INSTITUTE FOR ENV ASSESSMENT **EXCAVATION REPORT**

September 21, 1999

SEPTEMBER 21, 1999



Randy Grupe Superintendent P.0. Box 268 Martin County West ISD #2448

STORING D

ASSESSMENT

Welcome, MN 56181

Underground Storage Tank Removal and Replacement

T F

SEP 24 1999

Project #4076/1604 Leak #000000012855 Martin County West High School

Rochester MPCA

Dear Mr. Grupe:

Enclosed is the Excavation Report for the above referenced petroleum release site

determine the extent and magnitude of the petroleum contamination. Environmental Assessment (IEA) recommends additional investigation at this site to of underground storage tanks. In Part VII of the Excavation Report, the Institute for The Excavation Report summarizes the activities related to the removal and replacement

registered consultants for conducting the recommended additional work Unless IEA is directed otherwise, we will request bids from at least two Petrofund-

their information. This report has been forwarded to the Minnesota Pollution Control Agency (MFCA) for

If you have any questions, please contact IEA at 1-800-872-1260.

Sincerely

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT, INC

Manager, Mankato Regional Office Rod Schumacher

RS:smk - 092199

Enclosure

င္ပ Denise Oakes, MPCA-Rochester



Tanks and Emergency Response Section Minnesota Pollution Control Agency

EXCAVATION REPORT WORKSHEET FOR PETROLEUM RELEASE SITES

Fact Sheet #3.7 April 1997

reports to this excavation report. contaminated soil. Contaminated Soil" (fact sheet #3.6). Please attach any available preliminary site investigation Tanks and Emergency Response Section to document excavation and treatment of petroleum Complete the information below and submit to the Minnesota Pollution Control Agency (MPCA) Conduct excavations in accordance with "Excavation of Petroleum

Attach additional pages if necessary. Please type or print clearly

shorter deadline may be established by MPCA staff for high priority sites. The excavation reporting deadline is 10 months from the date of receipt of the standard letter. A

PART I: BACKGROUND

Site: Martin County West High School

Street: 16 West 5th Street

Mailing Address:

308 4th Street

West ISD #2448

Tank Owner/Operator: Martin County

City, Zip: Sherburn, MN 56171

County: Martin

MPCA Site ID#: LEAK0000 00012855

Services, Inc

Excavating Contractor: American Tank

Contact: Dianne Holte

Telephone: 651-481-7939

Tank Contractor Certification Number: 637

City, Zip: Welcome, MN 56181 Street/Box: P. O. Box 268

Telephone: 507-728-8276

Consultant: Institute for Environmental

Assessment

Contact: Rod Schumacher

Street/Box: 610 North Riverfront Drive

City, Zip: Mankato, MN 56001

Telephone: 507-345-8818

Others on-site during site work (e.g., fire marshal, local officials, MPCA staff, etc.): N/A

address, and relationship to site on a separate attached sheet. Note: If person other than tank owner and/or operator is conducting the cleanup, provide name,

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- \geq Date release reported to MPCA:
- ᡛ Dates site work performed (tanks removed, soil excavation, soil borings, etc.):

Installed one 6,000 gallon underground storage tank Removed two underground storage tanks - 6,000 gallon and Work Performed 6-21-99

6-22 and 6-23, 1999

Date

PART III: SITE AND RELEASE INFORMATION

Describe the land use and pertinent geographic features within 1000 feet of the site. (i.e. residential property, industrial, wetlands, etc.)

generally flat and used for residential and light commercial. Site property is used as a public high school facility. The surrounding property is

 $\mathbf{\Xi}$ Provide the following information for all tanks at the site at the time of the release: Table 1.

	1973 6-21-99	1973	Fuel Oil	10,000	UST	002
No apparent leaks	Removed					
hole	1956 6-21-99	1956	Fuel Oil	6,000	UST	001
Leaking - 1/4" diameter	Removed					
			(product type)	(gallons)	AST (gallons)	#
Condition of Tank	Age Status*	Age	Contents	Capacity	UST or	Tank

^{*}Indicate: removed (date), abandoned in place (date), or currently used Notes:

 $\dot{\Omega}$ Describe the status of the other components of the tank system(s), (i.e., piping and dispensers) for those tanks listed above

Good condition; no apparent leaks

Ď Identify and describe the source or suspected source(s) of the release

1/4" diameter hole in side of 6,000 gallon tank discovered upon excavation

Ή What was the volume of the release? (if known): _Unknown gallons

F. When did the release occur? (if known): Unknown

G. Describe source of on-site drinking water. Municipal

PART IV: EXCAVATION INFORMATION

I. If no soil boringSoil borings1999.		H. If a soil boring v Soil," Part VI A Attach the borir	G. If ground water ground water?	F. Was ground wate table? (yes/no)	_Installation of	E. Were new tank accommodate	[Note: If more of MPCA.]	D. Quantity of con	C. Native soil type	B. Original tank ba	A. Dimensions of
	If no soil boring was required, explain. Soil borings will be conducted during a Limited Site Investigation (LSI) to be bid later in 1999.	If a soil boring was required (see fact sheet #3.6 "Excavation of Petroleum Contaminated Soil," Part VI Additional Investigation) describe the soil screening and analytical results. Attach the boring logs and laboratory results to this report.	If ground water was not encountered during the excavation, what is the expected depth of ground water? 13 feet	Was ground water encountered or was there evidence of a seasonally high ground water table? (yes)no) At what depth? 13 feet, recent heavy rain	Installation of one new 6,000 gallon fiberglass tank required no additional excavation.	Were new tanks installed at the site? (yes/no) If yes, how much soil was excavated to accommodate the installation of the new tanks?	[Note: If more than 150 cubic yards removed, please attach copy of written approval from MPCA.]	D. Quantity of contaminated soil removed for treatment (cubic yards): None	Native soil type (clay, sand, etc.): Clay	Original tank backfill material (sand, gravel, etc.): Sand, clay	Dimensions of excavation: Length 38 ft. Width 35 ft. Depth 13 ft.

contaminated soil.

Apparent ground water was visible at 13 foot depth in contact with petroleum

	7
	Was bedrock encountered in the excavation? ()
3	(yes/no) At what depth?
)	what depth?

Were other unique conditions associated with this site? (yes/no) If so, explain.

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PART V: SAMPLING INFORMATION

Briefly describe the field screening methods used to distinguish contaminated from uncontaminated soil: · 直接 经金属的

and tested using the polyethylene bag headspace protocol described in MPCA Fact Sheet detector has a lower detection limit of approximately .2 ppm. Soil samples were collected to the excavation. Soil readings above the action level were stockpiled. 3.22 (July 1996) Section I. Soil with readings below MPCA action levels were returned Soil samples were screened for the presence of organic vapors using a HNU PID. This

 \mathbf{H} List all soil vapor headspace analysis results. Indicate all sampling locations using sample sure the sample codes correspond with the site map required in part VI, below. or bottom after excavation was complete, label it S-1 (for sidewall) or B-1 (for "bottom"). Be R-1A (2 feet), R-1B (4 feet), R-1C (6 feet), etc. If the sample was collected from the sidewall for "removed." Samples collected at different depths at the same location should be labeled codes (with sampling depths in parentheses), e.g. R-1 (2 feet), R-2 (10 feet), etc.

Sample Code							
Type							
Reading ppm							
4,	1	1	3	1	È	Ĩ	Ĭ
Sample Code				J.			
Type							
Keading ppm							

 Ω Was the "removed soil" placed into the excavation basin? (yes/no) Performed During Remedial Investigations). Investigation is necessary (see Fact Sheet #3.19, "Soil and Ground Water Investigations If no, please complete Part VIII: Soil Treatment Information section. If yes, a Limited Site

Ö Briefly describe the soil analytical sampling and handling procedures used:

using clean glove techniques and are grab samples of representative soils. Soil samples were collected in clean 60 ml Teflon-lined, septum glass purge and trap vials. Samples are kept refrigerated until transferred to the laboratory. Soil samples are collected

Ή not include analyses from the stockpiled soils. place when excavation is complete). Code the samples with sampling depths in parentheses as follows: sidewall samples S-1 (8 feet), S-2 (4 feet), etc.; bottom samples B-1 (13 feet), B-2 List below all soil sample analytical results from bottom and sidewall samples (i.e., soils left in (14 feet), etc. Be sure the sample codes correspond to the site map required in part VI. Do

	B-3 (13 feet)	B-2 (13 feet)	B-1 (10 feet)	Sample Code
	15,100 ppm	8,950 ppm	9,430 ppm	GRO/ DRO
				Benzene ppm
2)1				Ethyl- benzene ppm
i i				Toluene ppm
				Xylene Ppm
				MTBE ppm
				Lead ppm

NOTE: ATTACH COPIES OF LABORATORY REPORTS AND CHAIN OF CUSTODY FORMS.

PART VI: FIGURES

Attach the following figures to this report:

Site location map

2

- Site map(s) drawn to scale illustrating the following
- Location (or former location) of all present and former tanks, lines, and dispensers;
- b. Location of other structures (buildings, canopies, etc.);
- c. Adjacent city, township, or county roadways;
- d. Final extent and depth of excavation;
- P Location of soil screening samples (e.g. R-1), soil analytical samples (e.g., S-1 or 1), (e.g. SB-1). Also, attach all boring logs ቅ
- North arrow, bar scale and map legend.

ij

àэ Provide location of any on-site water wells. If on-site water wells exist please provide well logs and/or construction diagrams

PART VII: SUMMARY

of soil treatment. If no further action is recommended, the MPCA staff will review this report following notification discussed in parts VI and VII of "Excavation of Petroleum Contaminated Soil" (fact sheet #3.6). Briefly summarize evidence indicating whether additional investigation is necessary at the site, as

Petroleum contaminated soil excavated during tank removal was returned to the investigation into this site to determine extent and magnitude of the contamination contamination, the Institute for Environmental Assessment (IEA) recommends additional contact with petroleum contaminated soils. Based on this evidence of remaining ppm for clay soils. Ground water was observed at the base of the excavation and was in excavation. Laboratory analysis of soils below the tank revealed DRO levels of over 100 Soil contamination above the action level remains in all sidewalls of the excavation

PART VIII: SOIL TREATMENT INFORMATION

- Soil treatment method used (thermal, land application, composting, other). If you choose "other" specify treatment method: Removed soils were returned to the excavation.
- B. Location of treatment site/facility: N/A
- 0 indicate date that the MPCA permitted thermal treatment facility agreed to accept soil): Date MPCA approved soil treatment (if thermal treatment was used after May 1, 1991,
- D. Identify the location of stockpiled contaminated soil:
 N/A

PART IX: CONSULTANT (OR OTHER) PREPARING THIS REPORT

or certification, or if it omits material information, the responsible person or volunteer may be awards. remediation and may harm the environment and may result in reduction of reimbursement information in this document is inaccurate or incomplete, it will delay the completion of and as agents of the responsible person or volunteer for this leaksite. I/we acknowledge that if By signing this document, I/we acknowledge that we are submitting this document on behalf of Candor), and that the responsible person or volunteer may be liable for civil penalties. found to be in violation of Minn. Stat. \S 115.075 (1994) or Minn. Rules 7000.0300 (Duty of leaksite that if this document is determined to contain a false material statement, representation, In addition, I/we acknowledge on behalf of the responsible person or volunteer for this

Name and Title: Rod Schumacher, Regional Manager_	Signature: Date signed: Sol Shunch 09/22/9
Company and mailing address:	Institute for Environmental Assessment
	610 N. Riverfront Drive
	Mankato, MN 56001
Phone:	507-345-8818
Fax:	507-345-5301
Company and mailing address:	
Phone:	
Fax:	

attachments to: If additional investigation is not required at the site, please mail this form and all necessary

(Project Manager)
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks and Emergency Response Section
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

If additional investigation is required at the site, include this form as an appendix to the "Remedial Investigation Report Form." Excavation reports indicating a limited site investigation (LSI) is necessary will not be reviewed by MPCA staff until the LSI has been completed.

Upon request, this document can be made available in other formats, including Braille, large print and audio tape. TTY users call 612/282-5332 or 1-800-657-3864 (voice/TTY).

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Martin County West High School Initial Excavation

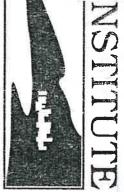


Martin County West High School South side of removed 6,000 gallon tank Stained soil visible

INSTITUTE FOR ENV ASSESSMENT **EXCAVATION REPORT**

September 21, 1999

SEPTEMBER 21, 1999



Superintendent Welcome, MN 56181 P.0. Box 268 Martin County West ISD #2448 Randy Grupe

> for ENVIRONMENTAL ASSESSMENT

SHOW VAD

SEP 24 1999

Rochester MPCA

Dear Mr. Grupe:

Project #4076/1604 Leak #000000012855 天 [5]

Underground Storage Tank Removal and Replacement

Martin County West High School

Enclosed is the Excavation Report for the above referenced petroleum release site

determine the extent and magnitude of the petroleum contamination. Environmental Assessment (IEA) recommends additional investigation at this site to of underground storage tanks. In Part VII of the Excavation Report, the Institute for The Excavation Report summarizes the activities related to the removal and replacement

registered consultants for conducting the recommended additional work Unless IEA is directed otherwise, we will request bids from at least two Petrofund-

their information. This report has been forwarded to the Minnesota Pollution Control Agency (MPCA) for

If you have any questions, please contact IEA at 1-800-872-1260.

Sincerely,

INSTITUTE FOR ENVIRONMENTAL ASSESSMENT, INC

Manager, Mankato Regional Office Rod Schumacher

RS:smk - 092199

Enclosure

င္ပ Denise Oakes, MPCA-Rochester



Tanks and Emergency Response Section Minnesota Pollution Control Agency

EXCAVATION REPORT WORKSHEET PETROLEUM RELEASE SITES

Fact Sheet #3.7 April 1997

reports to this excavation report. contaminated soil. Complete the information below and submit to the Minnesota Pollution Control Agency (MPCA) Contaminated Soil" (fact sheet #3.6). Please attach any available preliminary site investigation Tanks and Emergency Response Section to document excavation and treatment of petroleum Conduct excavations in accordance with "Excavation of Petroleum

Attach additional pages if necessary. Please type or print clearly

shorter deadline may be established by MPCA staff for high priority sites. The excavation reporting deadline is 10 months from the date of receipt of the standard letter. \triangleright

PART I: BACKGROUND

Site: Martin County West High School

Tank Owner/Operator: Martin County

West ISD #2448

Street: 16 West 5th Street

City, Zip: Sherburn, MN 56171

County: Martin

MPCA Site ID#: LEAK0000_00012855

Telephone: 507-728-8276

City, Zip: Welcome, MN 56181

Street/Box: P. O. Box 268

Mailing Address:

308 4th Street

Excavating Contractor: American Tank

Services, Inc

Contact: Dianne Holte

Telephone: 651-481-7939

Tank Contractor Certification Number: 637

Contact: Rod Schumacher

Assessment

Consultant: Institute for Environmental

Street/Box: 610 North Riverfront Drive

City, Zip: Mankato, MN 56001

Telephone: 507-345-8818

Others on-site during site work (e.g., fire marshal, local officials, MPCA staff, etc.):

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address, and relationship to site on a separate attached sheet. Note: If person other than tank owner and/or operator is conducting the cleanup, provide name,

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1-99

 \mathbf{B} Dates site work performed (tanks removed, soil excavation, soil borings, etc.):

Installed one 6,000 gallon underground storage tank Removed two underground storage tanks - 6,000 gallon and Work Performed 6-21-99 6-22 and 6-23, 1999 Date

PART III: SITE AND RELEASE INFORMATION

Describe the land use and pertinent geographic features within 1000 feet of the site (i.e. residential property, industrial, wetlands, etc.)

generally flat and used for residential and light commercial. Site property is used as a public high school facility. The surrounding property is

 \mathbf{B} Provide the following information for <u>all</u> tanks at the site at the time of the release: Table 1.

Tank	UST or	Capacity	Contents	Age	Status*	Condition of Tank
#	AST	(gallons)	(product type)			
					Removed	Leaking - 1/4" diameter
001	UST	6,000	Fuel Oil	1956	1956 6-21-99	hole
					Removed	No apparent leaks
002	UST	10,000	Fuel Oil	1973	1973 6-21-99	

Notes: *Indicate: removed (date), abandoned in place (date), or currently used

 \mathcal{C} Describe the status of the other components of the tank system(s), (i.e., piping and dispensers) for those tanks listed above

Good condition; no apparent leaks

Ď. Identify and describe the source or suspected source(s) of the release

1/4" diameter hole in side of 6,000 gallon tank discovered upon excavation

Ħ What was the volume of the release? (if known): <u>Unknown</u> gallons

F. When did the release occur? (if known): <u>Unknown</u>

G. Describe source of on-site drinking water. Municipal

PART IV: EXCAVATION INFORMATION

_
round water contamination? (yes) no) Describe this evidence of contamination, e.g., free roduct (specify thickness), product sheen, ground water in contact with petroleum contaminated soil, water analytical results, etc.
ground water contamination? (yes/no) Describe this evidence of contamination, e.g., free product (specify thickness), product sheen, ground water in contact with petroleum contaminated soil, water analytical results, etc.

[NOTE: If free product was observed, contact MPCA staff immediately as outlined in fact sheet #3.3 "Free Product: Evaluation and Recovery"].

Apparent ground water was visible at 13 foot depth in contact with petroleum

contaminated soil.

K. Was bedrock encountered in the excavation? (yes(no)) At what depth?
(yes/no) At what depth?
At what depth?

Ļ Were other unique conditions associated with this site? (yes/no) If so, explain.

PART V: SAMPLING INFORMATION

Briefly describe the field screening methods used to distinguish contaminated from uncontaminated soil:

to the excavation. Soil readings above the action level were stockpiled 3.22 (July 1996) Section I. Soil with readings below MPCA action levels were returned and tested using the polyethylene bag headspace protocol described in MPCA Fact Sheet detector has a lower detection limit of approximately .2 ppm. Soil samples were collected Soil samples were screened for the presence of organic vapors using a HNU PID. This

₩. List all soil vapor headspace analysis results. Indicate all sampling locations using sample sure the sample codes correspond with the site map required in part VI, below. or bottom after excavation was complete, label it S-1 (for sidewall) or B-1 (for "bottom"). Be R-1A (2 feet), R-1B (4 feet), R-1C (6 feet), etc. If the sample was collected from the sidewall for "removed." Samples collected at different depths at the same location should be labeled codes (with sampling depths in parentheses), e.g. R-1 (2 feet), R-2 (10 feet), etc.

				Sample Code
				Soil Type
				Reading ppm
				Sample Code
				Soil Type
				Reading ppm

9 Was the "removed soil" placed into the excavation basin? (yes/no) Performed During Remedial Investigations). Investigation is necessary (see Fact Sheet #3.19, "Soil and Ground Water Investigations If no, please complete Part VIII: Soil Treatment Information section. If yes, a Limited Site

Ŭ. Briefly describe the soil analytical sampling and handling procedures used:

Soil samples were collected in clean 60 ml Teflon-lined, septum glass purge and trap vials. Samples are kept refrigerated until transferred to the laboratory. Soil samples are collected using clean glove techniques and are grab samples of representative soils.

Ή List below all soil sample analytical results from bottom and sidewall samples (i.e., soils left in not include analyses from the stockpiled soils. (14 feet), etc. Be sure the sample codes correspond to the site map required in part VI. Do place when excavation is complete). Code the samples with sampling depths in parentheses as follows: sidewall samples S-1 (8 feet), S-2 (4 feet), etc.; bottom samples B-1 (13 feet), B-2

	B-3 (13 feet)	B-2 (13 feet)	B-1 (10 feet)	Sample Code
	15,100 ppm	8,950 ppm	9,430 ppm	GRO/ DRO
				Benzene ppm
				Ethyl- benzene ppm
				Toluene ppm
				Xylene Ppm
				MTBE ppm
7				Lead ppm

FORMS. NOTE: ATTACH COPIES OF LABORATORY REPORTS AND CHAIN OF CUSTODY

PART VI: **FIGURES**

Attach the following figures to this report:

- Site location map
- 2 Site map(s) drawn to scale illustrating the following:
- Location (or former location) of all present and former tanks, lines, and dispensers;
- Ò Location of other structures (buildings, canopies, etc.);
- O Adjacent city, township, or county roadways;
- 0 Final extent and depth of excavation;
- O 1), (e.g. SB-1). Also, attach all boring logs Location of soil screening samples (e.g. R-1), soil analytical samples (e.g., S-1 or Ψ.
- North arrow, bar scale and map legend
- ÷ 9 well logs and/or construction diagrams Provide location of any on-site water wells. If on-site water wells exist please provide

PART VII: SUMMARY

discussed in parts VI and VII of "Excavation of Petroleum Contaminated Soil" (fact sheet #3.6). of soil treatment. If no further action is recommended, the MPCA staff will review this report following notification Briefly summarize evidence indicating whether additional investigation is necessary at the site, as

ppm for clay soils. Ground water was observed at the base of the excavation and was in excavation. Laboratory analysis of soils below the tank revealed DRO levels of over 100 Petroleum contaminated soil excavated during tank removal was returned to the investigation into this site to determine extent and magnitude of the contamination contamination, the Institute for Environmental Assessment (IEA) recommends additional contact with petroleum contaminated soils. Based on this evidence of remaining Soil contamination above the action level remains in all sidewalls of the excavation

PART VIII: SOIL TREATMENT INFORMATION

- \triangleright "other" specify treatment method: Soil treatment method used (thermal, land application, composting, other). If you choose Removed soils were returned to the excavation.
- ᄧ Location of treatment site/facility: N/A
- \mathcal{C} indicate date that the MPCA permitted thermal treatment facility agreed to accept soil): Date MPCA approved soil treatment (if thermal treatment was used after May 1, 1991,
- Ď Identify the location of stockpiled contaminated soil:

PART IX: CONSULTANT (OR OTHER) PREPARING THIS REPORT

remediation and may harm the environment and may result in reduction of reimbursement information in this document is inaccurate or incomplete, it will delay the completion of and as agents of the responsible person or volunteer for this leaksite. I/we acknowledge that if By signing this document, I/we acknowledge that we are submitting this document on behalf of found to be in violation of Minn. Stat. \S 115.075 (1994) or Minn. Rules 7000.0300 (Duty of or certification, or if it omits material information, the responsible person or volunteer may be leaksite that if this document is determined to contain a false material statement, representation, awards. Candor), and that the responsible person or volunteer may be liable for civil penalties. In addition, I/we acknowledge on behalf of the responsible person or volunteer for this

Name and Title:	Signature: Date	Date signed:
Rod Schumacher, Regional Manager_	food Shumahu 09	09/22/99
		1
Company and mailing address:	Institute for Environmental Assessment	
	610 N. Riverfront Drive	
	Mankato, MN 56001	
Phone:	507-345-8818	
Fax:	507-345-5301	
Company and mailing address:		
Phone:		
Fax:		

attachments to: If additional investigation is not required at the site, please mail this form and all necessary

(Project Manager)
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks and Emergency Response Section
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

is necessary will not be reviewed by MPCA staff until the LSI has been completed. Investigation Report Form." Excavation reports indicating a limited site investigation (LSI) If additional investigation is required at the site, include this form as an appendix to the "Remedial

Upon request, this document can be made available in other formats, including Braille, large print and audio tape. TTY users call 612/282-5332 or 1-800-657-3864 (voice/TTY).

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