



3/15/88

Applied GeoSystems

43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

• FREMONT

• COSTA MESA

• SACRAMENTO

• HOUSTON

**REPORT
ENVIRONMENTAL INVESTIGATION
RELATED TO UNDERGROUND TANK REMOVAL
at
Barbary Coast Steel Corporation
4300 East Shore Highway
Emeryville, California**

INTRODUCTION

This report summarizes the limited environmental investigation conducted in conjunction with the removal of six underground storage tanks at the Barbary Coast Steel Corporation site located at 4300 East Shore Highway, Emeryville, California. W.A. Craig, Inc., requested that Applied GeoSystems conduct an Underground Storage Tank (UST) investigation to inspect the removed tanks and to test for the presence of hydrocarbon product in the soil under and adjacent to the tanks. This report describes the work elements associated with the tank removal and inspection and the soil sampling and laboratory analyses. The analytical results obtained are also summarized, and our recommendations are presented.

March 15, 1988

AGS 87023-2

Barbary Coast Steel Corporation, Emeryville, California

BACKGROUND

Barbary Coast Steel Corporation is located at 4300 East Shore Highway in Emeryville, California, as shown on the Site Vicinity Map, Plate P-1. The underground storage tanks removed were excavated from three locations of the site, designated A, B, and C in this report, as shown in the Generalized Site Plan, Plate P-2. Three underground storage tanks were present at Location A. These were a 1,200-gallon-capacity diesel storage tank (Tank T1), a 1,200-gallon-capacity gasoline storage tank (Tank T2), and a 10,000-gallon-capacity diesel storage tank (Tank T3). Two underground storage tanks were located at B. These were a 2,000-gallon-capacity gasoline storage tank (Tank T4) and a 2,000-gallon-capacity diesel storage tank (Tank T5). A 12,000-gallon-capacity diesel tank (Tank T6) was located at C. Tank T6 was constructed of fiberglass while the other five tanks were constructed of steel. It is our understanding that the tanks at Location A were installed in the 1940's or 1950's, and the tanks at Location B were installed in the 1960's. The fiberglass tank (Tank T6) was installed approximately 6 years ago.

March 15, 1988

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TANK REMOVAL AND INSPECTION

A field geologist from Applied GeoSystems was present on site on February 25, 1988, to observe removal of tanks T1 through T5; to inspect their outer surfaces; and to inspect and collect soil and water samples from the tank cavities. The geologist returned to the site on February 26, 1988, to inspect Tank T6 and to collect soil and water samples from the tank pit. Dry ice was placed inside each tank approximately 2 hours prior to its removal to create a non-explosive environment inside the tank, in accordance with regulations set by the Oakland Fire Department. An Organic Vapor Analyzer (OVA) was used to check that the vapor concentration inside each tank was below the Lower Explosive Limit (LEL) before the tank was removed.

W.A. Craig, Inc., of Richmond, California, removed the tanks. Excavation and tank removal were accomplished with a backhoe. The tanks were lifted from their cavities and rolled on their sides for inspection. The outer surface of each tank was inspected by personnel from Applied GeoSystems for signs of leakage, holes, pitting, or areas of weakness. The sides and ends of each tank were scraped, and particular attention was given to seams and points directly below the fill port. The

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Barbary Coast Steel Corporation, Emeryville, California

fiberglass tank (Tank T6) broke apart during the excavation operation; and, therefore, its in situ integrity could not be inferred by inspection. A summary of the observations made is shown in Table 1. After inspection, the tanks were transported to a disposal facility by H and H Ship Service Company of San Francisco, California.

TABLE 1
SUMMARY OF OBSERVATIONS DURING TANK INSPECTION
Barbary Coast Steel Corporation
4300 East Shore Boulevard
Emeryville, California

Tank T1	(diesel): steel, 1,200-gallon-capacity, slightly rusted, no signs of leakage or through-going holes.
Tank T2	(gasoline): steel, 1,200-gallon-capacity, slightly rusted, no signs of leakage or through-going holes.
Tank T3	(diesel): steel, 10,000-gallon-capacity, slightly rusted, no signs of leakage or through-going holes.
Tank T4	(gasoline): steel, 2,000-gallon-capacity, slightly rusted, no signs of leakage or through-going holes.
Tank T5	(diesel): steel, 2,000-gallon-capacity, slightly rusted, no signs of leakage or through-going holes.
Tank T6	(diesel): fiberglass, 12,000-gallon-capacity, broke apart during excavation and removal.

March 15, 1988

Barbary Coast Steel Corporation, Emeryville, California

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SOIL AND WATER SAMPLING

The material surrounding the tanks at the site was predominantly foundry slag containing a matrix of medium-grained sand. The water table was encountered at a depth of approximately 6 feet; therefore, the bottoms of the excavations were flooded. Soil samples were collected for laboratory analyses from the matrix material due to the large size of the slag pieces. These samples were collected from material excavated from the side wall of each tank pit from just above the water table. No soil samples were collected from around tanks T1 through T3 because there was insufficient matrix material in the slag to sample.

The samples were collected by driving a hand-held sampler containing a laboratory-cleaned brass sleeve into a bucket load of soil when the backhoe brought it to the surface. Samples were immediately sealed with aluminum foil, plastic caps, and airtight tape. Samples were then labeled and placed into iced storage for transport to the testing laboratory.

Water samples were collected from each of the flooded tank pit excavations. The water samples were collected using a laboratory-cleaned Teflon bailer and were transferred to

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Barbary Coast Steel Corporation, Emeryville, California

laboratory-cleaned, 40-milliliter glass volatile organic analysis (VOA) vials or 1-liter glass bottles depending on the analyses required. The samples were made acidic by adding hydrochloric acid and then immediately sealed with Teflon-lined caps, labeled, and placed in iced storage. When the fiberglass tank (Tank T6) broke apart during the removal operation, liquid from the tank entered the pit. A water sample was collected from the tank pit after H and H Shipping of San Francisco had pumped the liquid spill from the excavation.

The soil and water samples were delivered to the Applied GeoSystems laboratory in Fremont, California, for analyses. Chain-of-Custody protocol was observed throughout the process of handling the samples.

LABORATORY ANALYSES

Soil samples collected from the sides of the excavation which contained Tank T4 were analyzed for total petroleum hydrocarbons (TPH), and the samples collected from the sides of the excavations which contained Tank T5 and Tank T6 were analyzed for total extractable hydrocarbons (TEH). Water samples collected from excavations which contained the diesel storage tanks (T1, T3, T5, and T6) were analyzed for TEH and the hydrocarbon

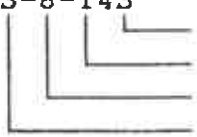
constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX). Water samples collected from excavations which contained the gasoline storage tanks (T2 and T4) were analyzed for TPH and BTEX. The analytical results are summarized in Table 2. The methods of analyses used are described on the Analysis Reports which are included in the Appendix of this report.

TABLE 2
RESULTS OF LABORATORY ANALYSES
 Barbary Coast Steel Corporation
 4300 East Shore Boulevard
 Emeryville, California

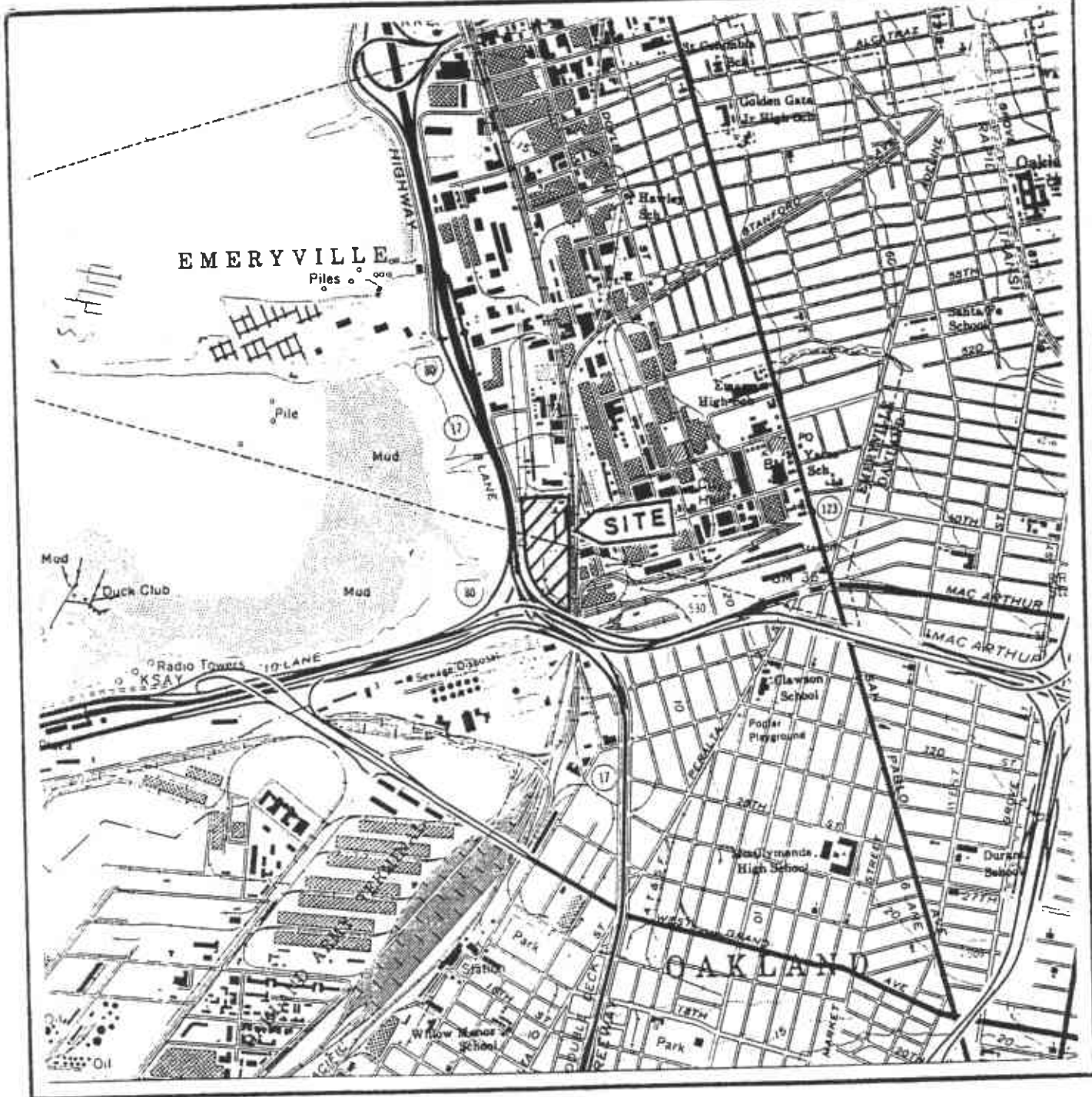
	B	E	T	X	TPH	TEH
Soil:						
S-8-T4S	NA	NA	NA	NA	<2	NA
S-8-T4N	NA	NA	NA	NA	6	NA
S-7-T5S	NA	NA	NA	NA	NA	9650
S-7-T5N	NA	NA	NA	NA	NA	9870
S-4.5-T6NE	NA	NA	NA	NA	NA	1100
S-5.5-T6SE	NA	NA	NA	NA	NA	<5
Water:						
W-7-T3	NA	NA	NA	NA	NA	0.40
W-6-T3	0.004	0.012	0.018	0.056	1.78	NA
W-8-T4	0.131	0.426	0.111	0.659	7.2	NA
W-7-T5	0.029	0.025	0.011	0.088	NA	NA
W-6.5-T6	0.51	0.21	0.94	1.23	NA	64.0

Results reported in parts per million (ppm)
 TPH = total petroleum hydrocarbons
 TEH = total extractable hydrocarbons
 BETX = benzene, ethylbenzene, toluene, and total xylene isomers
 < = less than detection limit for method of analysis used
 NA = analysis not required

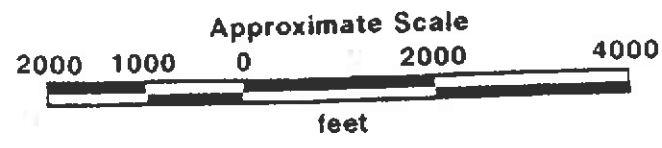
Sample description: **S-8-T4S**



Side of pit sampled
 Tank number
 Depth below grade (feet)
 S = soil, W = water



Source: U.S. Geological Survey
 7.5-Minute Quadrangle
 Oakland West, California
 Photorevised 1980

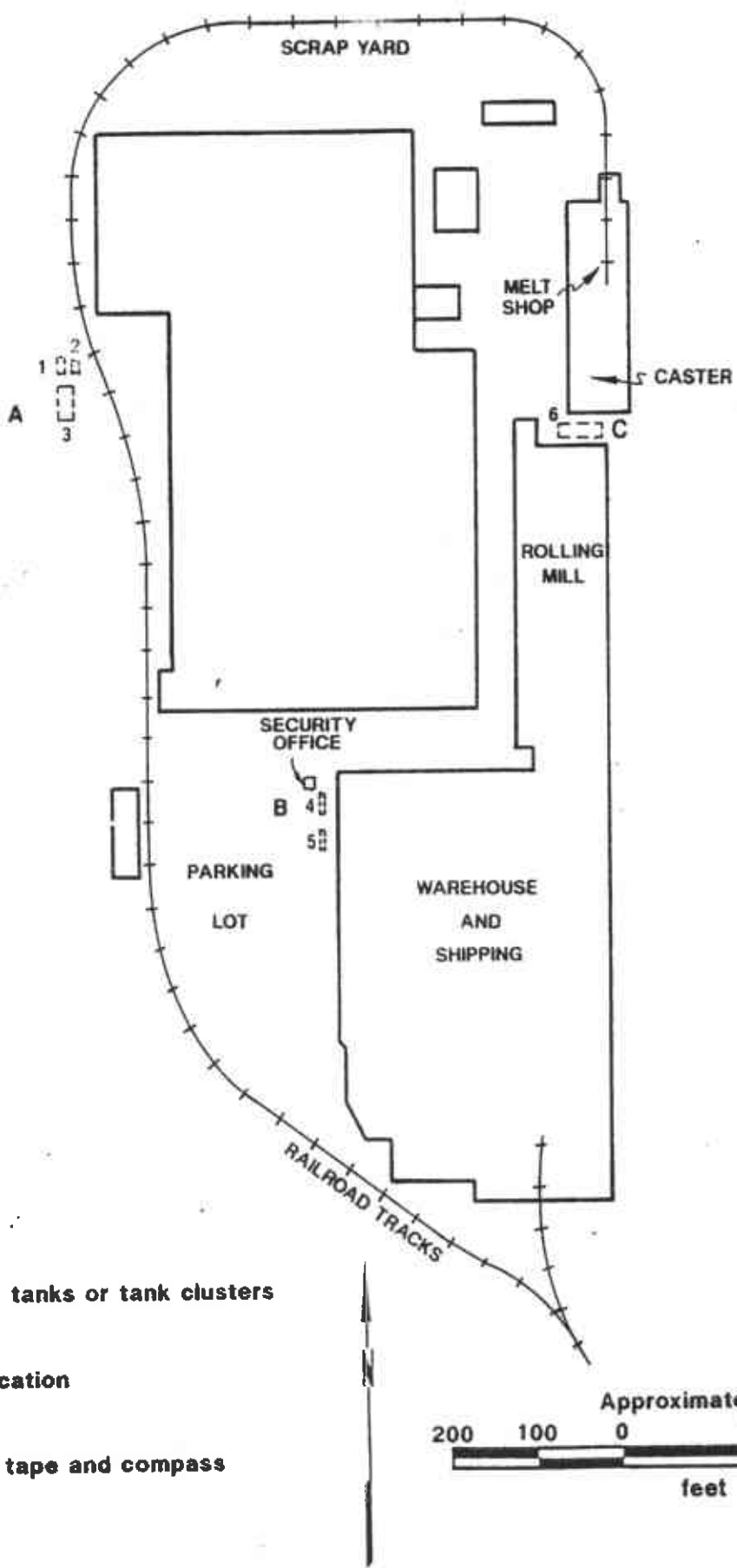



 Applied GeoSystems
 111 Mission Blvd., Suite B, Fremont, CA 94538 415 651 1860

PROJECT NO. AGS 018016-1

SITE VICINITY MAP
Barbarly Coast Steel Corporation
4300 East Shore Boulevard
Emeryville, California

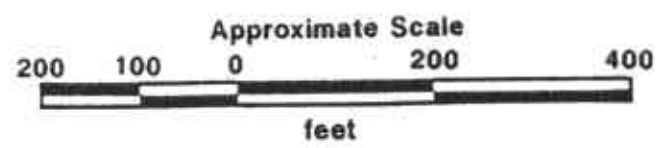
PLATE
P - 1



A,B,C = Locations of tanks or tank clusters

⁴ = Tank identification

Source: Measured by tape and compass



PROJECT NO. AGS 018016-1

GENERALIZED SITE PLAN
Barbary Coast Steel Corporation
4300 East Shore Highway
Emeryville, California

PLATE
P - 2

W. A. CRAIG, INC.
Marine & Industrial Construction
P.O. Box 448
NAPA, CALIFORNIA 94559

MEMO

(707) 252-3353

TO Barbary Coast Steel
4300 E. Shore Hwy -
Emeryville, CA.

DATE	2-16-88
SUBJECT	Site Safety Plan

Emergency phone #'s

OAKLAND Hosp. E.R. 415-532-3300 ext. 236

Ambulance 415-653-6622

Fire/Rescue 911

POISON Control/Cnt. 415-428-3248

Consultant & LAB - Ask for Glen 415-651-1906

SAFETY/All Emergencies - Page Bill Craig 415-620-7244

A site specific safety plan has been prepared
by Applied Geo Systems - 415-651-1906

PLEASE REPLY

NO REPLY NECESSARY

SIGNED

Bill Craig

Excavation Permit Granted _____ No. _____

CITY OF OAKLAND

Tank Permit

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks. No. 9063

Oakland, California, February 23, 1988

PERMISSION IS HEREBY GRANTED TO ~~XXXXX~~ remove ~~XXXXX~~ Gasoline tank and excavate commencing _____ feet inside property line

on the east side of - East Shore Highway Street Avenue _____ feet _____ of _____ Street Avenue _____

House No. 4300 Eastshore Hwy. Street Avenue _____ Present Storage _____

Owner. Barbary Coast Steel Address 4300 Eastshore Hwy. Phone _____

Applicant. W. A. Craig, Inc. Address P.O. Box 448 Napa 94559 Phone 707/252-3353

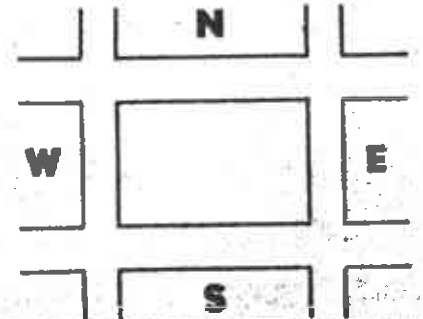
Dimensions of street (sidewalk) surface to be disturbed _____ X _____ Number of Tanks 1 Capacity 12,000 Gallons, each.

Remarks: _____ 2 _____ 2000 _____
_____ 2 _____ 1200 _____
_____ 1 _____ 5000 _____

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved _____ Fire Marshal

Approved _____ Drainage Division Engineering Dept.



EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

_____ square feet of digging or removal granted.

The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

Inspection Fee Paid - - - - - \$ 50.00 ck#1308 rec#128476

Received by D. Clemons

FIRE PREVENTION BUREAU

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on _____ 19 _____

By _____ Fire Marshal

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

When ready for inspection notify Fire Prevention Bureau, 273-3851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.

CITY OF OAKLAND
 O. J. Spikes
 Inspection
 Fire Prevention Bureau
 273-3853
 PHONE (415)
 7:30 p.m.

PARTIAL PAYMENT

CITY OF OAKLAND
CASH RECEIPT

128410

FINAL PARTIAL PAYMENT

CASH

DATE

2/16/88

RECEIVED FROM

W. A. Craig, Inc

BY CHECK

#1308

DESCRIPTION	INVOICE NO.	T/C	FUND	Y	F	ACT.	REV. SCE	COST CENTER	AMOUNT
<i>Tank Removal</i>			<i>101</i>			<i>231042</i>			<i>\$50.00</i>
<i>4300 East Shore Hwy</i>									

AUXILIARY RECEIPT REF. NO.:

TOTAL *\$50.00*

DEPARTMENT

Fire Prevention

BY

Doris Clemons

CREDIT TO EXPENDITURES FOR REIMBURSEMENTS

T/C	FUND	FY	FUNC	ACTIVITY	OBJECT	COST CENTER	AMOUNT

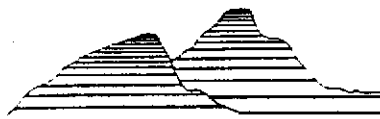
10-10.6 3-80

CUSTOMER COPY

CITY OF OAKLAND
O. J. Spikes
 INSPECTOR
 FIRE PREVENTION BUREAU



Between 7:30-9
 PHONE (415) 273-3853
 ONE CITY HALL PLAZA, OAKLAND, CA 94612



Applied GeoSystems

43255 Mission Boulevard, Fremont, CA 94539 (415) 631-1906

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ANALYSIS REPORT

Report Prepared for:
Applied GeoSystems
43255 Mission Blvd.
Fremont, CA 94539
Attention: John T. Lambert

0212lab.frm
Date Received: 2-26-88
Laboratory Number: 02058S04
Project: 018016-1
Sample: S-7-T5S
Matrix: Soil

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline						NR
TPH as Gasoline						NR
TEH as Diesel	9650		50		03-02-88	
Benzene						NR
Toluene						NR
Ethylbenzene						NR
Total Xylenes						NR

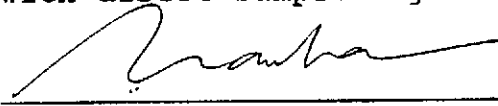
mg/kg = milligrams per kilogram = parts per million (ppm).
mg/L = milligrams per liter = ppm.
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TPH--Total petroleum hydrocarbons (low-to-medium boiling points) are measured by extraction according to EPA Method 5030 followed by analysis by a modified EPA Method 8015 which uses a GC equipped with an FID. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.


Tia Tran, Laboratory Supervisor

3-14-88
Date Reported



Applied GeoSystems

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ANALYSIS REPORT

Report Prepared for:	Date Received:	0212lab.frm
Applied GeoSystems	2-26-88	
43255 Mission Blvd.	Laboratory Number:	02058S03
Fremont, CA 94539	Project:	018016-1
Attention: John T. Lambert	Sample:	S-7-T5N
	Matrix:	Soil

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline						NR
TPH as Gasoline						NR
TEH as Diesel	9870		50		03-02-88	
Benzene						NR
Toluene						NR
Ethylbenzene						NR
Total Xylenes						NR

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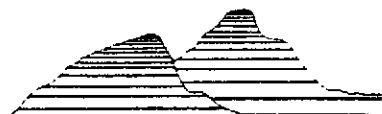
TPH--Total petroleum hydrocarbons (low-to-medium boiling points) are measured by extraction according to EPA Method 5030 followed by analysis by a modified EPA Method 8015 which uses a GC equipped with an FID. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Tia Tran, Laboratory Supervisor

3-14-88

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Applied GeoSystems

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ANALYSIS REPORT

Report Prepared for:	Date Received:	0212lab.frm
Applied GeoSystems	Laboratory Number:	2-26-88
43255 Mission Blvd.	Project:	02059W03
Fremont, CA 94539	Sample:	018016-1
Attention: John T. Lambert	Matrix:	W-7-T5
		Water

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline						NR
TPH as Gasoline						NR
TEH as Diesel						NR
Benzene		0.029		0.005	3-03-88	
Toluene		0.011		0.005	3-03-88	
Ethylbenzene		0.025		0.005	3-03-88	
Total Xylenes		0.088		0.005	3-03-88	

mg/kg = milligrams per kilogram = parts per million (ppm).

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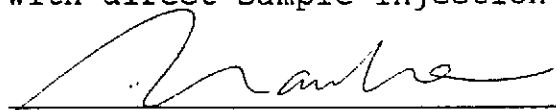
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PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

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TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015, with direct sample injection into a GC equipped with an FID.


Tia Tran, Laboratory Supervisor

3-14-88
Date Reported

ANALYSIS REPORT

Report Prepared for:
 Applied GeoSystems
 43255 Mission Blvd.
 Fremont, CA 94539
 Attention: John T. Lambert

0212lab.frm

Date Received: 2-26-88
 Laboratory Number: 02058S01
 Project: 018016-1
 Sample: S-8-T4S
 Matrix: Soil

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline	ND		2		03-03-88	NR
TPH as Gasoline						NR
TEH as Diesel						NR
Benzene						NR
Toluene						NR
Ethylbenzene						NR
Total Xylenes						NR

mg/kg = milligrams per kilogram = parts per million (ppm).

mg/L = milligrams per liter = ppm.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

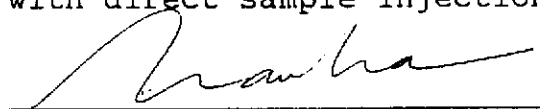
NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

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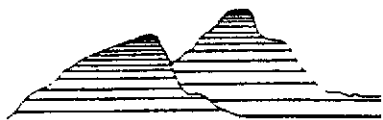
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ANALYSIS REPORT

Report Prepared for:
Applied GeoSystems
43255 Mission Blvd.
Fremont, CA 94539
Attention: John T. Lambert

0212lab.frm
Date Received: 2-26-88
Laboratory Number: 02059W02
Project: 018016-1
Sample: W-6-T3
Matrix: Water

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline						NR
TPH as Gasoline		1.78		0.02	3-03-88	
TEH as Diesel						NR
Benzene		0.004		0.001	3-03-88	
Toluene		0.018		0.001	3-03-88	
Ethylbenzene		0.012		0.001	3-03-88	
Total Xylenes		0.056		0.001	3-03-88	

mg/kg = milligrams per kilogram = parts per million (ppm).

mg/L = milligrams per liter = ppm.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

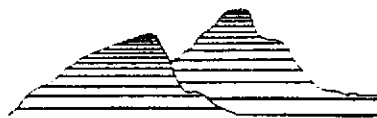
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Report Prepared for:
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Fremont, Ca. 94539
Attention: John T. Lambert

0212lab.frm
Date Received: 2-26-88
Laboratory Number: 02059W01
Project: 018016-1
Sample: W-8-T4
Matrix: Water

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline						NR
TPH as Gasoline		7.2		0.1	03-03-88	
TEH as Diesel						NR
Benzene		0.131		0.005	03-03-88	
Toluene		0.111		0.005	03-03-88	
Ethylbenzene		0.426		0.005	03-03-88	
Total Xylenes		0.659		0.005	03-03-88	

mg/kg = milligrams per kilogram = parts per million (ppm).

mg/L = milligrams per liter = ppm.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TPH--Total petroleum hydrocarbons (low-to-medium boiling points) are measured by extraction according to EPA Method 5030 followed by analysis by a modified EPA Method 8015 which uses a GC equipped with an FID. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

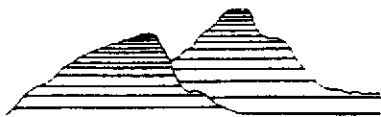
TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Tia Tran, Laboratory Supervisor

3-14-88

Date Reported

APPLIED GEOSYSTEMS IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY



Applied GeoSystems

43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

• FREMONT • COSTA MESA • SACRAMENTO • HOUSTON

ANALYSIS REPORT

Report Prepared for:
Applied GeoSystems
43255 Mission Blvd.
Fremont, CA 94539
Attention: John T. Lambert

0212lab.frm
Date Received: 2-26-88
Laboratory Number: 02058S02
Project: 018016-1
Sample: S-8-T4N
Matrix: Soil

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline	6		2		03-03-88	NR
TPH as Gasoline						NR
TEH as Diesel						NR
Benzene						NR
Toluene						NR
Ethylbenzene						NR
Total Xylenes						NR

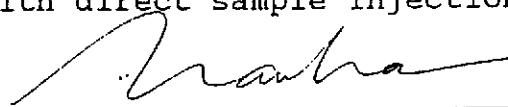
mg/kg = milligrams per kilogram = parts per million (ppm).
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ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

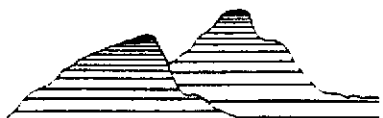
TPH--Total petroleum hydrocarbons (low-to-medium boiling points) are measured by extraction according to EPA Method 5030 followed by analysis by a modified EPA Method 8015 which uses a GC equipped with an FID. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.


Tia Tran, Laboratory Supervisor

3-14-88
Date Reported

APPLIED GEOSYSTEMS IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY



Applied GeoSystems

43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

• FREMONT • COSTA MESA • SACRAMENTO • HOUSTON

ANALYSIS REPORT

Report Prepared for:
Applied GeoSystems
43255 Mission Blvd.
Fremont, CA 94539
Attention: John T. Lambert

0212lab.frm
Date Received: 2-26-88
Laboratory Number: 02056W01
Project: 018016-1
Sample: W-6.5-T6
Matrix: Water

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline						NR
TPH as Gasoline						NR
TEH as Diesel		64.0		0.5	3-08-88	
Benzene		0.51		0.005	3-03-88	
Toluene		0.94		0.005	3-03-88	
Ethylbenzene		0.21		0.005	3-03-88	
Total Xylenes		1.23		0.005	3-03-88	

mg/kg = milligrams per kilogram = parts per million (ppm).

mg/L = milligrams per liter = ppm.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

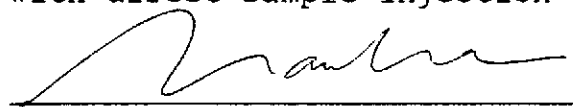
NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

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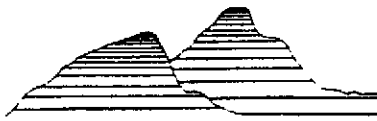
TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.


Tia Tran, Laboratory Supervisor

3-14-88

Date Reported

APPLIED GEOSYSTEMS IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY



Applied GeoSystems

43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

• FREMONT • COSTA MESA • SACRAMENTO • HOUSTON

ANALYSIS REPORT

Report Prepared for:
Applied GeoSystems
43255 Mission Blvd.
Fremont, CA 94539
Attention: John T. Lambert

0212lab.frm
Date Received: 2-26-88
Laboratory Number: 02056W02
Project: 018016-1
Sample: W-7-T3
Matrix: Water

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline						NR
TPH as Gasoline						NR
TEH as Diesel		0.40		0.05	03-08-88	
Benzene						NR
Toluene						NR
Ethylbenzene						NR
Total Xylenes						NR

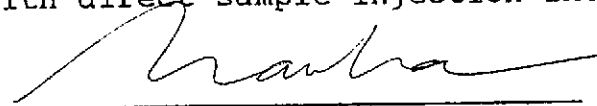
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mg/L = milligrams per liter = ppm.
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NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TPH--Total petroleum hydrocarbons (low-to-medium boiling points) are measured by extraction according to EPA Method 5030 followed by analysis by a modified EPA Method 8015 which uses a GC equipped with an FID. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.


Tia Tran, Laboratory Supervisor

3-14-88
Date Reported



Applied GeoSystems

43255 Mission Boulevard, Fremont, CA 94539 (415) 651-1906

• FREMONT • COSTA MESA • SACRAMENTO • HOUSTON

ANALYSIS REPORT

Report Prepared for:
Applied GeoSystems
43255 Mission Blvd.
Fremont, CA 94539
Attention: John T. Lambert

0212lab.frm
Date Received: 2-26-88
Laboratory Number: 02057S02
Project: 018016-1
Sample: S-4.5-T6NE
Matrix: Soil

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline	1100		5		03-02-88	NR
TPH as Gasoline						NR
TEH as Diesel						
Benzene						NR
Toluene						NR
Ethylbenzene						NR
Total Xylenes						NR

mg/kg = milligrams per kilogram = parts per million (ppm).

mg/L = milligrams per liter = ppm.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not required.

PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

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TEH--Total extractable hydrocarbons (high boiling points) are measured by extraction according to EPA Method 3550 for soils or EPA Method 3510 for water followed by a modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Tia Tran, Laboratory Supervisor

3-14-88

Date Reported

ANALYSIS REPORT

Report Prepared for:
 Applied GeoSystems
 43255 Mission Blvd.
 Fremont, CA 94539
 Attention: John T. Lambert

0212lab.frm

Date Received: 2-26-88
 Laboratory Number: 02057S01
 Project: 018016-1
 Sample: S-5.5T6SE
 Matrix: Soil

Parameter	Result		Detection Limit		Date Analyzed	Notes
	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)		
TVH as Gasoline	ND		5		03-02-88	NR
TPH as Gasoline						NR
TEH as Diesel						NR
Benzene						NR
Toluene						NR
Ethylbenzene						NR
Total Xylenes						NR

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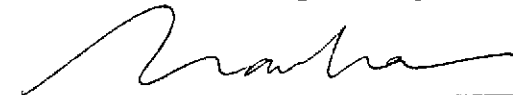
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PROCEDURES

TVH/BTEX--Total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction according to EPA Method 5030 followed by analysis by a EPA Method 8020/602 (modified for TVH) which uses a gas chromatograph (GC) equipped with a photo-ionization detector (PID) and a flame-ionization detector (FID) in series. Soil extracts and water samples are subjected to purge-and-trap introduction into the GC.

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Tia Tran, Laboratory Supervisor

3-14-88

Date Reported

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO.

ADDRESS 4300 Eastshore Highway

NAME Barbary Coast Steel / W.A. Craig Inc

GENERAL INSPECTION PERMIT OTHER HAZARD NOTED HAZARD ABATED

NOTICE LEFT LETTER 1st NOTICE 2nd NOTICE FINAL

DATE	VIOLATION	O.F.C.	CONTACTED
3-15-88	Witnessed Removal & Back Fill Of One 12,000 Gallon Diesel Fiberglass Tank. Some Product Was Present But It Was Due To Oil From The On Site Plant Cooling Tower That Spilled/overflowed		Supvi Craig

A REINSPECTION WILL BE MADE WITHIN _____ DAYS.
FIRE PREVENTION BUREAU — PHONE 273-3851
INSPECTOR D.J. Spikes

338-5 (Rev. 5-77)

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO.

ADDRESS 4300 Eastshore Highway 209

NAME Barbary Coast Steel / W.A. Craig Inc

GENERAL INSPECTION PERMIT OTHER HAZARD NOTED HAZARD ABATED

NOTICE LEFT LETTER 1st NOTICE 2nd NOTICE FINAL

DATE	VIOLATION	O.F.C.	CONTACTED
3-15-88	Witnessed Removal Of One 10,000 Gallons And Two 1200 Gallons Tanks With No Leaks Present At This Time.		Supvi Craig

A REINSPECTION WILL BE MADE WITHIN _____ DAYS.
FIRE PREVENTION BUREAU — PHONE 273-3851
INSPECTOR D.J. Spikes

338-5 (Rev. 5-77)

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO. 209

ADDRESS 4300 Eastshore Highway

NAME Barbary Coast Steel / W.A. Craig

GENERAL INSPECTION PERMIT OTHER HAZARD NOTED HAZARD ABATED

NOTICE LEFT LETTER 1st NOTICE 2nd NOTICE FINAL

DATE	VIOLATION	O.F.C.	CONTACTED
3-15-88	Witnessed Removal Of One 3,000 Gallon Diesel or One 3,000 Gallon Gasoline Tank With Minor Contamination Of The Soil From The Spilled Product That Was Present In The Soil		Supvi Craig

A REINSPECTION WILL BE MADE WITHIN _____ DAYS.
FIRE PREVENTION BUREAU — PHONE 273-3851
INSPECTOR D.J. Spikes

338-5 (Rev. 5-77)

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
470 - 27TH ST., RM. 322
OAKLAND, CA 94612
PHONE NO. 415/874-7237

ACCEPTED
DEPARTMENT OF ENVIRONMENTAL HEALTH
470 - 27th Street, Third Floor
Oakland, CA 94612
Telephone: (415) 874-7237

These plans have been reviewed and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your plans indicated by the Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction. One copy of these accepted plans must be on the job site available to all contractors and craftsmen involved in the removal. Any change or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspection Department to determine if such changes meet the requirements of State and local law. Notify this Department at least 48 hours prior to the following required inspections:

- Removal of Tank and Piping
- Sampling
- Final Inspection

Issuance of a permit to operate is dependent on compliance with accepted plans and all applicable laws and regulations.
THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS.

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

- Business Name Barbery COAST steel
Business Owner Birmingham steel Corp.
- Site Address 4300 East shore Hwy
City Emeryville Zip 94623 Phone 415-596-2329
- Mailing Address SAME
City _____ Zip _____ Phone _____
- Land Owner SAME
Address _____ City, State _____ Zip _____
- EPA I.D. No. CAD009133489
- Contractor W.A. CRAIG, INC.
Address 912 Harbour way south
City Richmond, Ca. 94804 Phone 415-231-0669
License Type A ID# 455752
- Other (Specify) _____
Address _____
City _____ Phone _____

8. Contact Person for Investigation

Name Bill Craig Title owner/contractor
Phone pages # 415-620-7244

9. Total No. of Tanks at facility 6

10. Have permit applications for all tanks been submitted to this office?
Yes [] No []

11. State Registered Hazardous Waste Transporters/Facilities

a) Product/Waste Tranporter

Name H+H Ship Service EPA I.D. No. CAD004771168
Address 220 China Basin
City S.F. State CA. Zip 94107

b) Rinsate Transporter

Name NONE EPA I.D. No. _____
Address _____
City _____ State _____ Zip _____

c) Tank Transporter

Name H+H Ship Service EPA I.D. No. CAD004771168
Address 220 China Basin
City S.F. State CA. Zip 94107

d) Contaminated Soil Transporter

Name NONE EPA I.D. No. _____
Address _____
City _____ State _____ Zip _____

12. Sample Collector

Name Dan Kirkman
Company Applied Geo Systems-
Address 43255 Mission Blvd. Suite B.
City Fremont State CA. Zip 94539 Phone 415-651-1906

13. Sampling Information for each tank or area

Tank or Area		Material sampled	Location & Depth
Capacity	Historic Contents (past 5 years)		
will be supplied by			APPLIED Geosystems

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

If yes, describe. _____

15. NFPA methods used for rendering tank inert? Yes No []

If yes, describe. 15 lbs of dry ice per 100 gallons of capacity

16. Laboratories

Name Applied Geosystems

Address 43255 Mission Blvd. Suite B.

City Fremont State CA. Zip 94539

State Certification No. _____

17. Chemical Methods to be used for Analyzing Samples

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Number
To be Submitted by Applied Geo System.		

18. Site Safety Plan submitted? Yes No []

19. Workman's Compensation: Yes No [] → Policy #
 Copy of Certificate enclosed? Yes [] No ↓
 Name of Insurer Industrial Indemnity WH8990214
 We will submit copy of Policy

20. Plot Plan submitted? Yes No []

21. Deposit enclosed? Yes No []

22. Please forward to this office the following information within 60 days after receipt of sample results.

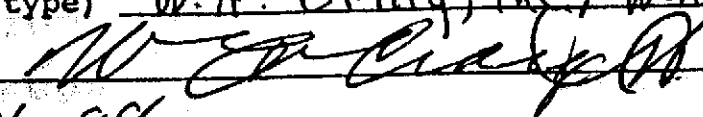
- a) Chain of Custody Sheets
- b) Original Signed Laboratory Reports
- c) TSD to Generator copies of wastes shipped and received
- d) Attachment A summarizing laboratory results

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true. I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

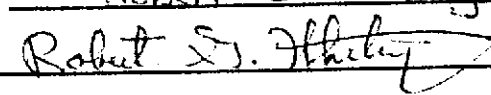
I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I will notify the Department of Environmental Health at least two (2) working days (48 hours) in advance to schedule any required inspections. 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.

Signature of Contractor

Name (please type) W.A. CRAIG, INC / W.A. CRAIG, II / owner
Signature 
Date 2-26-88

Signature of Site Owner or Operator

Name (please type) Robert G. Whitney
Signature 
Date 3/2/88

NOTES:

1. Any changes in this document must be approved by this Department.
2. Any leaks discovered must be submitted to this office on an underground storage tank unauthorized leak/contamination site report form within 5 days of its discovery.
3. Three (3) copies of this plan must be submitted to this Department. One copy must be at the construction site at all times.
4. A copy of your approved plan must be sent to the landowner.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CA1D06191334893418E		Manifest Document No. UJ		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address BARBARY COAST STEEL CORP. 4300 EASTSHORE HWY EMERYVILLE CA				A. State CA		Manifest Document Number 87434882	
4. Generator's Phone				B. State Generator's ID			
5. Transporter 1 Company Name H+H SHIP SERVICE		6. US EPA ID Number CA1D061917711168		C. State Transporter's ID		D. Transporter's Phone 415-543-4835	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone	
9. Designated Facility Name and Site Address H+H SHIP SERVICE 220 CHINA BASIN SAN FRANCISCO, CA				10. US EPA ID Number CA1D061917711168		G. State Facility's ID 1820061-7	
				H. Facility's Phone 415-543-4835			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No. Type		13. Total Quantity	
* EMPTY DIESEL TANK WASTE COMBUSTIBLE LIQUID NA 1270				01011 TP		12,610 GA	
b.						State EPA/Other	
c.						State EPA/Other	
d.						State EPA/Other	
J. Additional Descriptions for Materials Listed Above UNDERGROUND STORAGE TANK WITH LESS THAN 10% RESIDUAL LIQUID IN TANK				K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information GLOVES							
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 <i>Heinz P. Blum</i>		Signature <i>Heinz P. Blum</i>		Month Day Year 10/21/87			
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name FRED MORGAN		Signature <i>Fred Morgan</i>		Month Day Year 10/21/87			
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
19. Discrepancy Indication Space							
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name		Signature		Month Day Year			

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CIA D010911313148191314811	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Barbary Coast Steel 4300 East Shore Hwy, Emeryville, CA.		4. Generator's Phone ()		A. State Manifest Document Number 87434881		
5. Transporter Company Name H+H Ship Service		6. US EPA ID Number CIA D010477111618		C. State Transporter's ID 942452		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone 415-505-4135		
9. Designated Facility Name and Site Address H+H SHIP SERVICE 220 CHINA BASIN SAN FRANCISCO, CA 94107		10. US EPA ID Number		E. State Facility's ID 94011001		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	13. Type	15. Total Quantity	14. Unit Wt/Vol	Waste No.
a. APPROX 12 cu. ft. - SATURATED 1 BAG of Hydrocarbon Absorbent MATS						State EPA/Other
b.						State EPA/Other
c.						State EPA/Other
d.						State EPA/Other
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information Gloves						
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 Miss P. Robinson		Signature Miss P. Robinson		Month Day Year 10 22 19 88		
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name FRED MORGAN		Signature Fred Morgan		Month Day Year 10 22 19 88		
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 10.						
Printed/Typed Name		Signature		Month Day Year		

THIS SHIPPING ORDER

must be legibly filled in, in ink, in Indelible Pencil, or in Carbon, and retained by the Agent.

SHIPPER'S NO.

CARRIER

AGENT'S NO.

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading.

EMERYVILLE DATE 02/25/88

FROM BIRMINGHAM STEEL AT 4300 EAST SHORE HIGHWAY

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown) marked, consigned and destined as shown below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the tariff) agrees to carry to its usual place of delivery or final destination, if on its own railroad, water line, highway route or routes, or within the territory of its highway operations, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party of any loss interested in all 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 the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his agents.

CONSIGNEE TO HELL SHIP SERVICE CO

DESTINATION 220 CHINA BINSIN ST SAN FRANCISCO, CA 94107

ROUTING

DELIVERING CARRIER HELL SHIP SERVICE VEHICLE OR CAR INITIAL H-38 NO. 800252

COLLECT ON DELIVERY \$ and remit to:

C.O.D. CHARGE TO BE PAID BY SHIPPER CONSIGNEE

FOR EMERGENCY ASSISTANCE INVOLVING HAZARDOUS MATERIALS CALL CHEMTREC 800-424-9300 DAY OR NIGHT

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.

NO. PKGS.	H # M	DESCRIPTION OF ARTICLES, SPECIAL MARKS AND EXCEPTIONS	WEIGHT (SUB. TO CAR.)	CLASS OR RATE	CK. CODE
1		10,000 G L EMPTY UNDERGROUND STORAGE GASOLINE TANK;			
2		1,200 G L EMPTY UNDERGROUND STORAGE GASOLINE TANK.			
2		2,000 G L EMPTY UNDERGROUND DIESEL STORAGE TANK			
		DRY ICE INSERTED IN EACH AND READY FOR DISPOSAL.			
		ARRIVED: 10:20			
		DEPARTED: 12:30			

(Signature of Consignor)

If charges are to be prepaid, write or stamp here, "To be Prepaid"

Received \$ _____ to apply in payment of charges on the property described herein.

Agent or Cashier

PER (The signature here acknowledges only the amount prepaid)

Charges Advanced \$

* This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation

The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, with reference to the packaging requirements in the National Motor Freight Classifications.

* If 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 on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____

SHIPPER, PER _____

ESTER... Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

Permanent address of shipper.



REORDER FROM:

CALIFORNIA TRUCKING ASSOCIATION

Speediset [®] Moore Business Forms, Inc. - m

REF./
A/C NO.

COUNTY OF ALAMEDA
OFFICE OF THE AUDITOR-CONTROLLER

DATE: 2/26/88

No 505613

MISCELLANEOUS RECEIPT

\$2,070.00
DOLLARS

RECEIVED FROM:	W.A. Craig, Inc		BARBARA CRAIG
FOR:	P.O. Box 448, Orapa, CA 94559		
FOR:	Birmingham, Steil 4300 Eastshore Hwy, Emeryville 94608		
RECEIVED BY:	<i>[Signature]</i>		DEPT. NO.: 430-453

CASH PERSONAL/CASHIER'S CHECK/M. O. # 1345 OTHER: _____

110-1 (Rev 10/85) [0134E (08)] 3-Part Distribution: White - Payor Yellow & Pink - Depart.

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
470 - 27TH ST., RM. 322
OAKLAND, CA 94612
PHONE NO. 415/874-7237

INSTALLATION NAME: NORTH OF JUDSON
ALAMEDA COUNTY HAZ
MAT UNIT CONTACT: MR. LOWELL MILLER
FILE STATUS: MR. MILLER OPENED A FILE

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

1. Business Name THE MARTIN COMPANY
Business Owner MR. WALTER KACZMAREK / MR. TOM GRAM
2. Site Address SHELLMOUND STREET SOUTHERN TERMINUS
City EMERYVILLE CA zip 94608 Phone ---
3. Mailing Address THE MARTIN COMPANY
6425 CHRISTIE STREET SUITE 406 (415) 652-5852
City EMERYVILLE CA zip 94608 Phone (408) 945-9700
4. Land Owner SHELLMOUND VENTURE I
Address SAME AS #3 City, State _____ zip _____
5. EPA I.D. No. APPLICATION SENT, EPA I.D.# IS PENDING
6. Contractor DEVCON CONSTRUCTION ***TANK REMOVAL
CONTRACTOR See #12
Address 555 LOS COCHES STREET ***
City MILPITAS, CA 95035 Phone (408) 942-8200
License Type General Contractor ID# 399103
7. Other (Specify) EARTH METRICS INCORPORATED
Address 859 COWAN ROAD
City BURLINGAME CA 94010 Phone (415) 697 7103

8. Contact Person for Investigation

Name MR. PETER NANK Title GEOLOGIST
Phone (415) 697 7103 Field Supervisor of Tank Pull

9. Total No. of Tanks at facility 1 OR 2

10. Have permit applications for all tanks been submitted to this office? Yes [] No [] HISTORIC SITE

11. State Registered Hazardous Waste Transporters/Facilities

a) Product/Waste Transporter

Name H2H SHIP SERVICE EPA I.D. No. CAD004771168
Address 220 CHINA BASIN
City SAN FRANCISCO State CA Zip 94107

b) Rinsate Transporter

Name H2H SHIP SERVICE EPA I.D. No. CAD004771168
Address Same as above
City _____ State _____ Zip _____

c) Tank Transporter

Name H2H SHIP SERVICE EPA I.D. No. CAD004771168
Address Same as above
City _____ State _____ Zip _____

d) Contaminated Soil Transporter

Name H2H SHIP SERVICE EPA I.D. No. CAD004771168
Address Same as above
City _____ State _____ Zip _____

12. Tank Removal Contractor and Sample Collector

Name MR. GENE COMBS General Eng. Contract
Company CROWN ENVIRONMENTAL, INC. Lic. #A500646
Address 4175 LAKESIDE AVE SUITE 130
City RICHMOND State CA Zip 94806 Phone 415 222-1953

13. Sampling Information for each tank or area

Tank or Area		Material sampled	Location & Depth
Capacity 3000 GALLONS (ESTIMATED)	Historic Contents (past 5 years) APPROX 6" PRESENT IN TANK NOW (4-15-85)	DIESEL	

14. Have tanks or pipes leaked in the past? Yes [] No [X]

If yes, describe. NOT KNOWN TO HAVE LEAKED

15. NFPA methods used for rendering tank inert? Yes [] No []

If yes, describe. _____

16. Laboratories

Name TMA
 Address 2030 WRIGHT AVENUE
 City RICHMOND State CA Zip 94804
 State Certification No. 208

or
 CROWN ENVIRONMENTAL
 4175 LAKESIDE DR. SUITE 130
 RICHMOND, CA 94806
 State Certif. No. 189

17. Chemical Methods to be used for Analyzing Samples

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Number
DIESEL IN SOIL	EPA 8015 MODIFIED DIESEL	EPA 8015 MODIFIED DIESEL

18. Site Safety Plan submitted? Yes No

19. Workman's Compensation: Yes No

Copy of Certificate enclosed? Yes No

Name of Insurer _____

20. Plot Plan submitted? Yes No

21. Deposit enclosed? Yes No

22. Please forward to this office the following information within 60 days after receipt of sample results.

- a) Chain of Custody Sheets
- b) Original Signed Laboratory Reports
- c) TSD to Generator copies of wastes shipped and received
- d) Attachment A summarizing laboratory results

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true. I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

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

I will notify the Department of Environmental Health at least two (2) working days (48 hours) in advance to schedule any required inspections. 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.

Signature of Contractor

Name (please type) EARTH METRICS INC.

Signature Marc Papineau

Date 4-15-88

Signature of Site Owner or Operator

Name (please type) SHELLMOUND VENTURE I
c/o THE MARTIN COMPANY

Signature TOM GRAM

Date 4-15-88

NOTES:

1. Any changes in this document must be approved by this Department.
2. Any leaks discovered must be submitted to this office on an underground storage tank unauthorized leak/contamination site report form within 5 days of its discovery.
3. Three (3) copies of this plan must be submitted to this Department. One copy must be at the construction site at all times.
4. A copy of your approved plan must be sent to the landowner.

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

ATTACHMENT A
SAMPLING RESULTS

Tank or Area	Contaminant	Location & Depth	Results (specify units)

5. Triple rinse means that:

- a) final rinse must contain less than 100 ppm of Gasoline (EPA method 8020 for soil, or EPA method 602 for water) or Diesel (EPA method 418.1) Other methods for halogenated volatile organics (EPA method 8010 for soil, EPA method 601 for water) may be required. The composition of the final rinse must demonstrated by an original or facsimile report from a laboratory certified for the above analyses.
- b) tank interior is shown to be free from deposits or residues upon a visual examination of tank interior.
- c) tank should be labelled as "tripled rinsed; laboratory certified analysis available upon request" with the name and address of the contractor.

If all the above requirements cannot be met, the tank must be transported as a hazardous waste.

6. Any cutting into tanks requires local fire department approval.