Underground Storage Tank Closure Report

Prepared for:

U.S. Army Corps of Engineers New York District 1900 Hempstead Turnpike, Suite 316 East Meadow, New York 11554

Site:

Building No. 235 UST No. 235-1 Sievers-Sandberg United States Army Reserve Center Pedricktown, New Jersey

Prepared by:

Earth Tech, Inc. 2229 Tomlynn Street Richmond, Virginia 23230

July 28, 1997

Contract No. DACW31-95-D-0097 Delivery Order No. 0015

ET Job No. 21574

Client: United States Army Corps of Engineers Project Name: Sievers-Sandberg United States Army Reserve Center, Building 235 ET Job No.: 21574

This document has been reviewed for technical content and quality, clarity, and style in accordance with the internal QA/QC procedures of Earth Tech, Inc.

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EXECUTIVE SUMMARY

This report details the clean closure of an underground storage tank (UST) and fulfills the requirements of site investigation reporting activities as detailed in the New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for site remediation (NJAC 7:26E - 3.10).

Earth Tech, Inc. (Earth Tech) was contracted by the U.S. Army Corps of Engineers (USACE), Baltimore District, to remove a 1,000-gallon UST located southwest of Building No. 235 at the Sievers-Sandberg United States Army Reserve Center (USARC) in Pedricktown, New Jersey. The work was conducted under Contract No. DACW31-95-D-0097, Delivery Order No. 0015.

Prior to tank closure, Earth Tech removed 1,000 gallons of No. 2 heating fuel from the tank. Closure of the UST was conducted on May 13, 1997. The UST was excavated and removed by Earth Tech, a NJDEP-approved UST closure contractor (Registration No. US00537). Upon removal, the condition of the UST was examined by a NJDEP-licensed UST Subsurface Evaluator (License No. US00516). The UST was in good condition with no visible holes. No soil staining was observed beneath the former UST and groundwater was not encountered in the excavation. Earth Tech cut and cleaned the UST, which was then transported to Camden Iron for recycling as scrap. The tank contents were transported by Casie Ecology Oil Salvage, Inc., Vineland, New Jersey, for recycling. The waste generated during tank cleaning activities was drummed and stored on site pending analytical results for disposal.

No soil staining was observed beneath the former base of the UST. Photoionization detector (PID) field screening indicated no volatile organic vapor levels above background for the excavation or the excavated soils. The excavated soils were used as backfill material.

Earth Tech collected four confirmatory soil samples from the excavation base and sidewalls. One of the samples was split and submitted as a duplicate sample. Each sample was submitted for laboratory analysis for the presence and concentration of total petroleum hydrocarbons (TPH) by Environmental Protection Agency (EPA) Method 418.1, using a NJDEP-certified laboratory. Three of the samples and the duplicate sample indicated TPH concentrations below the method detection limit of 40.0 milligrams per kilogram (mg/Kg). One of the samples collected from the excavation sidewall had a TPH concentration of 55.6 mg/Kg, which is below the most stringent NJDEP Soil Cleanup Criteria of 10,000 mg/Kg for total organic compounds in soils. All sampling and analysis was performed in accordance with NJDEP Post-Remedial Action Requirements (NJAC 7:26E - 6.4).

Based on field observations and analytical data, Earth Tech recommends no further action relative to the former UST at Building 235.

1.0 INTRODUCTION

Earth Tech, Inc. (Earth Tech), a NJDEP-approved UST Closure Contractor (Certification No. US00537), was contracted by the United States Army Corps of Engineers (USACE), Baltimore District, to remove underground storage tanks (USTs) at the Sievers-Sandberg United States Army Reserve Center (USARC), Pedricktown, New Jersey, under Contract No. DACW31-95-D-0097, Delivery Order No. 0015. This report details the clean closure of an UST located at Building No. 235 of the Sievers-Sandberg USARC. A Site Location Map is included as Figure 1 in Appendix A. This report fulfills the requirements of site investigation reporting as detailed in the New Jersey Technical Requirements for Site Remediation (NJAC 7:26E-3.10), and provides an overview of the site investigation activities, analytical results, and recommendations.

The Sievers-Sandberg USARC property was acquired by the USACE in 1917, and the Delaware Ordinance Depot was established at Pedricktown in 1918. The depot became the backup storage facility for the Picatinny and Frankfort Arsenals and the Aberdeen Proving Ground. In 1960, the Pedricktown facility became the headquarters for the 42nd and 43rd Artillery, which commanded the Nike Missile Sites in the Philadelphia area. In 1965, the Salem County Technical Institute gained control of the site. In the late 1960s, the 79th Army Reserve Command and the 21st Corps were replaced by the 78th Division of the Army reserves, which is still stationed at the facility. The eastern portion of the property is currently leased by the Salem Community College.

Building No. 235 has been demolished with only the concrete pad remaining at the site. A 1,000-gallon steel UST at the site was formerly used to store diesel fuel (No. 2), for heating the building. The UST was a regulated tank (per NJAC 58:10); therefore, the UST was registered and an UST Closure Plan submitted to the New Jersey Department of Environmental Protection (NJDEP) prior to initiating closure activities. The NJDEP UST Closure Approval is included in Appendix B.

2.0 SITE ASSESSMENT

On May 13, 1997, Earth Tech removed one 1,000-gallon steel UST at the site. Figure 2 in Appendix A shows the general site layout and the location of the UST. Photographic documentation of site activities is included in Appendix C. The UST was oriented parallel to the north side of Building No. 235. No utility lines were located in the vicinity of the UST. Prior to removal, approximately 1,000 gallons of diesel fuel were removed by Casie Ecology Oil Salvage, Inc., Vineland, New Jersey for recycling. A copy of the disposal manifest in included in Appendix D.

Earth Tech personnel screened the UST with a lower explosive limit (LEL) meter. Readings were taken before excavating and cutting the tank for cleaning. The LEL level registered 2 percent prior to excavating and cleaning the UST. Oxygen levels both before excavation and before cleaning were 19.2 percent. The tank was not purged prior to initiating tank closure activities based on the low vapor readings.

Upon tank removal, the UST condition was examined by Mr. Julian Canuso, Jr., a NJDEP-licensed UST Subsurface Evaluator (License No. US00516). The tank was observed in good condition with no visible holes. Product staining was observed on the tank's exterior, but no soil staining was observed in the excavation or along the excavation sidewalls. The UST measured approximately 6 feet long by 5 feet, 4 inches in diameter. Earth Tech personnel cut the UST at both ends to provide ventilation and access for

tank cleaning. The tank was then cleaned using dry methods. The absorbent waste material generated during tank cleaning was drummed on site for disposal pending analytical results. The tank disposal certificate is included in Appendix E.

Earth Tech personnel examined the UST excavation after removing the tank. No piping existed and it is believed to have been removed when the building was demolished. No soil staining was observed beneath the former UST. Groundwater was not encountered in the excavation. No vapor readings were detected with the PID. Based on the PID field screening, no soils were deemed contaminated (i.e., no PID readings greater than 100 parts per million, or ppm).

Confirmatory soil samples were collected in accordance with NJAC 7:26E-6.4. Earth Tech personnel collected a total of four soil samples, two from the bottom of the excavation (PED-B235-1-SS-01 and PED-B235-1-SS-02) and two from the excavation sidewalls (PED-B235-1-SS-03 and PED-B235-1-SS-04). Earth Tech submitted a split sample of PED-B234-1-SS-04 as a duplicate (identified as PED-B235-1-SS-04-D) for quality control purposes. Field screening of each soil sample using the PID indicated no volatile organic vapors. Figure 2 in Appendix A depicts the soil sample locations. Each sample was submitted for laboratory analysis for the presence and concentration of total petroleum hydrocarbons (TPH) by Environmental Protection Agency (EPA) Method 418.1. The samples were analyzed by Toxikon Corporation, a NJDEP-certified laboratory.

Three of the samples and the duplicate sample indicated TPH concentrations below the method detection limit of 40.0 milligrams per kilogram (mg/Kg). One of the samples collected from the excavation sidewall had a TPH concentration of 55.6 mg/Kg. These concentrations are below the most stringent NJDEP Soil Cleanup Criteria of 10,000 mg/Kg for total organic compounds in soil. Soil analytical results are summarized in Table 1. Certificates of analysis and chain-of-custody forms are included as Appendix F. An executed NJDEP Site Inspection Report Checklist is included in Appendix G.

Table 1 Soil Analytical Results

Sample Designation	Date	Depth	TPH 418.1	PID					
and Location	Sampled	(feet)	(mg/Kg)	(ppm)					
PED-B235-1-SS-01	5/13/97	6	BDL	0.0					
bottom of excavation, eastern end									
PED-B235-1-SS-02	5/13/97	6	BDL	0.0					
bottom of excavation, western end									
PED-B235-1-SS-03	5/13/97		55.6	0.0					
north sidewall									
PED-B235-1-SS-04	5/13/97		BDL	0.0					
south sidewall									
PED-B235-1-SS-04-D	5/13/97		BDL	0.0					
duplicate									
Notes:		_							
BDL below detection limit									
(detection limit = 40.0 mg/Kg)									
mg/Kg milligrams per kilogram									
PID photoionization detector									
ppm parts per million									
NA not applicable									
ND not detected									

The stockpiled soil generated during UST removal, along with imported clean backfill was used to backfill the excavation. No soils associated with the UST closure were removed from the site.

3.0 CONCLUSIONS

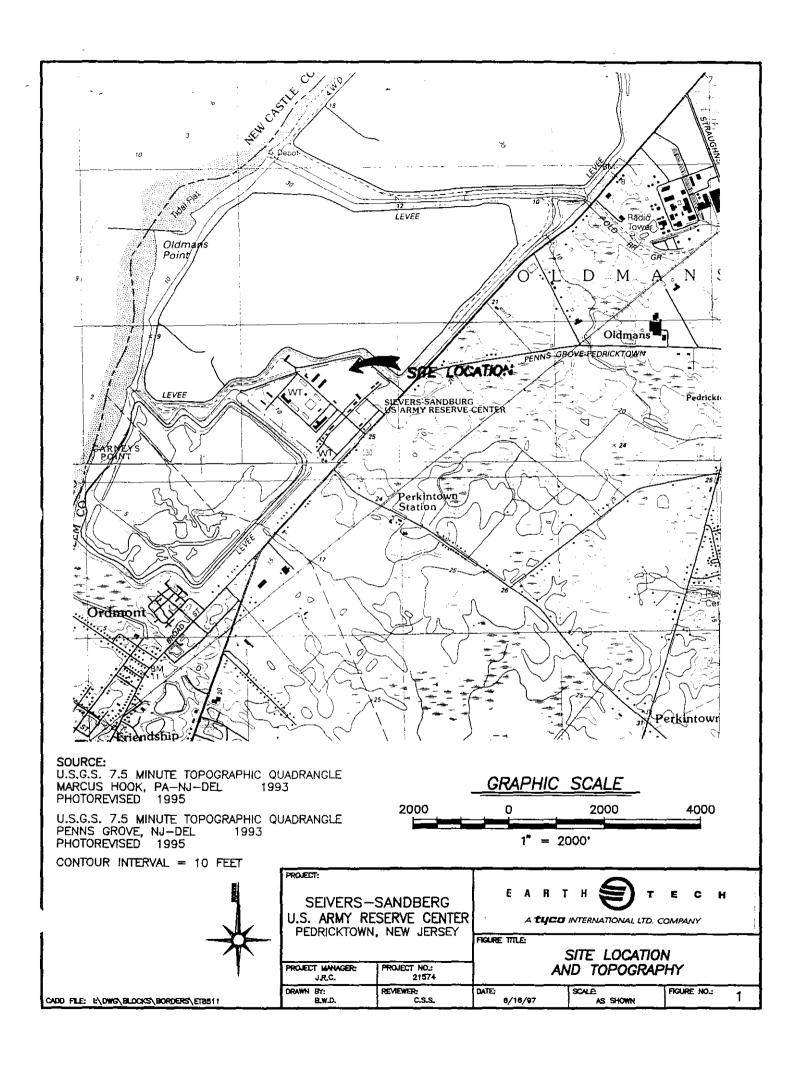
The following is a summary of Earth Tech's site investigation, findings, and tank closure activities for UST No. 235-1 at Building No. 235 on the Sievers-Sandberg USARC:

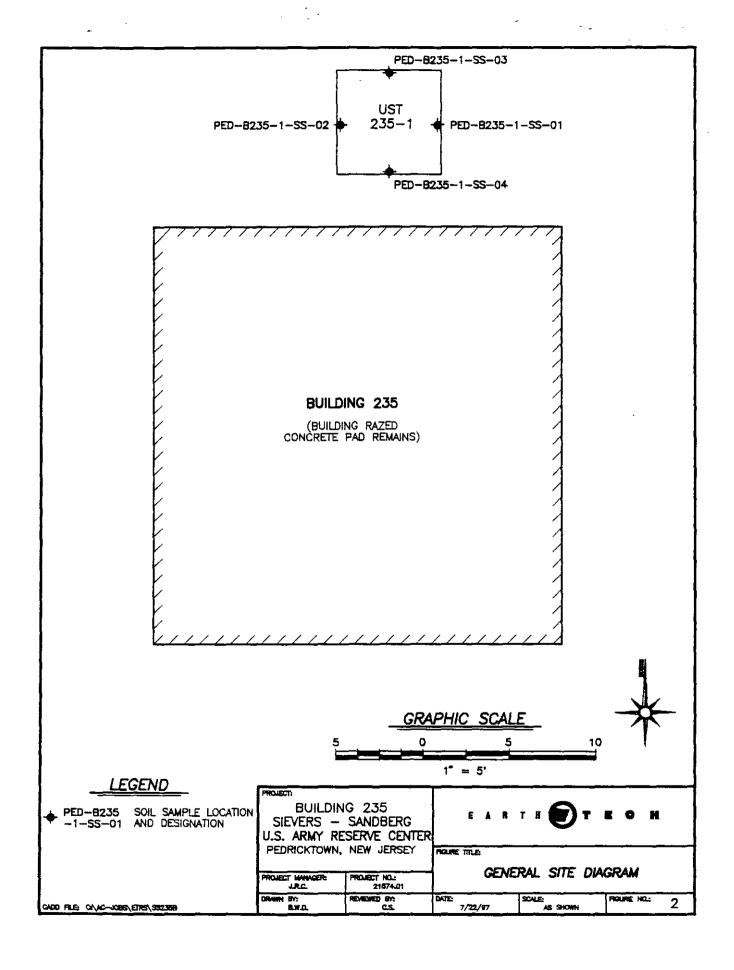
- Earth Tech removed one 1,000-gallon, steel UST used to store diesel fuel for Building No. 235 at the site on May 13, 1997.
- Approximately 1,000 gallons of product was removed from the tank and transported by Casie Oil Salvage, Inc., Vineland, New Jersey for recycling.
- No visible holes were observed in the tank.
- The cleaned UST was transported to Camden Iron and recycled as scrap.
- Product staining was observed on the tank's exterior, but no stained soils were observed in the tank
 excavation.
- PID field screening was performed for excavated soils and soil remaining in the excavation. No vapor readings above background were detected.
- Four confirmatory soil samples were collected from the base and walls of the UST excavation. The analytical result of one soil sample collected from the excavation sidewall indicated a TPH concentration of 55.6 mg/Kg, which is below the NJDEP criteria of 10,000 mg/Kg for total organic compounds in soils. The remaining three confirmatory samples, and one duplicate sample, had TPH concentrations below the detection limit of 40.0 mg/Kg.

Based on the site investigation results, Earth Tech recommends no further action relative to the former UST at Building No. 235.

Appendix A

Figures





Appendix B NJDEP UST Closure Approval

UNDERGROUND STORAGE TANK SYSTEM CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION BUREAU OF FIELD OPERATIONS CN-028, TRENTON, NJ 08625-0028

TMS #

UST #

C97-0177

0071994

SIEVERS-SANDBERG U.S. ARMY RESERVE CENTER BLDG 273, ROUTE 130 PEDRICKTOWN

SALEM

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH NJ.A.C. 7:14b-1 et. seq:

REMOVAL OF:

PLEASE SEE ATTACHED TABLE

SITE ASSESSMENT: Conduct a site investigation for the UST(s) and appurtenant piping specified in this approval in accordance with the Technical Requirements for Site Remediation, NJ.A.C. 7:26E.

The management of any excavated soils must follow the requirements listed in the Attachment enclosed within.

Note: The UNDERGROUND STORAGE TANK SERVICES CERTIFICATION ACT, N.J.S.A. 58:10A-24, requires all services performed on an UST system for the purpose of complying with P.L.1986, c.102 to be performed by or under the immediate on-site supervision of a person certified by the Department for that service. The certified person providing that service must be employed by a buisness that is also certified by the Department for that service.

CONTACT PERSON:

TELEPHONE:

JANIS CROWDER

804-358-5400

EFFECTIVE DATE:

04/03/97

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTIONS AT ALL TIMES.

Joshua Gradwohl, SUPERVISOR BUREAU OF FIELD OPERATIONS

(ton)

		Assumed			<u></u>	<u> </u>	T	i
Tank	Tank Size	Tank Length	İ		Petroleum-Contaminated		:	į
dentification		(feet)	Contents	Excavation Sample IDs	Stockpile Sample IDs	Analysis	Method	Turnaround Tir
			unleaded	PED-413NW-SS-01 through			7	, dividired the
413NW	14 000	25	gasoline	PED-413NW-SS-07	PED-413NW-SP-01	VO+10*	8260	10 days
	:			PED-413SW-SS-01 through	1			
413SW	10,000	17	diesei	PED-413NW-SS-06	PED-413SW-SP-01	TPHC **	418.1	10 days
				PED-413W-SS-01 through		-		
413W	1,000	10	waste oil	PED-413W-SS-04	PED-413W-SP-01	TPHC***	418.1	10 days
443515			unleaded	PED-413NE-SS-01 through				
413NE	5.000	24	gasoline	PED-413NE-SS-07	PED-413NE-SP-01	VO+10*	8260	10 days
4405				PED-413E-SS-01 through	1	i		
413E	5,000	24		PED-413E-SS-07	PED-413E-SP-01	VO+10*	8260	10 days
413SE	5,000	24	unleaded	PED-413SE-SS-01 through				
41335	3,000	24	gasoline unleaded	PED-413SE-SS-07 PED-404 1-SS-01 through	PED-413SE-SP-01	VO+10*	8260	10 days
404-	550	6	gasoline	PED-404.1-SS-03	PED-404.1-SP-01	10.40	2000	10.
	320		gasomie	PED-282.1-SS-01 through	FED-404.1-3P-01	VO+10*	8260	10 days
282-1	1,000	10	heating oil	PED-282.1-SS-04	: PED-282,1-SP-01	TPHC **	i 418.1	10 days
			- Adding on	PED-283 1-SS-01 through	1 25 202 1 31 31	IIIIO	410.1	10 days
283-1	1.500	9	heating oil	PED-283 1-SS-04	.PED-283.1-SP-01	i iTPHC ==	4484	10 days
			outing off	PED-272.1-SS-01 through	CO-200. (-O/O)	THE TOTAL PROPERTY OF THE PROP	418.1	10 days
272-1	1.000	10	heating oil	PED-272.1-SS-04	PED-272.1-SP-01	TPHC **	418.1	40 44.4
			nearing on	PED-272.2-SS-01 through	FED-272. : \SF-01	IFAC	410.1	10 days
272-2	1 000	10	heating oil	PED-272.2-SS-04	PED-272 2-SP-01	TPHC -	440.4	10
	1.500		neating on	PED-272.3-SS-01 through	FED-272 2-3F-01	IPAC	418.1	10 days
272-3	1.000	10	heating oil	PED-272.3-SS-04	PED-272,3-SP-01	TPHC **	418.1	40
	7.000		ricading on	PED-190 1-SS-01 through	FED-272.3-9F-01	ITENC	1 418.1	10 days
190-1	1 000	10	diesel	PED-190 1-88-04	: DED 100 1 SD 01	TOUGH	440.4	10.
130-1	7 000	10	ulesei	PED-220W-SS-01 through	PED-190 1-SP-01	TPHC	418.1	10 days
220W	1.000	10	booting all		DED 20014 00 04	-	1	1
22011	1,000		neating oil	PED-220W-SS-04 PED-220SW-SS-01 through	PED-220W-SP-01	TPHC **	418 1	10 days
220SW	1 000	10	heating oil		PED-220SW-SP-01	трнс ••	418.1	10 days
				PED-233.1-SS-01 through			1 4,5.1	10 02/3
233-1	1,000	10	diesel	PED-233.1-SS-04	PED-233.1-SP-01	TPHC **	418.1	10 days
		Ť		PED-235 1-SS-01 through		,,,,,	410.1	10 02/3
235-1	1 000	10	heating oil	PED-235.1-SS-04	PED-235 1-SP-01	TPHC **	418.1	10 days
				PED-235.2-SS-01 through				
235-2	1.000	10	heating oil	PED-235.2-SS-04	PED-235.2-SP-01	TPHC **	418.1	10 days
	-			PED-225 1-SS-01 through				1
225-1	1,000	10 '			PED-225.1-SP-01	TPHC **	418.1	10 days
	_ i	ĺ		PED-229.1-SS-01 through				İ
229-1	275	5		PED-229.1-SS-03	PED-229 1-SP-01	VO+10*	8260	10 days
:	!	į		PED-270 1-SS-01 through		ĺ		
270-1	275	5 :		PED-270.1-SS-03	PED-270 1-SP-01	TPHC **	418.1	10 days
426-1	1,000	10		PED-426.1-SS-01 through	050 400 4 50 64			1
420-1	1,000	10	neating oil	PED-426.1-SS-04 PED-268.1-SS-01 through	PED-426 1-SP-01	TPHC **	418.1	10 days
468-1	275	5	heating oil	PED-268.1-SS-03	PED-268 1-SP-01	TPHC **	418.1	10 days
			moduling on	. 12 130:1 00 00	7 20-200 1-01-01	i i i i i i i i i i i i i i i i i i i	410.1	TO Gays
nalyze sam	ple for lead i	f UST former	v contained	leaded gasoline				+
Analyze sar	nple for VO+	10 if TPHC >	1000 ppm					
Analyze sa	mple for VO	+10 BNs+15	PCBs. and	PP-metals if TPHC is detected	in the sample.			
	i				· · · · · · · · · · · · · · · · · · ·		-	
					·		-	
0+10 - volati	le organic co	mpounds plu	s 10 peaks	ncluding xylenes, target comp	ound list or priority poliutant V	O with library search	h: EPA Method 8	260
HC - total p	etroleum hyd	trocarbons; E	PA Method	418.1				
s+15 - base	ed neutral co	mpounds plu	s 15 peaks	by target compound list or pho	nty pollutant list with library sea	arch; EPA Method	8270	
B - potychic	onnated biph	enyis: EPA M	ethod 8080					
-metals - pr	iority pollutai	nts !				_		1
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				from the bottom of the sidewa	alls of the excavation, and one	soil sample		·
	every a re	et along the o	enter line di	the excavation		!		
	Italicized to-	k sizes are an	MCOVIE - 1-					!
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Appendix C

Photographic Documentation



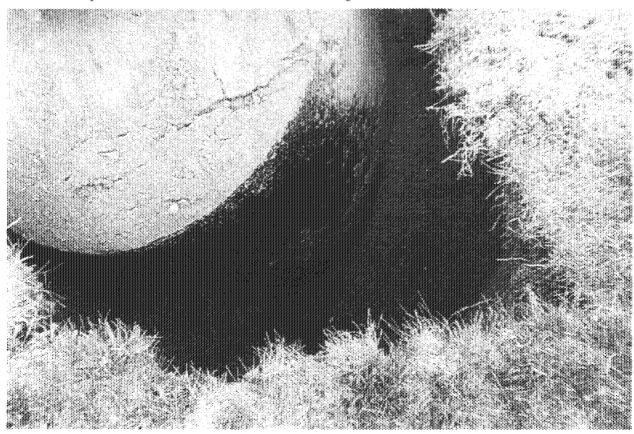
Photograph No.: 1 Contract No.: DACW31-95-D-0097 Project Name: Pedricktown U.S. Army Reserve Center

Photographer: D. Mothershead

Description: Excavation of UST No. 235-1 at Building No. 235.

Earth Tech Job No.: 21574

D,O, 0015 Date: 5/13/97 Direction: North.



Photograph No.: 2 Contract No.: DACW31-95-D-0097 Project Name: Pedricktown U.S. Army Reserve Center

Photographer: D. Mothershead

Description: View of 1,000-gailon UST and excavation at Building No. 235.

Earth Tech Job No.: 21574

D.O. 0015 Date: 5/13/97

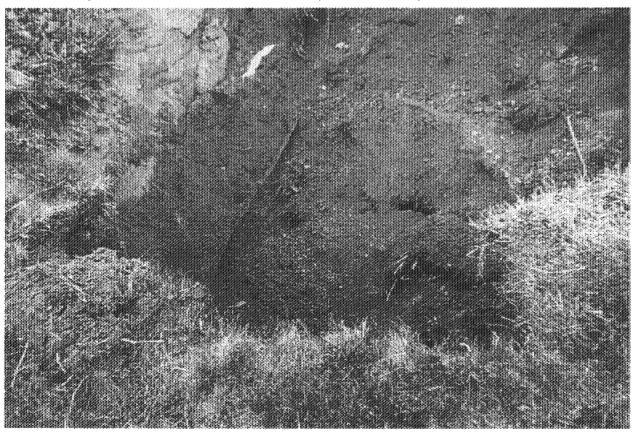
Direction: West.



Photograph No.: 3 Contract No.: DACW31-95-D-0097 Earth Tech Job No.: 21574
Project Name: Pedricktown U.S. Army Reserve Center D.O. 0015

Photographer: D. Mothershead Date: 5/13/97

Description: Removal of UST No. 235-1 (1,000-gallons) at Building No. 235. Direction: Northwest.



Photograph No.: 4 Contract No.: DACW31-95-D-0097
Project Name: Pedricktown U.S. Army Reserve Center

Photographer: D. Mothershead

Description: Excavation after removal of UST No. 235-1 at Building No. 235.

Earth Tech Job No.: 21574

D.O. 0015 Date: 5/13/97

Direction: North.



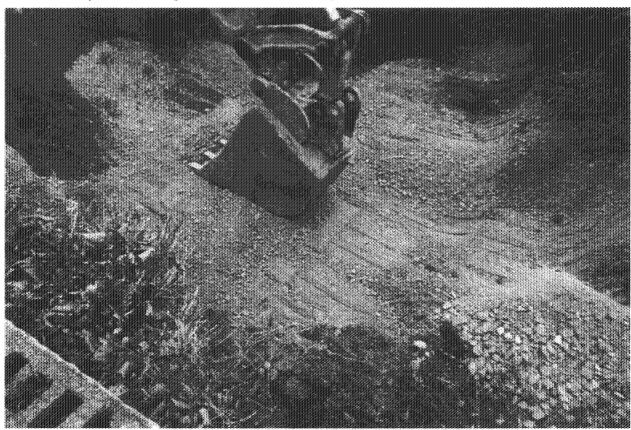
Photograph No.: 5 Contract No.: DACW31-95-D-0097 Project Name: Pedricktown U.S. Army Reserve Center

Photographer: D. Mothershead

Description: Screening of excavated soil at Building No. 235.

Earth Tech Job No.: 21574

D.O. 0015 Date: 5/13/97 Direction: Northwest.



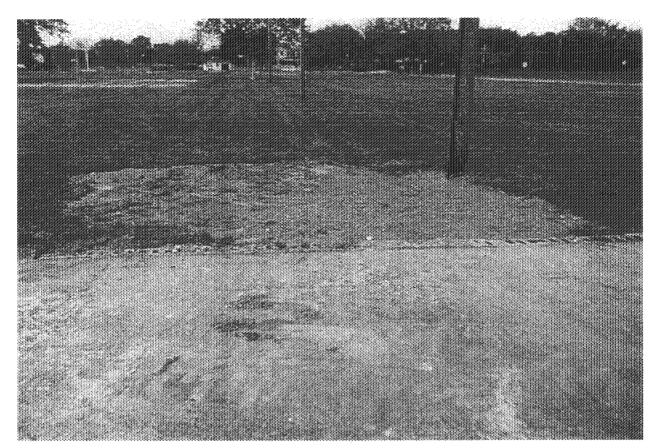
Photograph No.: 6 Contract No.: DACW31-95-D-0097 Project Name: Pedricktown U.S. Army Reserve Center

Photographer: D. Mothershead

Description: Backfilling of tank excavation at Building No. 235.

Earth Tech Job No.: 21574

D.O. 0015 Date: 5/13/97 Direction: North.



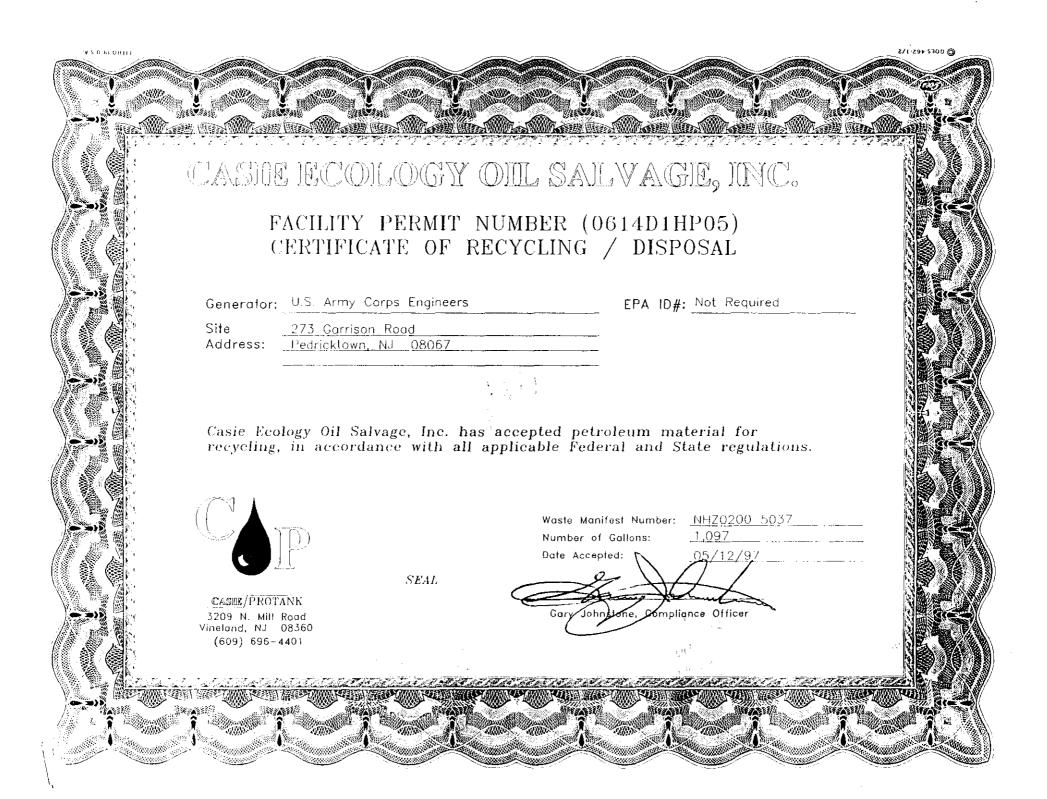
Photograph No.: 7 Contract No.: DACW31-95-Project Name: Pedricktown U.S. Army Reserve Center Photographer: D. Mothershead Contract No.: DACW31-95-D-0097

Description: Site after backfilling completed at Building No. 235.

Earth Tech Job No.: 21574

D.O. 0015 Date: 5/13/97 Direction: North. Appendix D

Liquid Disposal Manifest



1-GENERATOR COPY

CASIE | PROTANK

ENVIRONMENTAL SERVICES

,4	ase type or print in block letters. (Form designed for use on elite (12-pitch) type	pewriter.)			
Ti	I CHE COAL	D No.	2. Page of	i	· ·
	3. Generator's Name and Mailing Address U.S. Army Corps o.	f Engineers .	A. NO	n-hazardous Ma 20200 5 (anifest Document Number
	273 Garrison Road		te Generator's ID		
$\parallel \parallel$	Pedricktown NJ 08		SAME		
	5. Transporter 1 Company Name 6.				
		D h la is ig ig is is US EPA ID Number		te Trans. IQ 7	16131214
	7. Transporter 2 Company Name 8.		i	e Trans. ID	(609) 696-4401
	Designated Facility Name and Site Address 10.	US EPA ID Number			
	Casie Ecology Oil Salvage, Inc. T/A		<u> </u>	sporter's Phone	`
	3209 N. MIll Rd / Casie Protank			te Facility's Phone (HP05 9) 696-4401
		n b 4 5 9 9 5 6	12. Containers	13.	14.
	11. US DOT Description (Including Proper Shipping Name, Hazard Class.	and ID Number)	No. Type	Total Guantity	Unit Wt/Vol Waste No.
G	a. Flammable liquids, n.o.s. (Gasoline	<u>)</u>		š	,,,,,,,
E N	3, UN1993, PGIII		10 11 17 17 10	ST.	T D 7 2
E R	D Combustible Liquid Nos(Was	te Fuel oil)	<u> </u>	<u>. 10 10 10 11 .</u>	3. 3. 4
Å				XI 097	
O R			MULLIOK	20 00 -1	G 4 4 7 6
	c.				36
	d.				
' 		,	. *		
	J. Additional Descriptions for Materials Listed Above . On 3				Wastes Listed Above
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	15. Special Handling Instructions and Additional Information	Reserved to the control of the contr		and the second s	
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	a 24 Hr. Emergency Response \$609 696-4401	R Ambrosia	NAERG#_128	i i nastroni asilasi I ilay kalibasi I ilay kalibasi	4.15 d
	16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of proper shipping name and are classified, packed, marked, and labeled.	f this consignment are fully and are in all respects in pr	and accurately di	ir transport by his	ahway .
	according to applicable international and national government regulation	ONS. TO PROPER TO SERVICE TO A	ச இண்டுதொற்றும் உருந்து	وائيا د دار الروي د يراجه الارتيام (1.1 س. از الآلام	haughte. Stomathaughte
	I hereby certify that the above-named material is not hazardous waste as on the approximation of the above-named material is not hazardous waste as of the approximation of the above-named material is not hazardous waste as of the approximation of the above-named material is not hazardous waste as of the approximation of the above-named material is not hazardous waste as of the approximation of the approxi	ात राज्य अध्यास कार्य है हिंदर है विशेष के पूर्व के कार्य कार्य है है दिया है	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ladina tida ce za	anatero =
	- Profit Transition (Action Control of C			• •	1,12,2,11
	Printed/Typed Name	Signature		:ಟಳ⊂ ಆ ∴ಚರಾ	Month Day Year
7	17. Transporter 1 Acknowledgement of Receipt of Materials	A Survey of the survey of the	\mathcal{T}		
X	Printed/Typed Mame	Signature.	A San	1.00	Month Day Year
8 P O	18. Transporter 2 Acknowledgement of Receipt of Materials	Jun D			WS1/1231/
Ą	Printed/Typed Name	Signature			. Month Day Year
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	19. Discrepancy Indication Space	<i></i>		4	•
Ā	The fight of the second of the		en en en en en en en en en en en en en e	es sale en en en Les estats en en en	Miki Helis Anno Helin Miki Helin
1					
Ţ	20. Facility Owner or Operator: Certification of receipt of non-hazardous materi Printed/Typed Name	als covered by this manifest of Signature	except as noted in	Item 19.	Month Day Year
	regre Motos	Tech	w-1/2	Wa	195112197
		SIGNATURE AND	NEORMATION	MUSTRELE	GIBLE ON ALL COPIES

Appendix E

Tank Disposal Certificate



Environmental Technology Incorporated Certification of Tank Disposal

(In accordance with American Petroleum Iruttante recommended practice)

Client IIC A	Job Na.	Date
US ARMY CORPS OF	ENGINEERS	15 MAY 97
Size from which the tank was removed	6	
SIEVERS-SAUBERG ARMY		
Size to which the tank is to be transported for final	disposal	
	Tank Description	
Size Type (size) fil	berglass, etc.)	Condition
1000 SAL	STEEL	GOOD
Prior Contents		
HEATING OIL		
Tank Markings		
NONE		
	Cleaning Certificatio	π
This is to post fit that the change	depositud topic trackers -1-	aned in accordance with API methods and
procedures and has been render	ed suitable for disposal as:	scrap. All product residues were removed
and the interior of the tank was		
001/	EARTH TECH	15MAY 97
Styled	Согоралу	Dile
·	Environmental Technolo	gy Incorporated
	Transportation	
This is to certify that the above	described tank has been re	ceived and will be transported to the
disposal site as specified above.	000	
() t	(200 41h	5.15.97
Stated Idriver	Shipper or Houser	Date
		.
	Received for Disposal	l .
This is to continue that the character	described souls has been so	orient Co-dimensi and will be discount
of in accordance with applicable	a regulatoru regulrements.	reciped for disposal and will be disposed
1	_ ^ ` ` -	^ \ \
	- Landely Land + Y	Vau
Signed	Disposal Fuellity	Date
]]	Comments	
	•	
# PLEASE SIEN AND I	FAX RACK TO (BOY)	1358-6868
THE LEGISTE DIES TO THE		
	_	THANKS
		5 1988 Environmental Technology Incorporated

Appendix F

Laboratory Certificates and Chain-of-Custody

Page 1		TOXIKON	CORP.	KEPORT	Work Order # 97-05-218
Received:	: 05/14/97		05/20/9	77 10:39:46	
PEPORT	EARTH TECH REMEDIATION	1	PREPARED	TOXIKON CORPORATION	11
	2229 JOMLYNN ST.			15 WIGGINS AVE	
10	RICHMOND, VA. 23230		۵.	BEDFORD, MA 01730	dink Howke
	804-358-5400 FAX: 358-	6868			CERTIFIED BY
ATTEN	JANIS CROUDER		ATTEN	PAUL LEZBERG	7
********	THE CHARLE			(617)275-3330	CONTACT CHUCKC
CLIENT	EARTHTECH VA SAM	1PLES 14			
	EARTH TECH REMEDIATION			# H-HAO64: TRACE HETAL	S, SULFATE, CYANIDE, RES. FREE
	2229 TOMLYNN ST.			, Ca, TOTAL ALK., TDS	, pH, THMs, VOC, PEST., NUTRIENTS.
	RICHMOND, VA. 23230		DEMAND.	O&G, PHENOLICS, PCBs	. CT DHS #PH-0563, NY #10778
			FL HRS E	87143, NJ DEP 59538, I	NC DNR286, SC 88002, NH 204091-C.
WORK ID	PEDRICKTOWN, NJ			\sim	1-10
TAKEN	5/13/97		VERIFIED	BY:	a Thally
TRANS			CERT # M	-MA064	
TYPE	SOIL				
	21574		<u>.</u>		
INVOICE	under separate cover		,		
SAMPL	E IDENTIFICATION			TEST CODES and NAME	S used on this workorder
01 PED-8	3235-1-\$\$ - 01	TPH	IR TPH BY	IR	
02 PED-B	1235-1-\$\$-02				
03 PED-E	235-1-99-03				
04 PED-E	1235-1-ss-04				
05 PED-E	3235-1-\$\$-04-D				
06 PED-E	3413sv—ss-01				
07 PED-E	3413su-ss-02				
08 PED-E	3413SV-SS-03				
09 PED-E	3413su-ss-04				
10 PED-E	34138W-SS-05				
11 PED-E	3413su-ss-06				
12 PED-E	3413SU-SS-07				
13 PED-E	3413sy-ss-08				
14 PE0-E	84138W-88-0 9				

ege 2 eceived: 05/14/97	TOXIKON CORP. Results by	REPORT	Vonk	Order # 97-05-218
SAMPLE ID PED-B235-1-\$\$-01	SAMPLE # 01	FRACTIONS: A		
	Date & Time	Collected <u>05/13/</u> 9	77 10:30:00	Category SOIL
TPH_IRNO				
mg/Kg DL≃40.0				
ANNUE to not poor 4 on co				
SAMPLE ID PED-8235-1-SS-02			7 10:35-00	Category SOIL
	paco u i inic	000000000 <u>03/13/1</u>	77 10.33.00	caregory <u>sort</u>
TPH_IRND				
mg/Kg DL≃40.0				
ANNO 5 10 054 0775 A 04 07				
SAMPLE ID <u>PED-8235-1-SS-03</u>				.
	nate & 11me	corrected W/13/	7 10:40:00	Category <u>SOIL</u>
TPH_IR55.6				
mg/Kg DL=40.0				
SAMPLE ID <u>PED-B235-1-58-04</u>				
	Date & Time	Collected 05/13/	77 10:50:00	Category SOIL
TPH_IRND				
mg/Kg DL=40.0				
			 	
SAMPLE ID PED-8235-1-\$\$-04-	D SAMPLE # 05	FRACTIONS: A		
				Category SOIL
TOU IN				
TPH_IRND mg/Kg DL=40.0				
#g/kg vc-+0.0				
SAMPLE ID PED-841354-SS-01	SAMPLE # <u>06</u>			
	Date & IIme	Collected 05/13/	97 15:45:00	Category SOIL
TPH_IRND				
mg/Kg DL=40.0				
SAMPLE ID PED-84135W-SS-02		FRACTIONS: A		
	Date & Time	Collected <u>05/13/</u>	97 15:49:00	Category <u>SOIL</u>
TPH_IRNO				
mg/Kg DL=40.0				
SAMPLE 10 <u>PED-84135W-SS-03</u>		FRACTIONS: A Collected 05/13/	97 15-55-00	fateoney SOT!
	PG 10 G 1150	-31144162 <u>m/13/</u>	<u></u>	category autt
TPH_IR56.7				
mg/Kg DL=40.0				

age 3	TOXIKON	CORP.	REPORT	Work	Order # 97-05-218
ecaived: 05/14/97		Results by	y Samaple		
SAMPLE ID PED-B413SU-SS-04	· · · · · · · · · · · · · · · · · · ·	SAMPLE # 09	FRACTIONS:	<u> </u>	
		Date & Time	Collected <u>OS</u>	/13/97 15:57:00	Category <u>50IL</u>
TPH IR _ND					
mg/Kg DL=40.0					
SAMPLE ID PED-8413SW-SS-O	. <u>.</u>	SAMPLE # 10	FRACTIONS:		
<u> </u>		Date & Time	Callected <u>05</u>	<u>/13/97 15:52:00</u>	Category <u>SOIL</u>
TPH_IR 61,1 mg/Kg DL=40.0					
SAMPLE ID PED-8413\$W SS O	6	SAMPLE # 11	FRACTIONS:	A	
SMIREC TO PER SAIDSW 35 S	<u> </u>		-	/13/97 15:47:00	Category SOIL
TPH_IR62.6 mg/Kg DL=40.0					
SAMPLE ID PED-8413SU-SS-C	7	SAMPLE # 12	EDACTIONS:	<u> </u>	
SAMPLE IN PER-04/334-33-C	<u>. </u>		-	<u></u>	Category SOIL
TPH_IRND mg/Kg DL=40.0					
SAMPLE ID PED-8413SU-SS-C	VR	SAMPLE # 1	3 FRACTIONS:		
10 100 D41338 33 C	~		-	5/13/97 15:40:00	Category SOIL
TPH_IR					
SAMPLE ID PED-B413SW-SS-	79	SAMPLE # 1	4 FRACTIONS	A .	
1 1111111111111111111111111111111111111	<u></u>		-	<u>5/13/97 15:30:00</u>	Category SOIL
TPH_IR					

FROM : TOWNSON

PHONE NO. : 6172711135 May. 20 1997 10:32AM PS

Page 4

TOXIKON CORP. REPORT

Work Order # 97-05-218

Received: 05/14/97

Test Methodology

TEST CODE THE IR NAME THE BY IR

EPA METHOD: 418.1 for water sample.

Reference: Methods for Chemical Analysis of Water and Wastes.

EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL, Cincinnati, OH.

EPA METHOD: 9071/9073

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical Methods.

EPA SU-846 (Third Edition) 1986. Office of Solid Waste, USEPA.

LABORATORY CHRONICLE

All samples were chilled to 4°C at the time of receipt at Toxikon.

Toxikon Work Order #: 9705218

Date of Sample Collection: 05/13/97

Sample ID: As per Chain of Custody

ANALYSIS:

TPH by IR

Extraction 05/19/97

Analysis 05/20/97

Holding times were met for all sample analyses.

CONFORMANCE/NON-CONFORMANCE SUMMARY

Work Order #: 9705218

I certify that the reported laboratory results were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel evaluate the information submitted. I certify that the information submitted is true, accurate, and complete to the best of my knowledge and belief. The analyses were conducted without deviation from accepted practices, and were reviewed by the Quality Assurance Department.

Douglas V. Sheeley

Laboratory Manager

Date

CASE NARRATIVE

Work Order: 9705218

All samples were analyzed within the method holding times.

No target compounds were detected in the method blanks.

TOXIKON

QA/QC REPORT

WORK ORDER: 9705218 MATRIX: SOIL

					· · · · · · · · · · · · · · · · · · ·
PARAMETER	DUPLICATE PERCENT RPD	CONTROL LIMITS	CONTROL SPIKE PERCENT RECOVERY	MATRIX SPIKE PERCENT RECOVERY	CONTROL LIMITS
TPH by IR	0	< 25	101	NA NA	80 - 120
					1



CHAIN OF CUSTODY RECORD

WORK ORDER #: 97 - 05 - 218

DUE DATE

: 5 - 21 - 97

COMPANY: EARTH TECH								SAMPLE TYPE CONTAINER TYPE					ANALYSES										
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			<u>(U()</u> [$\Lambda\Lambda m$.	(2001)	77 <u>0 - 4</u>	- DF-2	4. OIL		_	/				/ /	/ ,	/ ,	/ /	/ /	/ /	′ /		
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TOXIKON	SAMPLE	SAL	APLE	CONT	AINER	SAMI	PLING	PRESE	RVATIV	E /	~/ ^		/ /	/ /	′ /						TRAI	RUCTIONS	
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Appendix G

NJDEP Tank Facility Questionnaire and Site Investigation Report Checklist

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION BUREAU OF STATE CASE MANAGEMENT Registration and Billing Unit

FOR STATE USE ONLY

Check In

CN 028, Trenton, N.J. 08625-0028 1-609-633-0719

HINDEDODOLIND STODAGE TANK

	1-609-633-0719	STATUS	<u></u> <u>C</u> C	OMCODE	
	Active Inact) L		7	
	FACILITY QUESTIONNAIRE				<u></u>
FACILITY UST #	0071994				
	nis Registration Questionnaire will satisfy the registration requirements of the Understances Act, N.J.S.A. 58:10A-21, and the Registration and Billing Regulations N.J.			of	
B. Is this a reg C. X Is this a con There have signatures) If "C" is checked ab Facility Name a Cwner Name a Facility Operate	istration of a proposed or newly installed underground storage tank? (This form must be filed istration of an existing underground storage tank not presently registered? rection or amendment to an existing facility registration? UST # 007 1994 been no changes to the facility registration since last submittal. UST # ever, please check the appropriate type of change(s) below and/or Address Change	(Go to certifi sibility Change cation(s) Complete Que	ication p	page for	
Owner Contact	Person Change Closure (Complete Question #13) X Other (please specified in the complete Question #13) register unit		d ta	nks	
SECTION A - G	ENERAL FACILITY INFORMATION	.cgrocere			_
Facility Name	Pieldiriicikitioiwn iSiulpipioiriti iFiarq i liitiyi i	<u> </u>	1.1.		
2. Facility Location	RIOI UI TI EI II II II II II II II II II II II II		لــــــــــــــــــــــــــــــــــــــ		
	Preidiri i a Mrioiwini ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !		للل	1	_
	CITY OR MUNICIPALITY	<u>.l. l. l. l.</u>	 		
	S a l em			L L L	
3. Facility Operator	MIST H JUIT IC THIE INISTOLUTION TITLE Contact 7 11 18 3 Tele. No 7 11 18 3 Tele. No (Area Code)	512 6101	513	(Extension)]
Operator Address (if different than				<u>dı 1 1</u>	
#2)	AIFIRICI - C N Y - E N 1(B 1 d g 1,21,01,01) 1 1 1 1 1 1 1 1 1	1-1-1-	1 1 1	<u> </u>	_
	Floar It Tott ten na I I I I I I I I I I I I I I I I I I	1	1 1 1	1	
	N 1Y 1 1 3 5 9 1 0 16 STATE ZIP CODE				
4. Tank Owner	UISIAIrimivi ITiriai in in ngi iCleinitieiri, i Fioiriti II	O _l i _l x _l	لللا		
Tank Owner Address	FIOITITI I DI II XI I I I I I I I I I I I I I I	<u> </u>			
		1111	1	<u> </u>	
	Bjuithlington 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	111.			
	NII 01 81 61 44 0-45 15 10 11 STATE ZIP CODE				
6. Contact Person (Tank Owner)	MITION SI he ef Is Ik II I I I I Contact I Tele. No.(Area Code)			Extension)	_
7. EPA ID# N	J 6 2 1 0 0 9 0 0 6 8				
8. Total number of r	regulated underground storage tanks at facility unk (Complete Section B for each	tank)			

9. Total regulated underground storage t	ank capacit	y at facili	ty (gailor	ns)						
10. Facility Type: A State B Commercial/ Industrial	C Co	untv/Mur deral	nicipal E	Cha	aritable / F sidence	Public Sch	∞i ົ.G H	∟∐Farm (a	as define 3.1 et sec	d in N.J.S.
11. Is a copy of the facility site plan submit	ted with this	s registra	ition purs	uant to N.	J.A.C. 7:1	4B-2?	□ YES	X NO		
	2511710							-		
SECTION B - SPECIFIC TANK INFO	DHMATIO	N								
ALL underground tanks, including those tall 9/3/86) must be registered. Report all tank	cen out of a piping stati	peration us chang	(UNLES:	S THE TAI s previous!	NK WAS I	REMOVEC	FROM	THE GROU	JND PRIC	OR TO
Tank Identification Number	TANK 1 2 3 5		TAN	K NO.	TAN	K NO.	TAN	K NO.	MAT	IK NO.
2. CAS Number (hazardous substances only)		3 1 1		i tili siti	1		1:11			
3. Date Tank installed (Month/Day/Year)	Mo. Day	Year	Mo. Day	Year	Mo. Day	Year	Mo. Day		Mo. Day	Year
4. Tank Size (gailons)		0 0	-	1 . 1						
Tank Contents Mark one "X" for each tank) A. Leaded gasoline			-		-					
B. Unleaded gascline	-			;						•
C Alconol enriched gasoline										
D. Light diesel fuei (Na. 1-D)				1			<u> </u>	1		:
E. Medium diesel fuel (No. 2-D)	!			:		<u> </u>	-			
F Waste Cil		-			<u> </u>	· .	-		:	
G. Kerasene (No. 1)							<u> </u>	:		
H. Home heating oil (No. 2)	X		<u> </u>		-		-	- :		
J. Heating oil (No. 4)					 -	·		:		**
K. Heavy heating oil (No. 5) L. Aviation fuel					 		-	i		
M. Motor oil								:		
N. Lubricating oil			:							i
P. Sewage								1		
Q. Sewage sludge									:	i .
Other hazardous substances (specify)										
S. Hazardous waste specify ID number)							ļ			
T. Mixtures please specify)	ļ						ļ			
U. Emergency spill tank (specify substance)	-					 	ļ			
V. Other petroleum products (please specify)					ļ					
W. Other (please specify)					_		-			
6. Tank & Piping Construction (Mark one each for both tank & piping)	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
A. Bare Steel	X.				[
B. Cathodically protected steel		1							1	
C. Fiberglass-coated steel		:	1	<u> </u>	:				: :	. !
D. Fiberglass-reinforced plastic		<u> </u>	1	!!!				-		, !
E, Internaily ined	<u> </u>	! !			<u> </u>	1				
F. Other (please specify)										
7. Tank & Piping Structure	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
(Mark one each for both tank & piping) A Single wail	TX'		-		\Box	-	 -		 -	
B Double wail	X		-	<u></u>					1 1	
C. Other (please specify)	! ! !	· : !	-	•	 					·
Type of Monitoring/Detection System	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Dining	Tank	Diaine
(Mark ail that apply for both tank & piping)	.—	— — —		ihinig		- iping		Piping 	- ank	Piping —
A. Statistical Inventory Reconciliation	<u>.</u> : .					<u>.</u>	-	. :		
B. Manual Tank Gauging		1 1	- !-	<u> </u>	<u> </u>		<u> </u>			
C. Inventory Control	<u> </u>	+ + +		!					1	1 .
D Interstitial E. Precision Test	! i						-		3	1 1
F. Ground water observation wells		+						<u> </u>		-
G. Vapor observation wells	. :		- : : :		1					-:
H. in-tank (automatic) monitoring gauge	-	- 1	<u> </u>				: ;			<u> </u>
J. Periodic Tank Test									1	

Tank Identification Number	TANK NO. TANK NO.		TAN	TANK NO.		TANK NO.		TANK NO.		
Type of Monitoring/Detection System K. None	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
L Other (please specify)	- A	<u> </u>	<u> </u>		+	· - · · ·				
9. Overfill Protection (tank only)										
(Mark one X for each tank)	1 -	_			1					
A. Yes								7		
B. Na		Χİ	1		1			:	i	
 Spill Containment Around Fill Pipe (Mark one X for each tank) 	-		-	\neg		_	_			
A. Yes		17.		<u> </u>	+					
B. No	- 	X	i i		-	!	<u> </u>		ļ!	
11. Tank Status (Mark one X for each tank) A. In-use	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
B. Empty less than 12 months			1 1							1
C. Empty 12 months or more	1 !		1							i l
Emergency spill tank (sump)	!		! !	1						<u> </u>
E. Emergency backup generator tank	1 !	:	: !	<u>:</u> :	1 : :			1 7		
F. Abandoned in Place	1	1		<u> </u>	 	· · · · · ·				
G. Removed	X		1 :		! !		1 !	<u></u>	1 .	<u> </u>
H. Other (please specify)	<u> </u>									
If box 11B, C, or D above has been marked, indicate the estimated date last used (month/day/year)	Mo. Day	Year	Mo. Day	Year	Mc. Day	Year	Mo. Day	Year	Mo. Day	Year
	TAN	K NO.	TANE	C NO.	TAN	K NO.	TAN	K NO.	TANK	NO.
3. Closure Information - Tank ID No.	2 3	5								
11-1-11-1-1	Mo. Day	Year	Mo. Day	Year	Mo. Day	Year	Mo. Day	Year	Mo. Da	y Year
A. Date abandoned in place		1				1		1 : 1	1 .	
B. Date taken temporarily out of service				1 - 1						
C. Date removed			! -	1			 			
		19 9 7				_		<u>. 1 i i </u>	1 1	
D. Date of Sale or Transfer			1 1	1 1 1				. i :	1	1.1.1.1
E. TMS ≠ (if applicable)										
F. ISRA # (if applicable)								-		
		 '			<u>!</u>		<u>. </u>		·	
ECTION C - FINANCIAL RESPONS Des this facility have a Financial Responsitions of the second information of the second inf	oility Assu	⊒ rance Med	hanism as				YES	NO		
Туре					Carrier / L	ssuing Ag	ency			
/	_ /							_ \$		
Effective Date Expiration D	ate			Policy N	umber			An	nount	
ECTION D - MONITORING SYSTEM	MS .									
pes this facility have a release detection me "No", please be aware that the facility mus	——I onitoring s								YES] NO
ECTION E - RECORDKEEPING/CO	MPLIAN	ICE								
 ease answer all the questions in this section. Does this facility have cathodic protection. if "Yes", are the systems properly open and documents of the performance claims and documents on the pursuant to N.J.A.C. 7:148-5? 	ction syste erated and	ems for all . d maintain	steel tank ed pursua	s and pipir int to N.J.A	ng? A.C. 7:148	3-5?		P	or the ent YES YES YES	ire facility. NO NO NO
3. Are the proper monitoring, testing, sa N.J.A.C. 7:148-5 and 6? 4. Is the proper Release Response Plan						oursuant t	to		YES T] NO ON
5. Does the facility have spill and over fi6. Have all Fill Ports been permanently i	ll protectio	n systems	pursuant	to N.J.A.C	D. 7:14 <mark>8</mark> -4				YES YES	NO NO

IMPORTANT INFORMATION

,-	•	-	
-	_	_	•

Please make checks payble to: "Treasurer, State of New Jersey". Use of the enclosed return envelope will expedite

processing. Registration and Billing Schedule can be found in N.J.A.C. 7:14B.

All Initial Registration fees are \$100 per facility.

PENALTY:

Failure by owner or operator of a regulated underground storage tank to comply with any requirement of the State UST

Act or regulations may result in the penalties set forth in NJ., S.A. 58:10A-10.

EMERGENCY:

If a discharge or spill occurs, the NJDEP Hotline at (609) 292-7172 must be called IMMEDIATELY - 24 hours a day

UPGRADE EXEMPTION: Residential heating oil underground storage tanks are exempt from all upgrade requirements.

DATES TO KNOW (critical deadlines)

December 22, 1988 — All new federally regulated tank systems must have cathodic protection and spill/overfill protection.

September 4, 1990 — All new State-only regulated tank systems must have cathodic protection and spill/overfill protection.

December 22, 1990 — All federally regulated piping must have begun leak detection.

February 19, 1993 — All federally regulated tank systems must maintain financial responsibility assurance.

December 22, 1993 — All federally regulated tank systems must have begun leak detection.

December 22, 1998 — All regulated tanks shall install cathodic protection and spill/overfill protection.

CERTIFICATIONS

NOTE: IF THE PERSON SIGNING CERTIFICATION NO. 2 IS THE SAME AS THE PERSON SIGNING CERTIFICATION NO. 1, THEN CERTIFICATION NO. 2 NEED NOT BE SIGNED. (If different persons are required to sign No. 1 and No. 2, then they must do so.)

CERTIFICATION NO. 1:

Must be signed by the highest ranking individual at the facility with overall responsibility

"I certify under penalty of law that the information provided in this document is true, accurate and complete to the best of my knowledge, information and belief. I am aware that there are significant civil and criminal penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

(Typed / Printed Name)	(Signature)
(Title)	(Date)

CERTIFICATION NO. 2:

Must be signed as follows:

- For a corporation, by a principal executive officer of at least the level of vice president
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively
- For a municipality, State, Federal or other public agency, by either a principal executive officer or ranking elected official
- · For persons other than indicated above, by the person with legal responsibility for the site

"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

(Typed / Printed Name)	(Signature)
(Title)	(Date)

CERTIFICATION NO. 3:

If applicable, must be signed by the individual who is certified to perform services.

"I certify under penalty of law that the information provided in this document is true, accurate and complete to the best of my knowledge, information and belief. I am aware that there are significant civil and criminal penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Tulian T. Canuso Ur. Project Engineer
(Typed / Printed Name)

(Typed / Printed Name)

(N.J. Certification Number)

(Signature)

(Name of Firm, if applicable)

New Jersey Department of Environmental Protection Site Remediation Program

Site Investigation/Remedial Investigation Report Checklist

☐ Adı	P Regulations □ Industrial Site Recovery ninistrative Consent Order (ACO) □ Memorandum of Agreen morandum of Understanding	
A. Case Name (and AKA):	Sievers-Sandwerg US Army Reserve Center	
Address:	Building 273, Route 130	
Municipality/County:	Pedricktown	
· · · ·	Telephone:	
B. (Check as appropriate)	C. (Complete all that apply)	
Site Investigation (SI)	Assigned Case Manager	
Report (51)	ISRA Case Number	(5 digits)
C Barre diet Terrendierties	UST Registration Number 007 1994	(7 digits)
☐ Remedial Investigation (RI) Report	Incident Report Number	(10 or 12 digits)
	- Tank Closure Number C9 7 - 0177 C9 - C9 C9 C9 - C9	(7 characters)
	• EPA ID Number NJ	(12 characters)
(If the answer to #1 is "No A) Did the Department groups used to N.J.A.C. 7 B) If alternative sampling	N.J.A.C. 7:26E-3 and 4, and analyzed pursuant to Table 2-3, as apple, answer 1A & 1B. If the answer is "Yes", go to #2) rant a variance from any of the requirements of N.J.A.C. 7:26E-2 the capture investigatory methods were utilized without Department precequired by N.J.A.C. 7:26E-1.6(c) provided?	rough 6,Yes No -approval,
The attached report document impact to ground water so	ents all individual contaminants below most recently published residule cleanup criteria contained in the "Site Remediation Newsletter".	lential andYes No
3) The attached report includ 7:26E-3.7 or 4.4. (If "No"	es results from a ground water investigation conducted pursuant to ? , go to question 5, if "Yes", answer question 4)	U.A.C. Yes (No
The attached report document Standards as contained in	nents all individual contaminants below applicable Ground Water Qu N.J.A.C. 7:9-6	alityYes No
7:26F-1 8	ubmitted in response to a discharge of any contaminants as defined a continue to 5A through 5E. If answer is "No" go to #6. E-3.7 and/or 4.4;	u NJ.A.CYes (No
/i.e. empolion #2 heat	sociated with a substance with a solubility greater than 100 milligran	1CS INO
B) Does all the soil between and ground water/bed	reen the discharge (last depth of contamination above remediation st trock contain less than 15% silt and clay?	Anuaru)

	C) If a soil sample was collected 2 feet from the saturated zone or bedrock, does it contain a contaminant above the impact to ground water remediation criteria? D) Are any of the soil sampling results above the impact to ground water remediation criteria.	
	anywhere in the soil column and the contaminant is not going to be actively remediated? E) Was a sheen or product noted on the ground water?	Yes No
6)	 Were any wastes generated for disposal during the SI or RI? A) The attached contains a "soil reuse" proposal or report, including characterization sampling, as requested in the May 14, 1993, "Management of Excavated Soils" guidance document B) The attached report contains a request for a Waste Flow Exemption C) The attached report contains documentation of the quamity, waste classification and status of all excavated soil/waste disposal (including drum contents, tank sludge/rinsate, overburden soils, etc.) remediation or reuse and clean fill documentation 	Yes No
	Site Investigation (SI) and Remedial Investigation (RI) Report Submittal Chec	
	(Note page, figure,	table or plate
E.	SI Reporting Requirements number(s) or NA for	· · · · · · · · · · · · · · · · · · ·
1)		g. No. <u>2</u>
2)	Physical Setting	g. No. <u>2</u>
3)	Technical Overview of investigation execution and results including reliability of lab data, summary of contamination, information on waste characterization and any other significant events P	g. No. <u>3</u>
4)	Findings and recommendations by Area of Concern (AOC) A) Description of each AOC including size (i.e. size of drum pad, volume of impoundment or area, length of UST and piping), suspected and actual contamination (presence of discoloration, stressed vegetation, corrosion holes in USTs, description of the excavation, if any), source or potential source of discharge and field measurements B) Results of Analyses C) Fully supported Recommendation for additional remedial activities or "No Further Action" P Summary Table of analytical methods and quality assurance indicators pursuant to N.I.A.C.	
5)	Summary Table of analytical methods and quality assurance indicators pursuant to N.J.A.C. 7:26E-2.2 (a) lv	g. No. <u>3</u>
6)	Laboratory Quality Assurance and Quality Control Deliverables pursuant to N.J.A.C. 7:26E-2.1 and Appendix A (include lab deliverable checklist)	g. No. App F g. No. g. No. App F
7)	Discussion of why the analytical methods chosen for each sample matrix accurately represent all of the contaminants of concern at the facility	g. No
8)	Table summarizing sampling results, including media, sampling depth, field and laboratory identification numbers, date and time of sampling, analytical results, and comparison to applicable remediation standards (ARS). Identify all samples exceeding ARS and all samples with MDLs or PQLs exceeding ARS. Solid results on dry weight basis (in mg/Kg) and aqueous samples in ug/1 F	g. No. <u>3</u>
9)	and the second state of the second second second second and contaminant	†
10	Boring/Stratiographic logs including instrument readings and physical characteristics	Pg. No
11	Boring/Stratiographic cross sections	g. No
12	2) Boring, piezometer and monitoring well records with applicable permit numbers	Pg. No

F.	RI Reporting Requirements (Include all items above plus the following)
13)	Additional information collected pursuant to N.J.A.C. 7:26E-4.1 and any work plan approved per N.J.A.C. 7:26E-4.8 (i.e. well search information results/summary, subsurface gas threats, investigation of sediment, surface water, wetlands), as applicable
14)	Well Search Results (pursuant to 7:26E-4.4(h) and Appendix B)
15)	Description of treatability bench scale or pilot studies as well as data to develop permit limits for air, surface water and/or ground water discharges
16)	Average contaminant concentrations for each AOC (see N.J.A.C. 7:26E-4.9 (c)3i), and a description of the procedures used for averaging
17)	Well casing and ground water elevations (include well Certifications A and B)
18)	Ground water temperature, pH and conductivity measurements
19)	Review of inventory control records to identify product loss
20)	Results of an Ecological Assessment, if conducted
21)	Summary of Landfill records, if site is a landfill
22)	Site base maps with sampling locations* and diagrams shall include:
•/	A) ground water elevation comour maps with flow direction, and tidal studies, if applicable Pg. No
G	Report Contents Completeness and Two Part Certification:
23) Na Fir (N	The attached report conforms to the specific reporting requirements listed at N.J.A.C. 7:26E-3.10 for a SI Report or N.J.A.C. 7:26E-4.9 for a RI Report me:
	A) N.J.A.C. 7:26C-1.2 B) N.J.A.C. 7:14B-2.3 C) N.J.A.C. 7:26B-1.13