

# Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

March 6, 1990

Mr. Roy Varney Utilities Maintenance Supervisor 12451 SE Fuller Road Milwaukie, Oregon 97222-1290

Re: UST-Clackamas County
N. Clackamas School District 12
Trans Center

Dear Mr. Varney:

We have completed our review of Hahn and Associates' report, dated January 25, 1990, concerning the underground storage tank decommissioning and contaminated soil cleanup conducted at the N. Clackamas School Districts Transportation Center. Since this information indicates that the decommissioning and cleanup met our current criteria, no further action is required at this time.

This decision is a result of our evaluation and judgement based on the regulations and facts as we now understand them, including:

- 1: Two underground storage tanks were removed from the site and disposed of in a manner approved of by the Department.
- 2: Approximately 330 cubic yards of gasoline and diesel contaminated soil were removed from the site and taken to Hillsboro Landfill for disposal. The diesel contamination apparently resulted from spillage from an above ground tank removed approximately 15 years ago.
- 3: Confirmation soil sample analyses did not detect any contamination remaining at the site above the most stringent cleanup level for soils of 40 parts per million total petroleum hydrocarbons.
- 4: No groundwater was encountered in the excavation.

Information concerning the tank and contaminated soil removals should be maintained with the permanent facility records. We remind you that the current investigation applies only to the leaking underground storage tank systems and in no way transfers any liability to the State of Oregon.

Although we agree that the current conditions at the site do not appear to pose an environmental threat, the responsibility for environmental evaluation, reporting, and cleanup rests with the landowners.

Mr. Roy Varney March 6, 1990 Page 2

If you have any questions regarding this matter, please contact me at 229-6923.

Sincerely,

Andree Pollock

UST Cleanup Specialist

Northwest Region

cc: Environmental Cleanup Division, UST Cleanup Section

Hahn and Associates

434 NW 6th Avenue, Suite 203

Portland, Oregon 97209 Attn: David Samples



# NORTH CLACKAMAS SCHOOL DISTRICT 12 PHYSICAL PLANT DEPARTMENT

12451 S.E. Fuller Road, Milwaukie, Oregon 97222-1290

(503) 653-3645

DIRECTOR David F. Church OPERATIONS SUPERVISOR Garry M. Kryszak

February 27, 1990

Oregon Department of Environmental Quality

ATTN: Mr. Garner

811 Southwest Sixth Avenue

Portlnad, OR 97204

Dear Mr. Garner:

Enclosed is a copy of the report detailing a project involving the removal two oil tanks and 230 yards of soil, soil sampling, and the re-installation of a single fuel tank. Hahn and Associate's report should explain the project and answer any questions; however, if you have any comments or concerns, please give me a call.

Sincerely

Roy T. Varney

Utilities Maintenance Supervisor

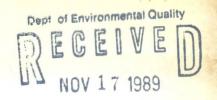
dlp enc.

Dept. of Environmental Quality

EEE 28 1990

NORTHWEST REGION

4=



### FAX TRANSMITTAL FORM

# NORTHWEST REGION

DATE Movember 16, 1989	No. of Pages (incl. FAX form): 2
TO: Mr. NWR	FROM Hahn and Associates, Inc.
COMPLEXY: It gurtnment of Engirenmental Qual	PROJECT # 1258 NCDIRT
Partiant OR	
	*****   *** x m m m m m m m m m m m m m m m m m
HARE AND ASSOCIATES, INC. (503)222-4178 Parthers, Ongot, USA (503,796-7717	FAX OFFICE
	please-call the office number.
	************
(6/89)	

HAHN AND ASSOCIATES, INC. ENVIRONMENTAL MANAGEMENT

Nuverile: 15 1399

Mr. Charles Gray Morthwest Rigion Department of Environmental Quality 511 SW 6th Austua Porthand, Origins 97244

HAI Project # 1258

SUBJECT Liaguage of Diesel Contaminated God from North Clackamas School District Transportation, Yard

Dear Mr. Cin.

This letter and aboratory results not admitted for your review in order to gain permission to dip you of approximately 1,000 yords of diesel-contaminated soil at the Hillshop Solid Waste Pacility. The continue of ded soil was discovered during an underground acres; table (UST, decemblishing project at the North Ciackamas School Distributor a approximation Yords. As you may note, the total petroleum hydrocarbon (IPH) seems global 250 ppm for a sample coor from the worst apparently contaminated area. The Hell the result indicated that the petroleum product was diesel fuel at a concept was of 1,000 ppm.

Your wessign represents FAX (221 of 175) to true request would be appreciated. If there exceeds not not us on questions, please contact the underrigned. Thank you for your assists so 1950 ohis that re-

Since

David L Serphs

Gao beist



9403 S. W. Nimbus Ave. Beaverton, OR 97005 (503) 844-0660 FAX # (503) 844-2202

## TELEPHONE USE REPORT

CALL FROM TO	Ray Varrey	DATE:	
COMPANY/TITLE:	N. Clackanus School Dis	TIME:	
PHONE NO.:	6.73-3645	_ (Circle for	filing)
CITY:	COUNTY:	AQ	Asbestos
		WQ	oss
N.C. S.	D. # 12 - Trans Center	SW	HW
SUMMARY OF CAL	L.:	General	Spill
	Cleany not done		
	Just got report from	Hahin + Ass.	
	in Neview. Probably sen		
	0.10		
	AUF	Signature	

89-223

Sent NWR 3/27

# NOTICE OF UNDERGROUND STORAGE TANK PERMANENT DECOMMISSIONING

Facility			Tank Owner
10	2011 Augo Burne	Det 12	Name SAME
Name Nill	ACKAMAS SCHOOL 1451 S.E. FULLER	Poss	Address
Address //	LIE, OREGON 9	7727-1290	
1912444	de, Oregon	The transferred	endowed pulses of the residual property of the
Dhone 5	03 · 653 · 3617 umber 5545	1	Phone
Facility ID N	umber 5545		
racinty 12.1	- Company of the Comp		
The highest production of the contraction	and the second of the second o		
Permanent D	ecommissioning Peri	formed By:	그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그
		3	Phone 668, 3516 4,20,89  Fill Material
Company	KONEU CONSTR	CON ION	2:20:89
Scheduled Da	ate for Permanent Dec	ommissioning	Fill Material
Method to b€	used: Removal	In-Flate	динительной метоновительной A44 A7 440 5-0-0 в чен податительной податительном
		Tanks to be Decomm	issioned -
7		anks to be Decoud	
	Tamle A ma	Tank Size	Last Product Stored
Tank ID#	Tank Age LINKNOWN	10,000	
3	CITY VICTOR VICTOR	The second secon	Was to the same of
ir yes, pieas	ommissioned tanks to e submit a new perm how will the old tan	apparate and a	runderground storage tanks? Yes No No inining information on the new tanks.
	Same	ITZER STEEL	Location PORTLAND, CR
Scrap			Location
Landfill	Name		Location
Stored	- THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED AND ADDRES		
Other	Comment		
(	XIIII CHAN	ion	Date 3:24:89
Signature _	July Hilliam		STIMATOR
	S/ // KON	EU CONSI. / E	
	apleted Form To:	Departmen	nt of Environmental Quality
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Return Con		811 SW Si	xth Ave.
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#### \*LUST FORM\*

	INCIDENT INFORMATION
LUST Incident Nbr:	LUST Log Nbr: 03-89-223 UST Facility ID: 3>7>
Date Received: 10/12	Received By: Lagarner Emergency Resp Taken:
Tank Identification:	
	Street: 13801 SE Webster Rd Conter.
	City: Milwankie Zip: 97267
1	County: Clark Phone:
Incident Comments:	
	CONTACT & MAIL TYPES
Reported By: Roy	Varney
Company: NCOLK	School Dist Company: Company: N Clack School Pis
Street:	Street: Street: 12451 55 Fuller Rd
City:	zip: City: Zip: City: Milwaukie Zip: 9722
State: Phone:	
LUST Incident Nbr: (X)	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Date Investigated: /	0/12/89 Investigated By: Laborner
Release Exists: (Circle)	N Confirmation Method: A)Staff B)Lab:DEQ C)Lab:RP D)Lab:Other E)RP F)Other (Circle)
Cleanup Necessary: (Circle)	$\tau$
Off-Site Migration: (Circle)	Y N ? Estimated Gallons Released: Priority:
Discovery Date: 10/	4/89
How Discovered:	A)Routine Monitoring B)Inventory Control C)Decommissioning D)Site_Assessment
(Circle)	E) Complaint F) Tank Test GOther - Pipe tranching
Material Released: (Circle)	A)Unleaded Gasoline B)Leaded Gasoline C)Misc. Gasoline
	D)Diesel E)Fuel Oil F)Waste Oil
	G)Lubricant H)Solvent . I)Bunker Fuel
	J)Other Pet. Dist. K)Chemical L)Unknown
Source of Release: (Circle)	A) Tank Leak B) Pipe Leak C) Overfill D) Surface Spill - from - old touts
(011010)	E)Pump/Valve Leak F)Other G)Unknown
Impacts:	Soil Y N % ?
Impacts: (Circle)	Groundwater Y N % ?
	Surface Water Y % ?
	Drinking Water Y % ?
	Facility (Vapor) Y N % ?
	Facility (Free Product) Y N %
Site Assessment Comm	ents:
Site Assessment Comm	
LUST Incident Nbr: (X	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Date Released Stoppe	d: 10112189
Cleanup Activity: S	10/12/20 Under Control Date: 10/12/29
	and Date: 12/29/90 Contractor Name: Hahn + Assoc Tom New Corsh
Cleanup Guideline: (Circle)	Matrix C.A.P. Cleanup Lead: RP SLw/TF SLw/OTF (Circle)
Free Product Dispose	
Est. Gallons:	N/A Est. Cu/Yds: 230
Resp. Party:	Resp. Party: Hahn + Assoc.
Disposal Location:	Disposal Location: Hillsboro Landfill
Removal Date:	Removal Date: 12/29/89
Enforcement Action: (Circle)	YN
Cost Recovery Initia (Circle)	ated: Y N Source of Cost Recovery: Pct. R.P.:
	PCT. SLW/IF:
Estimations: Co.	Pct. SLw/oTF:st of Cleanup: Staff Time On Project:
Estimations: Cos	st of Cleanup: Staff Time On Project:
Site Management Comm	nents:

03-89-223

# PETROLEUM-CONTAMINATED SOIL REMOVAL

#### AND

#### VERIFICATION SAMPLING

North Clackemas School District Transportation Yard Milwaukie, Oregon

January 25, 1990

Prepared for:

North Clackamas School District Milwaukie, Oregon

Prepared by:

Hahn and Associates, Inc. Portland, Oregon

#### PETROLEUM-CONTAMINATED SOIL REMOVAL

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#### **VERIFICATION SAMPLING**

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#### INTRODUCTION

The objective of the soil excavation underaken at the North Clackamas School District Transportation Yard in November and December 1989 was the removal of diesel-contaminated soil that was discovered during the decommissioning of two underground storage tanks (USTs) and the installation of one new UST. The diesel fuel apparently resulted from the use of an above ground storage tank that had been removed at least 15 years before.

Laboratory analytical results from investigatory soil sampling by Hahn and Associates, Inc. (HAI) indicated levels of contamination that exceeded the Oregon Department of Environmental Quality (DEQ) Level 2 petroleum-contaminated soil cleanup standard applicable to the site.

Initial excavation activity at the subject site was conducted on November 21 and 22, 1989. Contaminated soil was removed and transported for disposal at the Hillsboro Landfill, Hillsboro, Oregon. Soil sampling conducted on November 22, 1989 indicated the presence of additional soil contamination. An additional contaminated soil was removed on December 29, 1989 and was followed by verification sampling. The analytical result from the verification sampling indicated that further excavation activity did not appear to be necessary.

#### SOIL SAMPLING AND CLEANUP ACTIVITIES

On October 16, 1989, Ms. Randi Wexler of Hahn and Associates, Inc. (HAI) obtained one investigatory soil sample from the southeast corner of the underground storage tank (UST) excavation area (Figure 1). The sample was sent to Pacific Environmental Laboratory (PEL) of Beaverton, Oregon for analyses for total petroleum hydrocarbons (TPH) and for a hydrocarbon identification scan (HCID). The analytical result for the sample was 950 parts per million (ppm) for TPH and the HCID test indicated the contamination to be diesel fuel (Table 1) (Appendix A).

A DEQ Soil Cleanup Matrix Worksheet was completed for the project site (Appendix B) and the site was found to fall within a Level 2 clean up standard. This standard indicates that that any contamination above 500 ppm for TPH (diesel) needed to be removed. Removal of the contaminated soil from the tank pit area was undertaken under the supervision of HAI as directed by Mr. Roy Varney of the North Clackamas School District. The Tom New Construction Company (TNC) performed excavatory and transportation activities for the District.

On November 21, 1989 excavation of the contaminated soil adjacent to the fuel pump shed was undertaken. Mr. David Samples was the site manager for HAI. The fuel pump had been removed and the shed was demolished during excavation. It was evident from visual indicators such as soil discoloration and the strong odor of fuel, that the area of diesel contamination was more extensive than originally estimated and would require substantial soil removal. Readings from a hand held gas detector (Gastech Model 1314) of 500 ppm of hydrocarbon vapors was noted during the excavation. This value diminished quickly after the soil from the pump shed area was removed, but occasional readings of 100 to 300 ppm were encountered at various locations during the excavation.

Excavation work was conducted on all sides of the tank pit and beneath the concrete tank anchor slab at the bottom of the pit. A total of 220 cubic yards of contaminated soil was removed from the site on November 21, 1989 and was taken to the Hillsboro Landfill, Hillsboro, Oregon. A permit for the disposal was obtained through the DEQ (Appendix C). Groundwater was not encountered during the excavation activities at the subject site.

Three additional investigatory soil samples (#1, #2, and #3) were taken in the excavation pit on November 21, 1989 (Figure 1). Sample #1 was from the north wall, sample #2 was from the floor of the pit, and sample #3 was from the south wall. These samples were taken to PEL and analyzed for TPH (Appendix A). Analytical results were reported to be "non-detected" for samples #1 and #3, and 30 ppm for #2 (Table 2).

Excavation work continued on November 22, 1989 at the site in the continued effort to remove soil that appeared to be contaminated as indicated by soil discoloration, a persistent hydrocarbon odor and hand held gas detector readings of up to 100 ppm. Soil

was removed predominantly in the northwest and southeast corners and along the excavation bottom to an average depth of 20 feet.

During these excavation activities, a fuel pipeline was uncovered along the east wall of the pit that was surrounded by sand and gravel that had the odor of gasoline. The pipe was noted to have fuel in it. The pipe was bent back and taped off to prevent leakage of the fuel to the surrounding soils.

After approximately an additional 110 cubic yards of soil had been removed and it was noted that soil discoloration had diminished substantially, excavation activity was halted until additional soil test results were available.

#### VERIFICATION SAMPLING AND ANALYSES

Three verification soil samples were taken on November 22, 1989 from the excavation area and taken to PEL for analyses for TPH. Sample #4 was from the face of the north wall, #5 was taken from the southeast corner, and #6 was from the sand and gravel surrounding the fuel line that was detected in the east wall (Figure 1). Analytical results indicated 16 ppm of TPH for sample #4, 12 ppm for #5 and 3,500 ppm for #6. Due to the high TPH value for sample #6, a HCID scan was run on it to determine the type of petroleum contamination. The results indicated that the contamination was a petroleum product with a carbon range of C8 to C14, indicating that the contaminant was diesel fuel.

The soil around the fuel pipe was excavated on December 29, 1989 and a verification sample taken (verification sample #1) and analyzed for TPH. The analytical result was reported to be "non-detected". The results for this verification sample, and for samples#4 and #5 indicated that the soil contamination remaining at the project site was below the DEQ Level 2 cleanup standard of 500 ppm. The excavation pit was subsequently filled in with imported soil, compacted and graded over.

#### SUMMARY

Following the decommissioning by removal of two 10,000 gallon USTs at the North Clackamas School District Transportation Yard in August, 1989, it was apparent that petroleum contamination of the soil was present in the area. Soil sampling and analyses for total petroleum hydrocarbons (TPH) indicated that the contamination level exceeded the Oregon Department of Environmental Quality Level 2 Cleanup Standard maximum of 500 ppm. Excavation of contaminated soils was conducted on November 21 and 22, 1989. A approximate total of 330 cubic yards of contaminated soil was excavated and disposed of at the Hillsboro Landfill, Hillsboro, Oregon.

Additional sampling and analyses indicated that further excavation at the facility appeared to be necessary due to the presence of diesel contaminated gravel and sand that surrounded a fuel pipeline. This excavation work was done on December 29, 1989. Verification sampling, which followed, indicated that residual contamination at the site was below the Level 2 standard. The excavation was then backfilled with clean imported soil and the site paved.

#### DISCLAIMER

The data presented in this report was collected, analyzed and interpreted following the standards of care, skill and diligence ordinarily provided by a professional in the performance of similar services as of the time the services were performed. This report is based solely upon an inspection of the property and its surroundings, upon physical sampling and analytical activities, upon available historical records and governmental agency files and upon interviews of parties knowledgeable of the property and its history.

#### TABLE 1

# Investigatory and Verification Soil Analytical Results

#### Petroleum-Contaminated Soil Removal

# North Clackamas School District Transportation Yard Milwaukie, Oregon

#### (1/22/90)

Sample #	$\underline{\text{TPH}}$
South Soil # 1	950
# 1	ND
# 2	30
#3	ND
#4	16
#5	12
# 6	3,500
Verification Sample #1	ND
Sample #	HCID

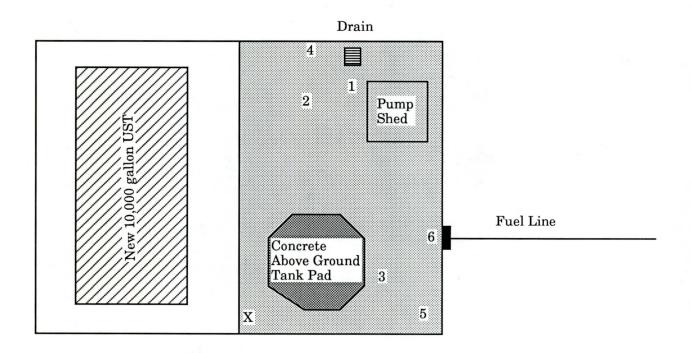
1,500 \*

Notes:

TPH = total petroleum hydrocarbons
HCID = hydrocarbon identification scan
\* C8-C14 hydrocarbon chain, likely diesel
all results reported in parts per million (ppm)
ND = not detected
detection limit = 5 ppm TPH

#6

#### Parking Area



Area of visible contamination

1,2,3 - Soil samples 11/21/89 4,5,6 - Soil samples 11/22/89 X - Soil sample 10/16/89

Not to Scale (HAI 1/90) Figure 1 Site Map

Above Ground Storage Tank Contaminated Soil Excavation area N. Clackamas School District Transportation Yard

Milwaukie, Oregon

November 1989



Photograph # 1: View to the east of project site prior to excavation. Note fuel pump shed.



Photograph # 2: Contaminated soil in northeast corner of pit adjacent to pump shed.



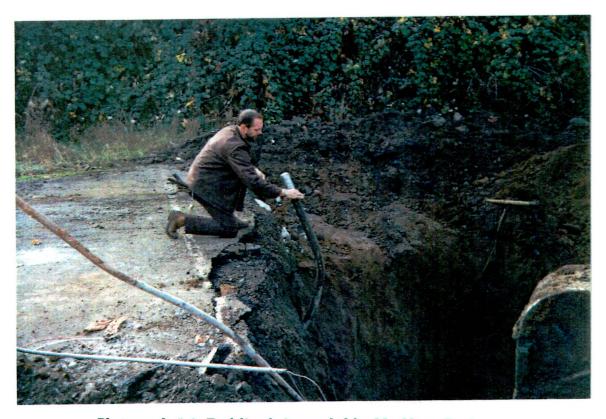
Photograph # 3: Contaminated soil beneath drainage grill.



Photograph # 4: View to the east of excavation pit. Note fuel line to the right.



Photograph # 5: Southeastern corner of excavation area.



Photograph # 6: Fuel line being sealed by Mr. Norm Davis.

### APPENDIX A

DEQ Soil Cleanup Level Decision Matrix Worksheet

#### APPENDIX A

#### DEQ SOIL CLEANUP LEVEL DECISION MATRIX WORKSHEET

North Clackamas School District Milwaukie, Oregon (10/89)

**INTRODUCTION:** This worksheet is intended to be used to determine the soil cleanup standard for the remediation of motor fuel and heating oil releases from underground storage tanks. Circle the appropriate depth and corresponding point value below it:

#### **EVALUATION PARAMETERS:**

1. **DEPTH TO GROUNDWATER:** Vertical distance (to nearest foot) from the surface of the ground to the highest seasonal elevation of the saturated zone.

Depth:	>100'	51-100'	25-50'	<25'	POINTS: 7
Points:	1	4	7	10	

Source: Field observation.

2. MEAN ANNUAL PRECIPITATION: From nearest appropriate weather station.

Inches:	<20"	20-40"	>40"	POINTS: 5
Points:	1	5	10	

Source: Portland International Airport Weather Station

#### 3.NATIVE SOIL TYPE:

Permeability:	Low	Moderate	High	POINTS: 1
Points:	1	5	10	

Source: Field Observations.

#### 4. SENSITIVITY TO THE UPPERMOST AQUIFER:

Sensitivity:	Unusable	Potable not used	Potable	Sole Source
Points:	1	4	7	10
Source				POINTS: 4

**5. POTENTIAL RECEPTORS:** Distance to nearest well that draws water from aquifer of concern and the number of people at risk including all people within 3 mile radius of site who regularly enter the area.

Nearest Well:	<1/2 mile	1/2 - 3 miles		>3 mile		
Description:	Near	Medium		Far		
Number of People:	>3,000	100-3,000	<100		POINTS:	10
Description:	Many	Medium	Few			

**TOTAL POINTS: 27** 

Level 2 Cleanup Standard: Diesel TPH (Total Petroleum Hydrocarbons) < 500 ppm

#### DEQ NUMERIC SOIL CLEANUP STANDARDS

#### North Clackamas School District Milwaukie, Oregon

(10/89)

	Level 1	Level 2	Level 3
TPH (Gasoline)	40 ppm	80 ppm	130 ppm
TPH (Diesel)	100 ppm	500 ppm	1,000 ppm

If the Matrix Score evaluated is:

- A) Greater than 40, the site must be cleaned up to at least the Level 1 standard
- B) From 25 to 40, inclusive, the site must be cleaned up to at least Level 2 standards
- C) Less than 25, the site must be cleaned up to at least the Level 3 standard



October 17, 1989

Hahn & Associates 434 NW 6th Ave., Suite 203 Portland. OR 97209

Attn: Randi Wexler

Re: PEL #89-1276

Enclosed is the lab report for your job #1235 NCSUST which was received in our lab on October 16, 1989.

#### I. Sample Description

One Soil Sample

The sample was received under a chain of custody.

The sample was received in a container consistent with EPA protocol.

#### II. Quality Control

No project specific QC was requested. In-house QC data is available upon request.

#### III. Analytical Results

Test methods may include minor modifications of published methods such as detection limits or parameter lists. Solid and waste samples are reported on an "as received" basis.

Compounds not detected are listed under results as ND.

Sincerely,

Howard Holmes Lab Manager Kim Chiusolo Kim Chiusolo Chemist



PEL REPORT NUMBER: 89-1276

CLIENT:

Hahn & Associates

JOB REFERENCE:

1235 NCSUST

DATE: ITEM:

October 17, 1989 One Soil Sample

METHOD: TPH per EPA 418.1

Results in mg/kg (ppm)

Sample ID TPH South Soil #1 950 Lab Blank ND Detection Limit 5

METHOD: Hydrocarbon I.D. by GC/FID

Results in mg/kg (ppm)

Sample ID	Carbon Range	Hydrocarbon	Detection Limit		
South Soil #1	C12-C22	1000*	20		

\*Similar to #2 Diesel

RUSH



HAHN AND ASSOCIATES, INC. 434 NW 6TH AVE: THE SUITE 203 PORTLAND, OREGON 97209-3600

(503) 796-0717

9405 S.W. Nimbus Ave. Beaverton, OR 97005 (503) 644-0650 ио 🗌 CHAIN OF CUSTODY RECORD Proj Ne Project Name NCSUST 1235 Sampler Randi Wertler 2.0. Number No. of Station Location Ste Na Time Containers Dete South Soil #1 10:30 0-16 ALL SAMPLES WILL BE DISPUSED OF 30 DAYS ATTER RUCEIPT Received by: Ismanuel Relinquished by: Is prevel Date Time Relinquished by: 15-pursel Date Time Received by: 15-mount 10,489 10.30 Relinquished by: (Speciar) Relinquished by: 15-11-1 Date Time Received by: Bernard 10/14/89



November 27, 1989

Hahn & Associates 434 NW 6th Ave. Suite 203 Portland, OR 97209

Attn: David Samples

Re: PEL #89-1599

Enclosed is the lab report for your job #1258 which was received in our lab on November 21, 1989.

#### I. Sample Description

Three Soil Samples

The samples were received under a chain of custody.

The samples were not received in containers consistent with EPA protocol.

#### II. Quality Control

No project specific QC was requested. In-house QC data is available upon request.

#### III. Analytical Results

Test methods may include minor modifications of published methods such as detection limits or parameter lists. Solid and waste samples are reported on an "as received" basis.

Compounds not detected are listed under results as ND.

Sincerely,

Philip Nerenberg

President

Linnet O'Hanlon

Chemist



PEL REPORT NUMBER:

89-1599

CLIENT:

Hahn & Associates

JOB REFERENCE:

1258

DATE:

November 27, 1989 Three Soil Samples ITEMS:

METHOD:

TPH per EPA 418.1 Results in mg/kg (ppm)

Sample I.D.	TPH
#1	ND
#2	30
#3	ND
Lab Blank	ND
Detection Limit	5



RUSH YES NO

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December 1, 1989

Hahn & Associates 434 N.W. 6th Ave. Suite 203 Portland, OR 97209

Attn: David Samples

Re: PEL #89-1610

Enclosed is the lab report for your job #1258 which was received in our lab on November 22, 1989.

#### I. Sample Description

Three Soil Samples

The samples were received under a chain of custody.

The samples were not received in containers consistent with EPA protocol.

#### II. Quality Control

No project specific QC was requested. In-house QC data is available upon request.

#### III. Analytical Results

Test methods may include minor modifications of published methods such as detection limits or parameter lists. Solid and waste samples are reported on an "as received" basis.

Compounds not detected are listed under results as ND.

Sincerely,

Howard Holmes Lab Manager Linnet O Hanlon

Chemist



PEL REPORT NUMBER:

89-1610

CLIENT:

Hahn & Associates

JOB REFERENCE:

DATE:

ITEMS:

December 1, 1989 Three Soil Samples

METHOD: TPH per EPA 418.1

Results in mg/kg (ppm)

Sample I.D.	TPH
4	16
5	12
6	3,500 9
Lab Blank	ND
Detection Limit	5



434 NW 6TH AVEN 1: SUFTE 203
PORTLAND, OREGON 97209-3600
(503) 796-0717

RUSH

YES

(503) 796-0717

CHAIN OF CUSTODY RECORD

Adirquided by: 15 point Reloquished by: Ispecial Retarquisted by: 15 P.O. Number Sta. He. 0 18/22/11 11/22/ 18/27 Dit Sampler ī Project Name 11/22/89 Comp 18/20/1 Date Time Date Time UAnd 1 Grain 6- Sand ATEL- of FUEL LINE 5- South Fro 4- North Fue Wall Received for Logislay pr Received by: (Symular) Received by: 15. mirel Station Location Jamp/18 37575 No. of Containers Relinquished by: Beautiful Relinquished by: Chymerol BTEX 602/8020 BTEX, VPH 3810 Modified Gasoline HO15 Mod TPH (IR) 418.1 ALL SAMPILES WILL DE gyah of soldakoasid 011 & Grease 413.1 VELIEN ISTEDIL 89-1610 Date Time Date Time EP TOX Cd, Cr, Ph only
EP TOX
Merals (8)
PCB's
608/8080 Received by: Brund Received by: Chlor. Solv. 601/8010 Flashpoint 15-viral



December 5, 1989

Hahn & Associates 434 NW 6th Ave., Suite 203 Portland, OR 97209

Attn: David Samples

Re: PEL #89-1674

Enclosed is the lab report for your job #1258 (NC-DIRC) which was requested by you on December 4, 1989.

#### Sample Description

One Soil Sample

The sample was received under a chain of custody.

The sample was received in a container consistent with EPA protocol.

#### II. Quality Control

No project specific QC was requested. In-house QC data is available upon request.

#### Analytical Results III.

Test methods may include minor modifications of published methods such as detection limits or parameter lists. Solid and waste samples are reported on an "as received" basis.

Compounds not detected are listed under results as ND.

Sincerely,

President

Kim Chiusolo

Kim Chinsolo

Chemist



PEL REPORT NUMBER:

89-1674

CLIENT:

Hahn & Associates

DATE:

December 5, 1989 One Soil Sample

ITEM:

METHOD:

Hydrocarbon I.D. by GC/FID Results in mg/kg (ppm) Carbon Range: C<sub>6</sub>-C<sub>24</sub>

Sample I.D.	<u>Hydrocarbon</u>	Carbon <u>Range</u>	Detection <u>Limit</u>
6	1500	c <sub>8</sub> -c <sub>14</sub>	400



January 9, 1990

Hahn & Associates 434 NW 6th Ave., Suite 203 Portland, OR 97209

Attn: David Samples

Re: PEL #90-0000

Enclosed is the lab report for your job #1258 which was received in our lab on January 2, 1990.

#### I. Sample Description

One Soil Sample

The sample was received under a chain of custody.

The sample was received in a container consistent with EPA protocol.

#### II. Quality Control

No project specific QC was requested. In-house QC data is available upon request.

#### III. Analytical Results

Test methods may include minor modifications of published methods such as detection limits or parameter lists. Solid and waste samples are reported on an "as received" basis, i.e, no correction is made for moisture content unless otherwise noted.

Compounds not detected are listed under results as ND.

Sincerely,

Howard Holmes Lab Manager Linnet O'Hanlon

Chemist

pacific environmental laboratory<sub>mc.</sub>

PEL REPORT NUMBER: 90-0000

CLIENT: DATE:

Hahn & Associates January 9, 1990

5

JOB REFERENCE:

1258

ITEM:

One Soil Sample

METHOD: TPH per EPA 418.1

Detection Limit

Results in mg/kg (ppm)

Sample I.D.				TPH
Verification Lab Blank	Sample	-	0000	ND ND



Aultoquished by: 15 presure Relinquished by: 15 prosure) P.O. Number 9405 S.W. Nimbus Ave. Beaverton, OR 97005 (503) 844-0860 SIA. No. 12 months Pigici Name Ī Sampler Comp. 12189 12/59/59 Date Time DAVID Jamples VERIFICATION Kin Chiwala Received by: 15 mainel Received for Laboratory by: Received by: (Signature) Station Location Sunple CHAIN OF CUSTODY RECORD Na. of Containers Relinquished by: Isonium Rolinquished by: 1. Separated BTEX 602/8020 BTEX, VPH 3810 Modified Remarks Gasoline 8015 TPH (IR) 418.1 Oil & Grease 413.1 EP TOX Date Time Date Time Cd, Cr, Pb only EP TOX Metals (8) PCB's 608/8080 Received by: Received by: Chlor. Solv. 601/8010 YES Flashpoint 1010 (Suprolue) (Signature) NO CH

RUSH



# Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5698

November 20, 1989

Gary D. Clapshaw Hillsboro Landfill 3205 SE Minter Bridge Rd. Hillboro, OR 97123

Re: SW - Washington County

Hillsboro Landfill SW Permit No. 112

Dear Mr. Clapshaw:

This letter will authorize disposal of petroleum contaminated soils from North Clackamas School District Transportation Yard. The contaminant is diesel fuel discovered while removing an underground storage tank. The amount of contaminated soil is approximately 1,000 cubic yards according to the environmental clean-up contractor, Hahn and Associates, Inc.

Permission is hereby granted to receive this contaminated soil at your landfill. The soil should be incorporated with the final soil cap wherever possible.

If you should have any questions, please feel free to call me at 229-5288.

Sincerely,

Charles H. Gray Regional Supervisor

Charles H. Bray

Northwest Region

cc: Solid Waste Section, DEQ

Hahn and Associates, Inc., Attn: David L. Samples