 7 METHANOL
<input type="checkbox"/> 3 CHEMICAL PRODUCT	<input type="checkbox"/> 95 UNKNOWN		<input type="checkbox"/> 1c MIDGRADE UNLEADED	<input type="checkbox"/> 5 JET FUEL	<input type="checkbox"/> 8 M85
			<input checked="" type="checkbox"/> 2 LEADED	<input type="checkbox"/> 99 OTHER (DESCRIBE IN ITEM D. BELOW)	

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED \_\_\_\_\_ C. A. S. #: \_\_\_\_\_

**III. TANK CONSTRUCTION** MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM	3 SINGLE WALL WITH EXTERIOR LINER	5 INTERNAL BLADDER SYSTEM	<input checked="" type="checkbox"/> 95 UNKNOWN
<input type="checkbox"/> 1 DOUBLE WALL	<input type="checkbox"/> 4 SINGLE WALL IN A VAULT	<input type="checkbox"/> 99 OTHER	
B. TANK MATERIAL (Primary Tank)	<input type="checkbox"/> 2 STAINLESS STEEL	<input type="checkbox"/> 3 FIBERGLASS	<input type="checkbox"/> 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC
<input type="checkbox"/> 1 BARE STEEL	<input type="checkbox"/> 6 POLYVINYL CHLORIDE	<input type="checkbox"/> 7 ALUMINUM	<input type="checkbox"/> 8 100% METHANOL COMPATIBLE W/FRP
<input type="checkbox"/> 5 CONCRETE	<input type="checkbox"/> 10 GALVANIZED STEEL	<input checked="" type="checkbox"/> 95 UNKNOWN	<input type="checkbox"/> 99 OTHER
<input type="checkbox"/> 9 BRONZE			
C. INTERIOR LINING OR COATING	<input type="checkbox"/> 2 ALKYD LINING	<input type="checkbox"/> 3 EPOXY LINING	<input type="checkbox"/> 4 PHENOLIC LINING
<input type="checkbox"/> 1 RUBBER LINED	<input type="checkbox"/> 6 UNLINED	<input checked="" type="checkbox"/> 95 UNKNOWN	<input type="checkbox"/> 99 OTHER
<input type="checkbox"/> 5 GLASS LINING			
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___			
D. EXTERIOR CORROSION PROTECTION	<input type="checkbox"/> 2 COATING	<input type="checkbox"/> 3 VINYL WRAP	<input type="checkbox"/> 4 FIBERGLASS REINFORCED PLASTIC
<input type="checkbox"/> 1 POLYETHYLENE WRAP	<input type="checkbox"/> 91 NONE	<input checked="" type="checkbox"/> 95 UNKNOWN	<input type="checkbox"/> 99 OTHER
<input type="checkbox"/> 5 CATHODIC PROTECTION			
E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____ DROPTUBE YES ___ NO ___ STRIKER PLATE YES ___ NO ___ DISPENSER CONTAINMENT YES ___ NO ___			

**IV. PIPING INFORMATION** CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE	A U 2 PRESSURE	A U 3 GRAVITY	A U 4 FLEXIBLE PIPING	A U 99 OTHER
A U 1 SUCTION	A U 1 SINGLE WALL	A U 2 DOUBLE WALL	A U 3 UNED TRENCH	A U 95 UNKNOWN
B. CONSTRUCTION	A U 1 BARE STEEL	A U 2 STAINLESS STEEL	A U 3 POLYVINYL CHLORIDE (PVC)	A U 4 FIBERGLASS PIPE
C. MATERIAL AND CORROSION PROTECTION	A U 5 ALUMINUM	A U 6 CONCRETE	A U 7 STEEL W/ COATING	A U 8 100% METHANOL COMPATIBLE W/FRP
A U 9 GALVANIZED STEEL	A U 10 CATHODIC PROTECTION	<input checked="" type="checkbox"/> 95 UNKNOWN	A U 99 OTHER	
D. LEAK DETECTION	<input type="checkbox"/> 1 MECHANICAL LINE LEAK DETECTOR	<input type="checkbox"/> 2 LINE TIGHTNESS TESTING	<input type="checkbox"/> 3 CONTINUOUS INTERSTITIAL MONITORING	<input type="checkbox"/> 4 ELECTRONIC LINE LEAK DETECTOR
	<input type="checkbox"/> 5 AUTOMATIC PUMP SHUTDOWN	<input type="checkbox"/> 99 OTHER		

**V. TANK LEAK DETECTION**

<input type="checkbox"/> 1 VISUAL CHECK	<input type="checkbox"/> 2 MANUAL INVENTORY RECONCILIATION	<input type="checkbox"/> 3 VADOZE MONITORING	<input type="checkbox"/> 4 AUTOMATIC TANK GAUGING	<input type="checkbox"/> 5 GROUND WATER MONITORING	<input type="checkbox"/> 6 ANNUAL TANK TESTING
<input type="checkbox"/> 7 CONTINUOUS INTERSTITIAL MONITORING	<input type="checkbox"/> 8 SIR	<input type="checkbox"/> 9 WEEKLY MANUAL TANK GAUGING	<input type="checkbox"/> 10 MONTHLY TANK TESTING	<input checked="" type="checkbox"/> 95 UNKNOWN	<input type="checkbox"/> 99 OTHER

**VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)**

1. ESTIMATED DATE LAST USED (MO/DAY/YR)	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING <u>100</u> GALLONS	3. WAS TANK FILLED WITH INERT MATERIAL? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
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THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE) <u>Don Moore</u> <u>Scott Vickers</u>	DATE <u>7/10/97</u>
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**LOCAL AGENCY USE ONLY** THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
PERMIT NUMBER	PERMIT APPROVED BY/DATE		PERMIT EXPIRATION DATE	