

Underground Storage Tank Decommissioning & Soil Remediation Project

2119 Mildred Street West Fircrest, Washington

May 24, 2002

Prepared for:

Robert and Ethel Freeman Family LLC 3512 SW 310th Ct. Federal Way WA 98023

Prepared by:

Sound Environmental Strategies, Corp. 12351 Lake City Way, Suite 102 Seattle, Washington 98125



Table of Contents

1.0	INTRODUCTION	1
1.1 1.2	Document Purpose Site Location and Description	
2.0	PRE-EXCAVATION ACTIVITIES	1
2.1 2.2	Anticipated site conditions Health and Safety	
2.3	UTILITY LOCATION	
3.0	UST CLOSURE	. 2
4.0	EXCAVATION, REMEDIATION AND SOIL SAMPLING ACTIVITIES	3
4.1 4.2 4.3	Excavation & remediation activities Confirmation sampling site restoration	. 4
5.0 SL	JMMARY	4

FIGURES

FIGURE 1 – GENERAL SITE PLAN FIGURE 2 – UST EXCAVATION AND SOIL SAMPLING LOCATION MAP

PHOTOGRAPHS

PHOTOGRAPH 1 - UST LOCATION - FACING SOUTHEAST PHOTOGRAPH 2 - UST 1 DURING EXCAVATION PHOTOGRAPH 3 - UST 1 DURING REMOVAL PHOTOGRAPH 4 - UST 2 OBSERVED DURING SOIL SAMPLING PHOTOGRAPH 5 - UST 2 DURING REMOVAL PHOTOGRAPH 6 - USTS 1 & 2 FOLLOWING REMOVAL PHOTOGRAPH 7 - UST EXCAVATION - VIEW TO SOUTH PHOTOGRAPH 8 - PIPING SYSTEM LOCATED INSIDE CONCRETE HOUSING PHOTOGRAPH 9 - REMOVAL OF PIPING SYSTEM PHOTOGRAPH 9 - REMOVAL OF PIPING SYSTEM PHOTOGRAPH 10 - PIPING SYSTEM LOCATION FOLLOWING REMOVAL PHOTOGRAPH 11 - UST EXCAVATION AREA DURING RESTORATION PHOTOGRAPH 12 - UST EXCAVATION AREA FOLLOWING SITE RESTORATION

i

TABLES

TABLE 1 – SOIL SAMPLE RESULTS

APPENDICES

APPENDIX A - ANALYTICAL RESULTS APPENDIX B - PERMITS, DISPOSAL RECEIPTS

Sound Environmental Strategies

1.0 INTRODUCTION

1.1 DOCUMENT PURPOSE

Sound Environmental Strategies, Corp. (SES) has prepared this underground storage tank (UST) assessment report on behalf of Ms. Janet Freeman-Daily, property manager of the property located at 2119 Mildred Street, Fircrest, Washington (Site). The property owner is Robert & Ethel Freeman Family, LLCI. SES was hired by the property owner to decommission by removal 1 – 80 gallon kerosene UST. During the UST decommissioning activities a second 80 gallon UST was identified adjacent to the first UST. Mrs. Freeman-Daily was contacted and had no knowledge of the second UST. This report documents the field observations and the results of the decommissioning activities

Tank closure and site assessment activities were completed in accordance with the following documents published by the Washington State Department of Ecology (Ecology):

Guidance for Site Checks and Site Assessments for Underground Storage Tanks (Ecology, February 1991);

<u>Guidance for Remediation of Releases from Underground Storage Tanks</u> (Ecology, July, 1991); and,

The Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC (Ecology, February 2001).

1.2 SITE LOCATION AND DESCRIPTION

The subject property, 2119 Mildred Street, is located in a light industrial and commercial area of Fircrest Washington near the intersection of Mildred Street and Regents Blvd. The site is 9.5 acres in size and is occupied by one main building and one painting / storage building. The property Parcel Number is 0220112005.

2.0 **PRE-EXCAVATION ACTIVITIES**

2.1 ANTICIPATED SITE CONDITIONS

The site has been historically used as a manufacturing facility and warehouse space for light industrial activities. The area where the USTs were located is along the western side of the building set near an air intake HVAC system (Figure 2). Both USTs were located six to eight inches below ground surface (bgs) in a landscaped area adjacent to the building. The USTs were used to supply kerosene in a circulating system for parts cleaning and had been installed in the late 1960's to early 1970's. No known releases from the USTs had reportedly occurred.

1

Sound Environmental Strategies

2.2 HEALTH AND SAFETY

A site-specific Health and Safety Plan (HASP) was prepared in accordance with Chapter 296-62 of the Washington Administrative Code (WAC) and 29 CFR 1910.120 (Code of Federal Regulations). The HASP identified potential physical and chemical hazards and specified personal protection and safety monitoring requirements. Site health and safety meetings were conducted during fieldwork at the beginning of each workday to review aspects of the HASP, and to provide an opportunity for SES site workers and contractor personnel to discuss health and safety issues or concerns. On-site SES personnel associated with the field activities were required to be familiar with and comply with provisions put forth in the HASP. Subcontractors on-site were required to have their own HASP that identified potential physical and chemical hazards associated with their own work activities.

During intrusive field activities, the on-site SES site manager performed air monitoring using an organic vapor monitor/photoionization detector (Mini Ray 5 Gas Analyzer [PID]). The PID was properly calibrated to 100 parts per million (ppm) isobutylene daily. Organic vapors were not observed in the breathing zone, the excavation or in soil sample headspace above normal background levels, as described in the HASP, during remedial activities at the Site. No other incidences, releases, or worker injuries were recorded during the project.

2.3 UTILITY LOCATION

Prior to implementing site activities public underground utilities alert network was notified of intrusive activities. The service contacted appropriate agencies or companies with underground utilities in the area. These agencies then marked the location of their utilities along the right-of-ways and easements of the property.

3.0 UST CLOSURE

An UST Closure permit was obtained from the City of Fircrest prior to conducting the decommissioning activities. The UST sizes were below the Department of Ecology (WAC 173-360-110) and Tacoma Pierce County Health Department (TPCHD) notification requirements. The USTs were in fact old water heaters converted for use as kerosene storage tanks.

The USTs were excavated using a case 580 backhoe. Following the removal of the USTs from the excavation, each UST was inspected and showed no obvious sign of leakage or corrosion (Photograph 3). According to the former business owner, Michael Freeman, the USTs were installed in the late 1960's to early 1970's. Both USTs were steel, double-walled water heaters. Piping from each of the USTs ran through the concrete piping housing (Photograph 8) and into the adjacent building. The piping inside the building was reportedly previously cut and drained. The re-circulating system was decommissioned by the business owner prior to the UST decommissioning event. The USTs measured four feet in length and two feet in diameter. A total of seven gallons of kerosene was recovered and disposed of at a local recycling facility

2

during the decommissioning activities. The USTs were then transported to Rivers Edge Services to be cut up for disposal (disposal receipt attached - Appendix B).

During the excavation of the USTs, several soil field-screening techniques failed to detect any obvious indication of hydrocarbon contamination in the excavation area. Field screening methods included:

- Olfactory Observations
- Visual Observations
- Photoionization Detector (PID)
- Sheen Test

4.0 EXCAVATION, REMEDIATION AND SOIL SAMPLING ACTIVITIES

4.1 EXCAVATION & REMEDIATION ACTIVITIES

Following the removal of the USTs, soil samples were collected from each sidewall and below each UST along the excavation floor. In addition, a sample was obtained from the bottom of the piping housing (Table1, Figure 1). Each soil sample was collected in accordance with WAC 173-360 Washington State UST Site Assessment Requirements. The samples were analyzed by Environmental Services Network (ESN). All soil samples collected from the UST excavation were analyzed for kerosene using diesel extended range hydrocarbons analysis (NWTPH-Dx). Select samples (S2, S3, S5, S6 & S7) were also analyzed for volatile organic compounds. Based on laboratory chromatogram results, one sample (S9-3.0') was also analyzed for gasoline-range hydrocarbons. ESN laboratory chemist reported that while analyzing sample S9-3.0' for diesel range hydrocarbons, he detected an *"intermediate range petroleum hydrocarbon"* and suggested that additional petroleum hydrocarbon analyses be conducted. All sample analytical results were reported below Washington Department of Ecology (Ecology) MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses.

As a precautionary measure and at the direction of the client, SES conducted additional excavation at the site to address the "intermediate-range petroleum hydrocarbon" reported by the laboratory. SES removed by excavation 6.7 tons of soil from the western excavation side wall that reportedly contained intermediate petroleum range hydrocarbons. The purpose of this excavation activity was to remove from the site any soil affected by petroleum hydrocarbons regardless of the reported concentrations. The excavation was guided by field parameters, including:

- Olfactory Observations
- Visual Observations
- Field Analytical Observations
 - o Photoionization Detector (PID)
 - o Sheen Test
 - o Shaker Test

The excavated 6.7 tons (approximately 4 cubic yards) of affected soil was directly loaded into a dump truck and transported to Waste Managements, Olympic View disposal facility (Disposal receipt attached - Appendix B).

4.2 CONFIRMATION SAMPLING

Following the supplemental excavation activities, confirmation soil sampling was completed along the perimeter and the bottom of the UST excavation and over excavation (Figure 2). Soil samples were analyzed for Total Petroleum Hydrocarbons - Hydrocarbon Identification (TPH-HCID). Additional soil samples were also colleted from the original perimeter of the UST excavation and also analyzed for TPH-HCID. No indications of contamination were observed in any of the field screening activities completed during the confirmation soil sampling activity. Laboratory results for the twelve soil samples analyzed for TPH-HCID were reported below quantifiable analytical detection limits (Table 1).

4.3 SITE RESTORATION

The excavation was backfilled with imported soil from Port Orchard Sand & Gravel following confirmation sampling. Bark dust removed during the excavation process was replaced over the excavation area.

5.0 SUMMARY

Both USTs were effectively decommissioned and disposed. Affected soil identified through analysis completed by a state licensed laboratory of containing intermediate petroleum range hydrocarbons was effectively removed through over excavation and disposed of at a state licensed disposal facility. Confirmation soil samples colleted from the excavation side walls and excavation floor were analyzed at a state licensed laboratory for contaminants of concern. Results of conformational samples were reported below the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use. Further, laboratory results reported no confirmation samples analyzed exceeded laboratory detection limits. No groundwater was observed during excavation activities. No further work is recommended.

6.0 LIMITATIONS

SES services performed for this project, including this report, were conducted in accordance with generally accepted professional practices ordinarily exercised by other members of the environmental consulting profession, for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. These services were conducted subject to project-specific time limits and financial, physical and any other constraints applicable to this project. It is intended for the use of the client, for specific application to the referenced property. This report is not meant to represent a legal opinion. No other warranty, express or implied, is made.

4









UST Location - Facing southeast



UST 1 during removal



UST 2 during removal



Robert & Ethyl Freeman Family, LLC UST Decommissioning Project 2119 Mildred Street West Fircrest, Washington



UST 1 during excavation - View to southwest



UST 2 observed during soil sampling activities - View to south



USTs1 & 2 following removal from excavation

Page 1 of 2

SES Project No.: 331-1 Date: May 24, 2002 Drawn By: SSpencer Chk By: Sspencer File ID: 331-1 Project Photos



UST Excavation - View to south



Removal of piping system housing



UST excavation area during site restoration - View to southeast



Piping system located inside concrete housing



Piping system location following removal - View to east



UST excavation area following site restoration

Chk By:

File ID:



Robert & Ethyl Freeman Family, LLC **UST Decommissioning Project** 2119 Mildred Street West Fircrest, Washington

		uge
SES Project No.:	331-1	
Date:	May 24, 2002	
Drawn By:	SSpencer	

331-1 Project Photos

Sspencer

Page 2 of 2

Table 1 Petroleum Hydrocarbon Analyses

UST Decommissioning & Soil Remediation Project 2119 Mildred Street West Fircrest, Washington



			I					Page 1 of 2			May	24, 2002
					EPA Test Method							
			Sample Date		<u>TPH-</u>	HCID		<u>8260</u>	NWTPH-G	N	WTPH-I	
Sample ID	Sample Location	Depth BGS		Gasoline	Diesel	Oil	Mineral Oil	Volitale Organic Compounds	Gasoline	Diesel	Oil	Mineral Oil
						mg/kg						
S1-3.0'	North Sidewall	3.0'	4/5/2002	NA	NA	NA	NA	NA	NA	<20	<40	<40
S2-3.0'	East Sidewall - North	3.0'	4/5/2002	NA	NA	NA	NA	ND	NA	1700	<40	<40
S3-3.5'	UST 2 Floor	3.5'	4/5/2002	NA	NA	NA	NA	ND	NA	<20	<40	<40
S4-3.0'	West Sidewall - North	3.0'	4/5/2002	NA	NA	NA	NA	NA	NA	<20	<40	<40
S5-3.5'	UST 1 Floor	3.5'	4/5/2002	NA	NA	NA	NA	ND	NA	25	<40	<40
S6-3.5'	Pipe Housing Floor	3.5'	4/5/2002	NA	NA	NA	NA	ND	NA	<20	<40	<40
S7-3.0'	East Sidewall - South	3.0'	4/5/2002	NA	NA	NA	NA	ND	NA	440	<40	<40
S8-3.0'	South Sidewall	3.0'	4/5/2002	NA	NA	NA	NA	NA	NA	<20	<40	<40
S9-3.0'	West Sidewall - South	3.0'	4/5/2002	NA	NA	NA	NA	NA	160	<20	<40	<40
S1A-3.0'	North Sidewall	3.0'	5/23/2002	<20	<50	<100	<100	NA	NA	<20	<40	<40
S3A-3.5'	UST 2 Floor	3.5'	5/23/2002	<20	<50	<100	<100	NA	NA	<20	<40	<40
S5A-3.5'	UST 1 Floor	3.5'	5/23/2002	<20	<50	<100	<100	NA	NA	<20	<40	<40
S8A-3.0'	South Sidewall	3.0'	5/23/2002	<20	<50	<100	<100	NA	NA	<20	<40	<40
S11-4.0'	West Sidewall - 2nd Exe.	4.0'	5/23/2002	<20	<50	<100	<100	NA	NA	NA	NA	NA
S12-4.0'	North Sidewall - Over Exe.	4.0'	5/23/2002	<20	<50	<100	<100	NA	NA	NA	NA	NA
MTCA	Method A Soil Cleanup Levels Fo	or Unrestricted L	and Use:	100	2000	2000	2000	Listed	100	2000	2000	2000

Note:

MTCA Method A Cleanup Levels derived from Washington State Administrative Code Chapter 173-340, State of Washington Model Toxic Control Act (MTCA) Regulations as amended February 12, 2001 (Table 740-1, p.233). BOLD/RED = analyte above MTCA Method A Cleanup Criteria

mg/kg = milligrams per kilogram

NA = not analyzed

Table 1 Petroleum Hydrocarbon Analyses

UST Decommissioning & Soil Remediation Project 2119 Mildred Street West Fircrest, Washington



								Page 2 of 2			May	24, 2002
			}					EPA Test N	lethod			
					TPH-I			<u>8260</u>	NWTPH-G	N	WTPH-	<u>Jx</u>
Sample ID	Sample Location	Depth BGS	Sample Date	Gasoline	Diesel	Oil	Mineral Oil	Volitale Organic Compounds	Gasoline	Diesel	Oil	Mineral Oil
								mg/kg				
S13-4.0'	South Sidewall - Over Exe.	4.0'	5/23/2002	<20	<50	<100	<100	NA	NA	NA	NA	NA
S14-4.0'	Floor - Over Exe.	4.0'	5/23/2002	<20	<50	<100	<100	NA	NA	NA	NA	NA
S15-4.0'	Pipe Housing Sidewall South	4.0'	5/23/2002	<20	<50	<100	<100	NA	NA	NA	NA	NA
S16-4.0'	Pipe Housing Sidewall East	4.0'	5/23/2002	<20	<50	<100	<100	NA	NA	NA	NA	NA
S17-4.0'	Pipe Housing Sidewall North	4.0'	5/23/2002	<20	<50	<100	<100	NA	NA	NA	NA	NA
S18-4.0'	Pipe Housing Sidewall Floor	4.0'	5/23/2002	<20	<50	<100	<100	NA	NA	NA	NA	NA
MTCA	Method A Soil Cleanup Levels For	100	2000	2000	2000	Listed	100	2000	2000	2000		

Note:

MTCA Method A Cleanup Levels derived from Washington State Administrative Code Chapter 173-340, State of Washington Model Toxic Control Act (MTCA) Regulations as amended February 12, 2001 (Table 740-1, p.233). BOLD/RED = analyte above MTCA Method A Cleanup Criteria

mg/kg = milligrams per kilogram

NA = not analyzed



Environmental

Services Network

FILE COPY

April 23, 2002

Steve Spencer Sound Environmental Strategies 12351 Lake City Way NE, Suite 102 Seattle, WA 98125

Dear Mr. Spencer:

Please find enclosed the analytical data report for the Freeman Project in Washington. Soil samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended, Gasoline by NWTPH-Gx, BTEX by Method 8021B, and VOC's by Method 8260 on March 8 – 17, 2002.

The results of these analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

ESN Northwest appreciates the opportunity to have provided analytical services to Sound Environmental Strategies for this project. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Mulik

Sherry L. Chilcutt Vice President

FREEMAN PROJECT Washington Sound Environmental Strategies Client Project #FREEMAN

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)	Mineral Oil (mg/kg)
Method Blank	4/8/02	107	nd	nd	nd
Method Blank	4/9/02	97	nd	nd	nd
S2-3.0'	4/8/02	int	*1700	nd	nd
S3-3.5'	4/8/02	93	nd	nd	nd
S5-3.5'	4/8/02	95	*25	nd	nd
S6-3.5'	4/8/02	86	nd	nd	nd
S7-3.0'	4/9/02	104	*440	nd	nd
Method Detection	Limits		20	40	40

"*" Indicates Diesel range hydrocarbons.

"nd" Indicates not detected at the listed detection limits. "int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Dean Phillips

FREEMAN PROJECT Washington SES

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Oil (mg/kg)	Mineral Oil (mg/kg)
Method Blank	4/17/02	106	nd	nd	nd
S1-3.0	4/17/02	88	nd	nd	nd
S1-3.0 Dup.	4/17/02	80	nd	nd	nd
S4-3.0	4/17/02	79	nd	nd	nd
S8-3.0	4/17/02	88	nd	nd	nd
S9-3 .0	4/17/02	87	nd	nd	nd
Method Detection Limits			20	40	40

"nd" Indicates not detected at the listed detection limits. "int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Tim McCall

ESN NORTHWEST CHEMISTRY LABORATORY

FREEMAN PROJECT Washington SES

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8021B) in Soil

Sample Number	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline (mg/kg)	IPH (mg/kg)	Surrogate Recovery (%)
Method Blank	4/17/02	nd	nd	nd	nd	nd	nd	103
S9-3.0	4/17/02	nd	nd	nd	nd	nd	160	77
S9-3.0 Dup.	4/17/02	nd	nd	nd	nd	nd	140	72
Method Detection	n Limits	0.02	0.05	0.05	0.05	10	10	

"IPH" Indicates intermediate petroleum hydrocarbons.

"nd" Indicates not detected at the listed detection limits.

"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Chlorobenzene): 65% TO 135%

ANALYSES PERFORMED BY: Tim McCall

ESN Job Number:	S20408-1
Client:	SES
Client Job Name:	FREEMAN
Client Job Number:	FREEMAN

8260, µg/kg		MTH BLK	LCS	S2-3.0	S2-3.0	S2-3.0	S2-3.0	S3-3.5	S5-3.5
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soi
Date extracted	Reporting	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02
Date analyzed	Limits	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02
Dichlorodifluoromethane	50	nd		nd				nd	nc
Chloromethane	50	nd		nd				nd	nc
Vinyl chloride	50	nd		nd				nd	no
Bromomethane	50	nd		nd				nd	nc
Chioroethane	50	nd		nd				nd	nc
Trichlorofluoromethane	50 50	nd nd		nd				nd nd	nc
1,1-Dichloroethene	50 20	nd		nd nd				nd	no
Methylene chloride trans-1,2-Dichloroethene	50	nd		nd				nd	nc
1,1-Dichloroethane	50	nd		nd				nd	nc
cis-1,2-Dichloroethene	50	nd		nd				nd	nc
2,2-Dichloropropane	50	nd		nd				nd	nc
Chloroform	50	nd		nd				nd	nc
Bromochloromethane	50	nd		nd				nd	nc
1,1,1-Trichloroethane	50	nd		nd				nđ	nc
1,2-Dichloroethane	50	nd		nd				nd	nc
1,1-Dichloropropene	50	ndi		nd				nd	nc
Carbon tetrachloride	50	nd		nd				nd	nc
Benzene	20	nd	100%	nd	93%	95%	3%	nd	nc
Trichloroethene	20	nd	88%	nd	91%	95%	3%	nd	nc
1.2-Dichloropropane	50	nd		nd				nd	nc
Dibromomethane	50	nd		nd				nd	no
Bromodichloromethane	50	nd		nd				nd	nc
cis-1,3-Dichloropropene	50	nd		nd				nd	. no
Toluene	50	nd	118%	nd	108%	112%	4%	nd	no
trans-1,3-Dichloropropene	50	nd		nd			•	nd	no
1,1,2-Trichloroethane	50	nd		nd				nd	nc
1,3-Dichloropropane	50	nd		nd				nd	nc
Dibromochloromethane	50	nd		nd				nd	nc
Tetrachloroethene	20	nd		nd				nd	nc
1,2-Dibromoethane (EDB)(*)	5	nd		nd				nd	nc
Chlorobenzene	50	nd	115%	nd	110%	113%	3%	nd	nc
1,1,1,2-Tetrachloroethane	50	nd		nd				nd	nc
Ethylbenzene	50	nd		nd				nd	nc
Xylenes	50	nd		nd				nd	nc
Styrene	50	nd		nd				nd	nc
Bromoform	50	nd		nd				nd	nc
1,1,2,2-Tetrachioroethane	50	nd		nd				nd	nc
Isopropylbenzene	50	nd		nd				nd	nc
1,2,3-Trichloropropane	50	nd		nd				nđ	. no
Bromobenzene	50	nd		nd				nd	nc
n-Propylbenzene	50	nd		nd				nd	no
2-Chiorotoluene	50	nd		nd				nd	no
4-Chlorotoluene	50	na		na				nd 	no
1,3,5-Trimethylbenzene	50	nd		nd				nd nd	nd nd
tert-Butylbenzene	50	nd		nd				nd	
1,2,4-Trimethylbenzene	50 50	ndi		nd nd				ndi	nc
sec-Butylbenzene	50 50	nđ nđ		nd				nd	nc
1,3-Dichlorobenzene	50 50	na nd		na nd				nd	nc
1,4-Dichlorobenzene	50 50	nd		nd				nd	nc
Isopropyitoluene	50 50	na nd		nd				nd.	nc
1,2-Dichlorobenzene	50 50	nd		nd				nd	nc
n-Butylbenzene	50 50	nd		nd				nd	nc
1,2-Dibromo-3-Chloropropane 1,2,4-Trichlorobenzene	50	nd		nd				nd	nc
	50	nd		nd				nd	nc
Naphthalene Hexachioro-1,3-butadiene	50	nd		nd				nd	no
I IGAGOLIUIOTI, OTOBLAUICHO									

*-instrument detection limits

ESN Job Number:	S20408-1
Client:	SES
Client Job Name:	FREEMAN
Client Job Number:	FREEMAN

Analytical Results					MS	MSD	RPD		
8260, µg/kg		MTH BLK	LCS	S2-3.0	S2-3.0	S2-3.0	S2-3.0	\$3-3.5	S5-3.5
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02
Date analyzed	Limits	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02
Surrogate recoveries									
Dibromofluoromethane		88%	87%	87%	88%	90%		86%	86%
Toluene-d8		97%	95%	102%	96%	99%		97%	96%
4-Bromofluorobenzene		110%	116%	115%	111%	116%		111%	107%

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits Acceptable Recovery limits: 65% TO 135% Acceptable RPD limit: 35%

ESN Job Number:	S20408-1
Client:	SES
Client Job Name:	FREEMAN
Client Job Number:	FREEMAN

8260, µg/kg		S6-3.5	S7-3.0
Matrix	Soil	Soil	So
Date extracted	Reporting	04/08/02	04/08/02
Date analyzed	Limits	04/08/02	04/08/02
Dichlorodifluoromethane	50	nd	n
Chloromethane	50	nd	nc
Vinyl chloride	50	nd	n
Bromomethane	50	nd	nc
Chloroethane	50	nd	nc
Trichlorofluoromethane	50	nd	nc
1,1-Dichloroethene	50	nd	nc
Methylene chloride	20	nd	nc
trans-1,2-Dichloroethene	50	nd	nc
1,1-Dichloroethane	50	nd	nc
cis-1,2-Dichloroethene	50	nd	nc
2,2-Dichloropropane	50	nd	nc
Chloroform	50	nd	n
	50		
Bromochloromethane		nd	no
1,1,1-Trichloroethane	50	nd	n
1,2-Dichloroethane	50	nd	n
1,1-Dichloropropene	50	nd nd	n
Carbon tetrachloride	50	nd	n
Benzene	20	nd	п
Trichloroethene	20	nd	n n
1,2-Dichloropropane	50	nd	n
Dibromomethane	50	nd	n
Bromodichloromethane	50	nd	n
cis-1,3-Dichloropropene	50	nd	n n
Toluene	50	nd	na
trans-1,3-Dichloropropene	50	nd	ne
1,1,2-Trichioroethane	50	nd	n
1,3-Dichloropropane	50	nd	no
Dibromochloromethane	50	nd	מ
Tetrachioroethene	20	nd	no
1,2-Dibromoethane (EDB)(*)	5	nd	n
Chlorobenzene	.50	nd	n
1,1,1,2-Tetrachloroethane	50	nd	n
Ethylbenzene	50	nd	nc
Xylenes	50	nd	nc
Styrene	50	nd	no
Bromoform	50	nd	n
1,1,2,2-Tetrachloroethane	50	nd	n
sopropyibenzene	50	nd	n
1,2,3-Trichloropropane	50	ndi	n
Bromobenzene	50	ndi	n
n-Propylbenzene	50	ndi	n
2-Chlorotoluene	50	nd	n
4-Chiorotoiuene	50	nd	- DC
	50 50		
1,3,5-Trimethylbenzene		nd	no
ert-Butylbenzene	50	nd	no
1,2,4-Trimethylbenzene	50	nd	n
sec-Butyibenzene	50	nd	n
1,3-Dichlorobenzene	50	nd	п
1,4-Dichlorobenzene	50	nd	n
sopropytoluene	50	nd	n
1,2-Dichlorobenzene	50	nđ	nc
n-Butylbenzene	50	nd	nc
1,2-Dibromo-3-Chloropropane	50	nd	no
1,2,4-Trichlorobenzene	50	nd	nc
Naphthalene	50	nđ	nc
lexachloro-1,3-butadiene	50	nd	no
1,2,3-Trichlorobenzene	50	nd	· no

. .

ESN Job Number:	S20408-1
Client:	SES
Client Job Name:	FREEMAN
Client Job Number:	FREEMAN

Analytical Results			
8260, µg/kg		S6-3.5	S7-3.0
Matrix	Soil	Soil	Soil
Date extracted	Reporting	04/08/02	04/08/02
Date analyzed	Limits	04/08/02	04/08/02
Surrogate recoveries			
Dibromofluoromethane		83%	84%
T ()0		070/	4000

97% Toiuene-d8 102% 4-Bromofluorobenzene 109% 104% Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits Acceptable Recovery limits: 65% TO 135% Acceptable RPD limit: 35%

ES NORTHWEST		onmer cs Netv									· · · ·)				. (CI	H	/11	N-0	Öl	F-(RE
CLIENT: SES	> .		· · · · ·											D	ATE	. L	t- :	5-	07	2			PAGEOF	1	
	-	••			-									· ·									MAQ)		
ADDRESS:		~	20												RU,	JEC	21 P	VIA IV	/IC		4	<u> </u>			
PHONE: 253.														13.									` 		
CLIENT PROJEC	т #: _ F	RÉE,	MAR) PR	ROJEC	ст м		AGER:		11	<u>15</u>			C	OLI	.EC	то	R:_		511	5)) 	DATE O COLLEG	= L. [. L	-1
Sample Number	Depth		Sample Type	Contain		·		1	25	77	7	Ż	100 00 00 00 00 00 00 00 00 00 00 00 00	10 00 00 00 00 00 00 00 00 00 00 00 00 0	100 00 00 00 00 00 00 00 00 00 00 00 00	NOS IN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	At M	enarit	rearing the	e -	Ste	NOTES	Total Number of Containers	Laboratory Victo Minches
S1-3P'	3.0		GRAB	40					ſ	Í													(Hold		
.52-3,0'	3.0'		· 1	40			X				X														
53-3.5	3.5				12		X				X														
54-3.0	3.0				02																		Hold		
55-35'	3.5	·		41			X	·			X	·									_		· · · · · · · · · · · · · · · · · · ·		
56-3.5'	35			40	12		X				X														
57-20'	3.0'		\downarrow		22		X		_		X		,												-
58-30'	3.0	<u></u>		41	02			\downarrow		-											_		H012		<u> </u>
59 - 3.0'	3.0'		· · ·	41	0Z			-								+							Hold		
0	_			ļ				┨┃																	
<u>l.</u>				 				┢╌╽╴						\rightarrow									KUN SHILL	C_{P}	
2				ļ,	_			+-+			+-		-	-61	10		<u> </u>	-	्			-+-	51-30, 41-31	<u>2516-</u>	1
3		·		<u> </u>				╂╌┠┈	-+-		+					17	×			-			12172.010	15-	-
4			<u> </u>	{				$\left\{ - \right\}$	+							্য							DX HO	1 A.K	-
5.			 					<u> </u>															1520N 41	$\frac{1}{1}$) <u>é</u>
6,								+-+																	+
7					·		+-	╉╌╂╌	+	<u> </u>														1 11-1	4
8. RELINQUISHED BY (Sign			TE/TIME	R	ECEN	ED RX	Sion	ature	-	DATE/]	SAN	IPLE	DE	~EID] T			L	LABORATORY NOTES:	<u>l</u>	
		21.	5-02		Ex.	4		1-5-0			05		OTAL	NUN	ABEF	OF	CON	INTAI	NER			9		251	5 fl + e v
RELINQUISHED BY (Slop	ature)	DA			ECEIVI	ED BY	(Sign	ature)	1	DATE	TIME		HAIN					ALS	Y/N/	NA			5day 1/1841 481, 8260	.5	
			DIREAC									RECEIVED GOOD COND./COLD					6								
	SAMPLE DISPOSAL INSTRUCTIONS																				48 HB	5 DAY			

<u>E</u> <u>NORTHWEST</u>		ronmer ces Netw										Cł	IAI	N-(OF	-(CUSTOD	Yhc		R	۲D
CLIENT: SES	•									D	ATE:_	4.	5-0	2			PAGE/	OF _	1		
ADDRESS:									······	P	ROJE	CT N	AME	1	12	Ē	MAQ)				
PHONE:	921	-7(059	FAX	‹ :	··					OCATI	ON:									
CLIENT PROJECT	- #: <u>-</u>	222	MAR) PROJEC		ER:	(n)	<u> </u>		c	OLLE	стоі	२:	511	2			DATE OF		4	
Sample Number	Depth	Time	Sample Type	Container Type	ppp1/32 /0/32 pp1/32 /0/32 301/301/00 301/301/00	ALL AL	HCD STO	Sand Long	AND	A 48 10	88 (18 19 19 19 19 19 19 19 19 19 19 19 19 19	ST ST	Merrie	ngreating	e Chore		NOTES		Total Number	of Containers	Laboratory Note Number
$1.51 \cdot P'$	3.0		(1913	402				\mathbf{X}								T	Hata				
2.52-3.0'	2.0°		Í	402	X			X													
3.03-2.5	2.5		2	.402	X			\times													
4.4- 0'	0.0			402	汉			X									leta				
5.55-05'	3.5			402	X			X													
6. 56 - 7.5'	2.5			402	X			X								T					
7.57-00'	2.0'			402	X			X								T					
8. 58-20 '	2.0		∇	402				X								Τ	Hota				
9.99 - 20'	<u>)</u> .0'			402				X									Hatt	<u></u>		T	
10.																				T	
<u>10.</u> 11.														T		Τ					
12.																					
13.				<u>h</u>												T				T	
14.																					
15.																Τ					
16.																					
17.																					
18.																T					_
RELINQUISHED BY (Sign	ature)	DA	TE/TIME	RECEIVE	D BY (Signati	ire)	DATE/TI	ME		A.	SAMPL	E REC	EIPT				LABORATORY NOT	ES:			
1 / p	-	4.3	5.02	10	1-4-	5.02	130	5	5-TOTAL NUMBER OF CONTAINERS						0	1					
RELINQUISHED BY (SIDA	ature)		TE/TIME	RECEIVE	D BY (Signatu		DATE/TI		CHAI	OF C	CUSTOR	Y SEA	LS Y/N	I/NA							
and the Comment			Same					SEALS INTACT? Y/N/NA						}							
	SAMPLE DISPOSAL INSTRUCTIONS							RECEIVED GOOD COND./COLD													
L	SAMPLE DISPOSAL INSTRUCTIONS I ESN DISPOSAL (0) \$2.00 eech I Return I Pickup								NOTE	S:			NOTES: Turn Around Time: 24 H							5 D.	AY

.

ESN NORTHWEST CHEMISTRY LABORATORY

FREEMAN PROJECT Washington SES Client Project #331-1

PRELIMINARY DATA

• - -

Sample	Date	Surrogate	Gasoline	Diesel	Heavy Oil	Mineral Oil
Number	Analyzed	Recovery (%)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Method Blank	5/30/02	101	nd	nd	rul	nd
SIA	5/30/02	81	nd	nd	nd	nd
S3A	5/30/02	75	nd	nd	nd	nd
55A	5/30/02	114	nd	nd	nd	nd
584	5/30/02	84	nd	nd	rsel	nd
Method Detection L	imits		20	50	100	100

Hydracarbon Identification by NWTPH-HCID for Soil

"nd" indicates not detected at listed detection limits.

"D" Indicates detected above the listed detection limit.

"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Tim McCall

-

ESN NORTHWEST CHEMISTRY LABORATORY

FREEMAN PROJECT Washington SES Client Project #331-1

PRELITING DATA

Sample Number	Date Analyzed	Surrogate Recovery (%)	Gasoline (mg/kg)	Diesel (mg/kg)	Hcavy Oil (mg/kg)	Mineral Oil (ing/kg)
Method Blank	5/30/02	109	nd	nd	nd	nd
SII	5/30/02	81	nd	nd	nd	nd
512	5/30/02	74	nd	nd	nd	nd
S13	5/30/02	79	nd	nd	nd	nd
\$13 Dup.	5/30/02	67	nd	nd	bts	nd
514	5/30/02	90	nd	nd	nd	nd
\$15	5/30/02	78	nd	nd	nd	nd
S16	5/30/02	80	nd	nd	nd	nd
\$17	5/30/02	87	nd	nd	nd	nd
S18 ·	5/30/02	102	nd	nd	nd	nd
Method Detection L	mits		20	50	(00)	100

Hydrocurbon Identification by NWTPH-HCID for Soil

.

"nd" Indicates not detected at listed detection limits. "D" Indicates detected above the listed detection limit.

L' mainines delettes above the nated detection minit.

"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 65% TO 135%

ANALYSES PERFORMED BY: Tim McCall

ESN		ronmen :es Necw												C	H	AI	N۰	-0	F-(сι	JSTOD	Y RE(COF	RD
CLIENT: SES	2								<u>-</u>			D	ATE		5-2	29	- (12		PA	GE	OF/	[
ADDRESS:																					AN-			
PHONE: 206	306	190	00	FA	x. 7	:06	, 7,	76	19	5	7										Apine			
CLIENT PROJEC																						DATE OF	5.23	>
Sample Number	Depth		Sample Type	Container Type	ANAL S		0 10 10 10 10 10 10 10 10 10 10 10 10 10	AN AN AN	0 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		241 00 241 00 241 00 241 00	5	7	\square	7	7	7	7	7	T	NOTES		Total Number of Containers	
1. 510			67403	402				X	the second se	4											HULD			
2.511				L				X		4	1114	10	·		_	_								
3.512 4.513								X		X	Fi	<u>(14</u>						-						<u> </u>
4.513								X		×	H	(0											
5.514 6. 9 15 7.516								X		X	1+0	· i 🖗												
6.415							T	X		X	410	ı C)											
7.516							-	X	1	<u>s</u>	H	10)											
8 517				11				X		$\overline{\mathbf{N}}$	+ +	CI	Ü											
8.517 9.518			V					X	1	(H	10												
10.														Τ										
11.			1											T		T								
12.																			1					
13.		·	1				T														}			
14.																	1							-
15																	1		1			,		
16.			1					1																
17.			1	1				1		1					-				1					
18.			1	1		$\uparrow \uparrow$	-	1		T					-			1	1	f	1		-	-
RELINGUISHED BY (Sig	nature)	0/	TETIME	RECEI	EDBY	(Signat	ure)		NTE/TH		Γ	L	SAN	PLE	RECE	IPT			1	L	ABORATORY NO	res:	A	
K Mi		T	soloz	d	Un.	rale) e. T	i s	130		TOTAL	NUN	ABER	OF	CONT	AINE	RS		9		1117 F	r Smit	4 I V	ر بر ر
RELINOUISHED BY ISIN	nature)		TE/TIME	RECEN		and the second se		- <u>-</u> D/	ATE/TI	JE .	CHAIN	OF	CUST	ODY	SEAL	.S Y	N/NA	1			Markar	Han 0 .	Herry	
	•					U	-				SEAL	S INT	ACT?	YIN	NA						HLID FO Hanked . U I	hr m	sh61	^س د
	S	AMPLE	DISPOS	AL INSTRUC	TIONS						RECE	IVED	600	D CC	ND.K	хог ()				-, .	7		
							p				NOTE	S :								ד	urn Around Time:	24 HR (4/	8 HF Ş	KIAN

ESN NORTHWEST		ronmer ies Netw														(CI	HÆ	١I	V-	0	F-(Cl	IS.	ГО	D	Y R	EC	OF	lD
	5																										OF			-
ADDRESS:														P	RO	JEC	T N	1AN	1E:	Fr	E	E	U	5						[
PHONE: 200	300	19	100	F	AX:	20	6	sa	0	19	07	7			oc	ATIC	DN:		N	e!	201	1	Ņ	la	~	٦				
CLIENT PROJEC													· ·														DATE COLL	OF	572	3
Sample Number	Depth		Sample	Container Ty	<u> </u>	CA SC	2 () Q / Q / Q / Q / Q / Q / Q / Q / Q / Q	ALL	ANT ANT	PH B	5 19 49 5 19 49	Pres and	AND OF CONTRACT		43 00		AN AN	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	erran	A REAL	Crie Crie	ST.C.				s			Total Number of Containers	Laboratory Note Number
1. SIA									X		40	11																		
2. 53A									X		14-1																			
3. 54 A									X															Hu	LD		·			
4. SSA				1				Τ	X		H.		1																	
4. SSA 5. SØA		Ī					-		X		40	T	d																	
6.								Τ	1		T -	Γ																··		
<u>6.</u> 7.		1	1	1								\square	1																	
8.				1				1	1	1	1		1														· · · · · · · · · · · · · · · · · · ·		1	
9.				1						\mathbf{T}	1		-																1	
10.	-	1			-					1			-														••••••••••••••••••••••••••••••••••••••		1	
11.	1	1	1	1	-			-	1	1-	1		+				_												1	<u> </u>
12.		1	1	+				+	1-	1	-	┢╌	+	+															1	
13.		1	1		-			-	+	+-	1	+-	+	+							<u>† </u>		1						1	\vdash
14.	+		1	+					+-	+	\mathbf{T}	t	+	1															+	
15.			1	+	-				-	1	1-	ϯ		+							†	†							+	
16.		1		-				+-	-	1		+	+	+															+	1
17.			1				-+-	+	-	<u>}</u>	1-	+	+	+						}			<u> </u>						+	+
18		<u> </u>	<u> </u>					+	+	\frown	1-	+	+	- <u>-</u>							f		<u>†</u>		<u> </u>				+	+
RELINQUISHED BY (Sig	nalure)	0/	TETIME	RECE		SY/S	ignatu	re}	- <u> </u>	ATE/	TIME				SAI	APLE	RE	CE IF		L	1		<u> </u>	BORA	TORY		ES		- J	
F-W	~ · ·	- 1	30/02	11	T	To					02 TA		TOTA	L NU						S		5								
RELINCUISHED BY (Sig			SU/UL	RECE	IVED 8						7A			N OF										45	pr N	<i>с 1</i> ,	. de	۹	0. ai	4.
	··am.c)		, L., I III		V				0			- T		LSINT										HCIC	ncitri ta I	hers hers	المرار الم مرار المرار	(1):	/	
	S	AMPLE	DISPOS	AL INSTRU	CTIO	vs						RECEIVED GOOD COND./COLD						5 45 hr Heid for samples & Quant. Heid others in 1/30/1-				5								
				0 each []			Pickup	,			• • ** -		NOT	ES:									Т	irn Arc	und T	îme:	24 HF	1 481	1R) 5	ČĂ.

¥

OLYMPIC VIEW SANITARY LANDFILL INC P.O. BOX 990 - BREMERTON, WA 98337 674-2331 17321 Ne Date 5123102 To: \mathbb{C} LUIPAN. Ê 147 Compacted cu. yds. @ Septic gals. @ INVOICE/ Signature

WASTE MANAGEMENT

OLYMPIC VIEW SANITARY LANDFILL

PERMIT # 2002-051

PERMIT TO DISPOSE OF NON-HAZARDOUS/ NON-DANGEROUS MATERIALS

EXPIRES: 8/22/02

GENERATOR: METAL MARINE PILOT

DESCRIPTION:PCS - DIESEL, CLASS IV		TONS:10
LOCATION: FIRCREST, WASHINGTON		
CONTACT: STEVE SPENCER		PHONE: 206-306-1900
BILLING: sound environmental	PO# :	JOB#:

We accept business checks, cash or charge (with prior approval)

SPECIAL HANDLING : NONE:		
МЕ	BR	MH
APPROVED: Kristin Castner	DATE: 05/22/02 8:46:30 AM	

A COPY OF THIS PERMIT MUST BE SHOWN BY EACH DRIVER

HAZARDOUS/DANGEROUS WASTE IS STRICTLY PROHIBITED

USA WASTE SERVICES, INC THE QUALITY PLUS CHOICE

OLYMPIC VIEW SANITARY LANDFILL WASTE DISPOSAL APPLICATION (Not applicable to MSW)

Mail t	Kristin Castner 7227 NE 55 th Ave Portland, OR 97 Phone: (800) 6 Fax: (800) 5	10015 SW Barney White Road Port Orchard, WA 98337
Note:	All questions must for waste to be app	be answered
		Rелеwal #
1.	Generator Informati	on:
	Company Name:	Metal Moerne Pilot
	Mailing Address:	3512 SW 310 + CT.
		Federal WAT WA 98023
		1
	Contact:	Junct Freemins-Daily
•	Phone/Fax:	253 606 2173
	Project Name:	UST IMULATIGATION
	Project Location:	ZIIA MILDRED ST. FIRCHREAT, WA
2.	Other Contacts (If a	pplicable)
	Consulting Firm:	Samo Environmental Strateg &
	Contact:	STEPHEN'S SPENCER
	Phone:	253 92: 7059
	Contractor Name:	SAME
	Contact:	
	Phone:	
	Laboratory:	ESN
	Contact:	SHERY CHILLON -
	Phone:	306 459 3432
Billind	a (Party responsible f	or invoices): Sound ENVI RONMENTA!
	· _ ^	VE SVENCAL
		351 LAVE CILL WAY SUILL 102
		6 306 1900

١.

r has	no that will a	lor despur	s and/	iact procos	priefly describe the p	now and	of Waste:		3.
1102					Include the gasolin				
					Agency Contact:	diation	CLA / MTCA Rem	C CE	•
•			•			Action	endent Remedial		
							Removal	9 US	
						uct Spill	ed Chemical Prod	🗌 Ur	
					•		r		
			<u>·</u>						
	_								
					· · · · · · · · · · · · · · · · · · ·				
ı/) ,	ent of tota	e percer	clude	oly and in	check all that a	sition:	laterial Compo	Waste	4.
%		dry Slag	Found		4	100	il	B	
%		ge Sedime					ncrete Asphalt		
7°		- •	Debris		-		eserved Wood		
70		_					al Ash		•
%		(431)	Other		n -		ood Ash		
%	*				/C				
							equal 100%	Total m	NOTE:
			•	oply)	(check all that	ninants	laterial Contar	Waste	5.
	5	Metals					asoline		
• .		Solvent					iesel	0	
		PCBs					eating Oil		
	- 	Other					nused Motor Oil		
						aste Oil	sed Motor Oil / W		
-		Unknow					ther Petroleum Pr		
					ion, it available,	ith applica	SDS information w	Supply	NOTE:
							·		
			a	1.	or Disposal:	Waste	d Quantity of	Estima	5.
estimate bot	tons ()	O	· () -	cubic yards /	· · ·	Fle_		
estimate both									
)	B		cubic yards /				

NOTE: Estimated quantity for disposal must be within 20% of the quantity actually disposed. (10% for projects over 7,500 tons or 5,000 cubic yards.)

7.

Frequency of Disposal:

One time	` D	Monthly	Annual	Other

8. Waste Sampling:

T

Proper characterization of waste for disposal requires the collection of representative samples. The methods and equipment necessary for obtaining representative samples of a waste, and the frequency of sampling, will vary with the type and form of the waste. Check the appropriate box and briefly describe how and where the waste was sampled. Include site maps with sampling locations if possible.

Number of COMPOSITE samples & number of discrete samples per composite
Number of DISCRETE samples SAMPLING Res WAC 173-360-UST ASSESSMENT_ Guidlines.

NOTE 1: Unless prior approval has been granted by OVSL, the following sampling frequency will be used:

0 – 25 cubic y	/ards = 1 composite sa	imple
25 – 100 cubic y	ards = 3 composite sa	Imples
101 - 500 cubic ;	yards = 5 composite sa	Imples
501 – 1000 cubic y	ards = 7 composite sa	Imples
1001 - 2000 cubic y	ards = 10 composite sa	mples
>2000 cubic y	ards = 10 plus one sam	ple for each additional 500 cubic yards

NOTE 2: One composite sample shall contain a minimum of three/maximum of five discrete samples.

9. Waste Analysis:

The "Dangerous Waste Regulations" (WAC 173-303) shall be utilized to determine the appropriate analytical requirements for waste characterization. Ecology Publication # 91-30 "Guidance for Remediation of Petroleum Contaminated Soils" shall also be used to characterize petroleum contaminated soils from UST releases. Submit all laboratory analytical results, QA/QC data, and Chain of Custody sheets along with this application. (NOTE the laboratory must be accredited by the Washington State Department of Ecology.)

a) List all analytical test methods used: <u>NWTP1+Dx</u>, <u>NWTPH-6</u>, <u>BZ60V0C</u> b) Provide a narrative as to why the above analytical methods were selected: <u>Amely heal</u> <u>Methods</u> <u>Whee</u> <u>Selected</u> <u>based</u> <u>mulu</u> <u>Nistanical</u> <u>Whents</u> <u>of</u> <u>THE</u> <u>UST</u> <u>Chstem</u>.

NOTE: Additional sheets attached (analytical with QA/QC and C.O.C.) XYES INO

10. Soil Classification: (**FOR PETROLEUM CONTAMINATED SOILS ONLY**)

Based on the analytical data and Ecology Publication #91-30, the soil classification is: (check one)

Class 1

Class 2

Class 3

Class 4

11. Dangerous Waste Affidavit:

Based on a review of the analytical test results, site history, and the applicable regulations, this waste is classified as: (check one)

C Neither Dangerous Waste (DW) nor Extremely Hazardous Waste (EHW)

Dangerous Waste (DW)

and Waste Code:

Extremely Hazardous Waste (EHW)

and Waste Code:

TERMS AND CONDITIONS OF DISPOSAL

1. ACCEPTABLE WASTE. Customer shall deliver and Company shall accept for disposal only Acceptable Waste. Customer shall deliver the full quantity of Acceptable Waste generated, handled and/or collected by Customer as estimated above. Acceptable Waste means and includes only such waste as is described above and which is approved and permitted for disposal at the Designated Landfill and shall not include any Excluded Waste. As used herein, Excluded Waste means waste that: (a) is not in conformance with the description of the waste set forth above; (b) is or contains any infectious waste, or radioactive, volatile, corrosive, highly flammable, explosive, blomedicel, biohazardous material or hazardous, dangerous, or toxic substances, as defined pursuant to or listed or regulated under applicable federal, state or local law above regulated levels permitted for disposal as the Designated Landfill; (c) is prohibited from being received or disposed of at the Designated Landfill by federal, state or local law, regulation, rule, code, ordinance, order, permit or permit condition; (d) Company reasonably believes would, as a result of or upon disposal, be a violation or local, state or persent a significant risk to human health or the environment, cause a nuisance or otherwise create or expose Company or Customer to potential liability.

2. REPRESENTATIONS & WARRANTIES. Customer represents and warrants that: (a) the description of the waste set forth on the first page hereof is true and correct in all material respects; (b) all waste delivered to the Designated Landfill by Customer shall be Acceptable Waste as defined above and shall not be or contain Excluded Waste; (c) Customer shall, and shall cause any carrier with which it contracts to, handle and transport the waste in a safe and workmanlike manner in full compliance with all applicable federal, state and local laws, ordinances, decisions, orders, rules or regulations; and (d) Customer has advised its drivers of Company's prohibition on delivery of Excluded Waste, of the definitions and listing of hazardous waste and hazardous substances under applicable federal and state law and regulations and of the definition of Acceptable Waste herein. Company represents and warrants that it shall dispose of the Acceptable Waste in a safe and workmanlike menner in full compliance with all applicable in a safe and workmanlike menner in full compliance with all applicable federal and regulations and of the definition of Acceptable Waste herein. Company represents and warrants that it shall dispose of the Acceptable Waste in a safe and workmanlike menner in full compliance with all applicable federal, state and local laws, ordinances, decisions, orders, rules or regulations.

3. TITLE; INSPECTION, REJECTION OF WASTE. This to and ownership of all Acceptable Waste shall transfer to Company upon its final acceptance of Acceptable Waste. Title to, ownership of and liability for Excluded Waste shall at all times remain with Customer. Company may inspect the waste delivered by Customer and reject Excluded Waste. If, following acceptance of the waste delivered by Customer, such waste is found to be or contain Excluded Waste, in whole or in part. Company may revoke its acceptance of all such waste. Revocation of acceptance by Company shall operate to revest all incidents of ownership in Customer at the time revocation is communicated, either orally or in writing. Customer shall remove Excluded Waste, at its sole cost and expense, from the possession of Company promptly, but in no event later than 7 days, after notice of rejection or revocation of acceptance. Company shall have the right to refuse to accept or to reject any Acceptable Waste in the event of Customer's failure to pay disposal fees owed by Customer.

4. INDEMNITY. Each party hereto (the "Indemnitor") hereby agrees to indemnify, hold harmless and defend the other party, and its owners, officers, directors, employees and agents (collectively. the "Indemnitees"), from and against any and all liabilities, penalties, fines, forfeitures, demands, claims, causes of action, suits, judgments and costs and expenses incidental thereto, including attorneys' fees (collectively. "Damages"), which any or all of the Indemnitees may hereafter suffer, incur, be responsible for or pay out as a result of personal injuries, property damage, or contamination of or adverse affects on the environment, to the extent caused by, or arising from or in connection with the breach of any representations or warranties of the Indemnitor set forth in this Agreement, or any negligent actions or omissions or willful misconduct of the Indemnitor, its employees, officers, owners, directors or agents, or the violation of any law, ordinance or regulation, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq., as amended. Such indemnity shall exclude Damages to the extent they arise as a result of any negligent actions or omissions or their employees, officers, owners, directors or agents, or omissions or willful misconduct of the Indemnitor shall be liable hereunder to pay obligation hereunder shall arise only in excess of any available and collectible insurance proceeds and the Indemnitor shall be liable hereunder to pay only its share of the amount of Damages, if any, that exceeds the total amount that all insurance has paid for the Damages, plus the total of all deductible and self-insured expenses paid under all insurance policies. The obligations in this Section 4 shall survive the performance and termination of this Agreement.

5. UNCONTROLLABLE CIRCUMSTANCES; TERMINATION. Except for the obligation to pay fees for disposal of Acceptable Waste accepted at the Designated Landfill, the performance of this Agreement may be discontinued or temporarily suspended by either party, and neither party shall be deemed to be in breach of this Agreement, in the event the delivery of waste by Customer, or the disposal of waste by Company are prevented by a cause or causes beyond the reasonable control of either party. Such causes shall include, but not be limited to, acts of God, acts of war, riot, fire, explosion, accident, flood or sabotage, governmental laws (including nuisance), permit conditions, regulations, restrictions (including land use), condition of the waste or injunction. Company may immediately terminate disposal services upon written notice to Customer in the event Customer breaches any term. provision or obligation under this Agreement, in which case, Customer shall be liable for and shall pay to Company all costs and losses Incurred by Company as a result of or relating to any such termination.

6. MISCELLANEOUS. This Agreement shall be governed by the laws of the state in which the Designated Landfill is located. Every provision of this Agreement shall be severable. This Agreement represents the entire understanding and Agreement between the parties relating to the disposal of waste, except that, if the parties, or their parent companies, are parties to a national service agreement, the terms of such national service agreement shall control over any inconsistent terms in this Agreement. No representations, statements or Agreements, unless agreed to by the parties in writing, shall modify, change, amend or otherwise affect the obligations undertaken in this Agreement. No waiver by either party of any one or more defaults or breaches by the other in the performance of this Agreement shall operate or be construed as a waiver of any future defaults or breaches. Customer may not assign this Agreement without the prior written consent of Company. This Agreement shall be binding upon and shall inure to the benefit of the parties' successors and assigns.

CERTIFICATION

THIS DOCUMENT MUST BE SIGNED BY THE GENERATOR OR GENERATOR'S AUTHORIZED REPRESENTATIVE, AND INDICATES A FIRST HAND KNOWLEDGE OF THE WASTE'S CHARACTERISTICS. BY SIGNING BELOW, GENERATOR CERTIFIES THE TRUTH OF THE INFORMATION ON THE FIRST PAGE HEREOF AND THAT GENERATOR HAS READ AND AGREES TO THE TERMS AND CONDITIONS SET FORTH ON THE <u>FIRST AND SECOND PAGES</u> HEREOF WHICH ARE INCORPORATED HEREIN.

	DATE: 5/22/02 CUSTOMER/GENERATOR: Metal Manine	
SIGNATURE: Agent for Jaret Froman Daily	PRINTED NAME: Janet Freeman - Duily	

APPROVAL

Date:	
Approval Expiration Date:	

1.

CITY OF FIRCREST 115 RAMSDELL STREET FIRCREST WA 98466 (253) 564-8902

Permit Number: 020401 Permit Type: MECHANICAL

PROJECT: LOCATION:	REMOVE UNDERGROUND ST TNK MILDRED ST W 2119	ASSESSOR'S #:0220112005 ESTIMATED CONSTRUCTION VALUE: \$.00
		FEES:

.50
.65
.15
•

Phone #: 253-606-2173

CONTRACTOR: RIVERSIDE SERVICES Address: P.O. BOX 39 KENT WA 98035

Phone #: 253 8728988

State Contractors License # RIVERESOO0J

Expiration date: 02/01/2003

APPROVED: JEFF BOERS PLANNING/BUILDING DIRECTOR

This permit becomes null and void if the work or construction is not commenced within 180 days, or if the work or construction is suspended or abandoned for 180 days at any time after work is commenced, or if work is not completed within one year from the date of issue. All work shall be done in accordance with the approved plans. The approved plans shall not be changed or modified withinout the prior approval of the Planning/Building Director.

It is the responsibility of the permittee to obtain the required inspections. Failure to notify this department that the work is ready for inspection may necessitate the removal of some of the construction materials at the owner's expense in order to perform such inspection.

REMOVE UST BY EXCAVATION

SUBMIT CERTIFICATION OF UST REMOVAL UPON COMPLETION SUBMIT CERTIFICATION OF SIZE OF TANK & OF SUBMIT SOILS TESTING RESULTS

TOB

SIGNATURE OF PROPERTY OWNER OR AGENT

hired by the property owner, on which the proposed work will take place, and hereby certify that the work is

be performed by me. This work is approved for the work described in accordance with the approved plans and specifications.

I further certify that I:

- 1. will comply with the building, mechanical, plumbing, land development and fire codes of the City of Fircrest,
- 2. the City has no liability for the work that I/we do on our home (*even if it is fully inspected and okayed by the inspection division*),
- 3. all people that I/we hire to help on the job must be adequately insured.

It is your responsibility if you are acting as your own general contractor to see that the appropriate permits are obtained for your project. If you are hiring a licensed contractor, he/she must obtain the plumbing, mechanical or electrical permit in his name, but it is up to *you* to make sure that he does. A subcontractor should take out his own permit, which makes him legally responsible for his portion of the work.

I have read RCW 18.27.110, quoted below, and understand that only contractors registered with the State of Washington may be used in performing work under this permit other than the work performed by me.

RCW 18.27.110 Building permits – Verification of registration required – Responsibilities of issuing entity – Penalties.

- (1) At the time of issuing the building permit, all cities, towns or counties are responsible for:
 - (a) Printing the contractor registration number on the building permit; and
 - (b) Providing a written notice to the building permit applicant informing them of contractor registration laws and the potential risk and monetary liability to the homeowner for using an unregistered contractor.
- (2) If a building permit is obtained by an applicant or contractor who falsifies information to obtain an exemption provided under RCW 18.27.090, the building permit shall be forfeited.

This permit becomes null and void if the work or construction is not commenced within 180 days, or if the work or construction is suspended or abandoned for 180 days at any time after work is commenced, or if work is not completed within one year from the date of issue.

I hereby certify that I have read and examined the above-printed information and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. The granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction.

Signature of Owner/Contractor/or Authorized Agent for Riverside Services

<u>FMC 9.74.010</u> <u>Public disturbance noises</u>: It is unlawful for any person to cause, or for any person in possession of property to allow to originate from the property, sound that is a public disturbance noise. The following sounds are determined to be public disturbance noises:

- bu as au be
- Sound emanating from the construction, maintenance, repair or demolition of buildings, grounds, and appurtenances such as fences and walls, or from activities associated with site clearing, grading, excavation, filling and other alternations, if audible beyond the boundary of the lot or parcel on which the activity is occurring between the hours of 10:00 p.m. and 7:00 a.m. on weekdays and between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays and Sundays.