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MPCA — DULUTH
DULUTH, MN.

PETROLEUM CONTAMINATED SOIL CORRECTIVE ACTION WORKSHEET

Minnesota Pollution Control Agency
Tanks and Spills Section
May 1991

To be eligible for Petroleum Tank Release Compensation Account (Petrofund) reimbursement of costs incurred up to the point that petroleum contaminated soil corrective action plans are approved, this worksheet must be submitted to the Minnesota Pollution Control Agency (MPCA) Tanks and Spills Section for review and approval.

Please complete the following:

1) Obtain approval for soil treatment from MPCA staff. (As of May 1, 1991, if thermal treatment is the treatment option, them MPCA approval is granted via the thermal treatment facility; however, the procedures in the MPCA document "Thermal Treatment of Petroleum Contaminated Soil" (April 1991) must have been followed and the MPCA-permitted thermal treatment facility must have agreed to accept the soil).

2) Adequately complete this worksheet. The worksheet is an integral element of a soil corrective action plan.

3) Send a copy of this worksheet to the MPCA project manager for review and approval. If approved, an approval letter will be sent to the responsible party (or volunteer).

4) Submit your Petrofund application to the Department of Commerce accompanied by a copy of the MPCA approval letter. Reimbursable costs are limited to those eligible costs incurred up to the date of the MPCA approval letter that you receive in response to this worksheet. (Note: As of October 1, 1991, the Petrofund application can be submitted to the Department of Commerce at the same time that this worksheet is submitted to the MPCA).

Since the information requested in this worksheet does not cover all aspects of the cleanup and investigation, submittal of the appropriate reports and, possibly, additional site work will still be necessary. For sites involving soil excavation, an excavation report should be prepared in accordance with the MPCA document "Excavation Report for Petroleum Release Sites" (May 1, 1991). If the excavation results indicate that additional investigation or corrective action is necessary at your site, you should begin the investigation promptly and the excavation report should not be submitted until the remedial investigation is complete. The excavation report should then be included as a section of the Remedial Investigation (RI) report.

Additional investigation and corrective action should be conducted in accordance with the MPCA document "Petroleum Tank Release Reports" (May 1, 1991). Results of the additional investigation should be submitted to the MPCA no later than 120 days after the date of the MPCA letter that you will receive in response to this worksheet, approving the proposed soil corrective action plans. If you are unable to meet this deadline, contact the MPCA project manager. An extension may be given on a site-specific basis. Failure to proceed in a timely manner with the necessary additional investigation and corrective action may result in a recommendation for reduction of Petrofund reimbursement.

I. SITE INFORMATION

Site: Food - N - Fuel Store
Street: 5493 Miller Trunk Highway
City, Zip: Duluth, MN 55811
County: St Louis

MPCA Site ID#: LEAK0000 3534

Tank owner/operator (or volunteer): Curtis Oil Company
Street/Box: 4997 Miller Trunk Highway
City, Zip: Duluth, MN 55811
Telephone: (218) 729-5501

II. TANK INFORMATION AND COMPLIANCE

A. Underground Storage Tanks. Complete the following information to reflect the status of your underground storage tanks at the time the release was discovered. Refer to the attachments "Do Underground Storage Tank And Piping Requirements Apply to Your Petroleum Tank?" and "What Do You Have To Do?/When Do You Have To Act?" to determine the applicability of registration, leak detection, corrosion protection, and spill/overfill protection. Indicate "YES" or "NO" for the presence or absence of leak detection, corrosion protection and spill/overfill protection.

Tank	Contents	Capacity	Type Of Tank	Date Installed	Date Registered	Date Tank & Piping Removed
1	Regular	5,000	Steel	7/1/71	4/24/86	10/16/90
2	Unleaded	10,000	Fiberglass	5/15/84	4/24/86	--
3	Premium	4,000	Steel Strip	7/27/87	5/2/88	--
4						
5						

(Tanks Continued)

	Tank			Piping		
Tank	Leak Detection	Corrosion Protection	Spill/Overfill Protection	Type of Piping	Leak Detection	Corrosion Protection
1	Inventory Control	Asphalt Coated	No	Galv Steel	Inv Control	No
2	Inventory Control	Fiberglass	No	Galv Steel	Inv Control	No
3	Inventory Control	Strips	No	Galv Steel	Inv Control	No
4						
5						

- Date 10-day tank removal notice given to MPCA: 10/3/90

- If the tank(s) involved in the release were removed after July 9, 1990, complete the following:

  Removal Contractor: B & D Pump, Inc
  Certification Number: 0233

- If the tank(s) involved in the release were installed after July 9, 1990, complete the following:

  Installation Contractor: B & D Pump
  Certification Number: 0233

B. Aboveground Storage Tanks. Complete the following information to reflect the status of your aboveground storage tanks at the time the release was discovered. The registration requirements for aboveground storage tanks are based on the same criteria as the registration requirements for underground storage tanks--refer to the attachments "Do Underground Storage Tank And Piping Requirements Apply to Your Petroleum Tank?" In describing your secondary containment, specify the materials used in the construction of both the base and the walls.

Tank	Contents	Capacity	Date Installed	Date Registered	Description of Secondary Containment
1					
2					
3					
4					
5					

III. SOIL TREATMENT APPROVAL INFORMATION

Treatment used/proposed: ("X" the option)

___ Landfarming
X Thermal Treatment (indicate treatment facility Dust Coating Inc)
___ Other (Specify_____)

Date MPCA approved soil treatment* : 7/19/91

*If thermal treatment was used/proposed after May 1, 1991, indicate date that the MPCA-permitted thermal treatment facility agreed to accept the soil. Also, unless previously submitted, attach a copy of the thermal treatment application signed by the thermal treatment facility.

IV. PRELIMINARY SITE INVESTIGATION RESULTS

1. Was all soil contaminated above action levels removed from the base and side walls of the excavation? (Soil action levels are described in the MPCA document "Excavation of Petroleum Contaminated Soil" (May 1, 1991))

YES NO

2. Have petroleum vapors been noticed in utilities or buildings?

YES NO

If ground water has not been encountered up to this point in the investigation, go to section V; If ground water has been encountered, continue.

3. Was free product observed on ground water (including perched ground water) in the excavation, soil borings, or in monitoring wells?

YES NO

If free product is found, it must be reported to the MPCA within 24 hours as described in the MPCA document "Petroleum Tank Release Reports" (May 1,1991). If more than 0.1 foot (approximately one inch) of product is present you will most likely be required to install a product recovery system. Preparations for a product recovery system should begin immediately. All recoverable free product should be removed from the excavation and properly disposed of. Notify the MPCA Tanks and Spills staff of the design and installation of the product recovery system, but do not wait to start the system--it is crucial to begin product recovery as soon as possible. If less than 0.1 foot of product is found, the need for recovery will be based on the results of the Remedial Investigation.

5. Was there a petroleum sheen on the ground water?

YES NO

6. Are there any shallow wells on the site or adjoining properties?

YES NO

V. INDIVIDUAL PREPARING THIS WORKSHEET

Company Name:	Twin City Testing Corp
Street/Box:	4444 Airpark Blvd
City, Zip:	Duluth, MN 55811
Telephone:	(218) 722-8433
Contact:	Les Cownay

Signature Les Conway Date: 1/10/92

Please mail this worksheet and all necessary attachments to:

(Project Manager)
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks and Spills Section
520 Lafayette Road North
Saint Paul, Minnesota 55155

MINNESOTA POLLUTION CONROL AGENCY
APPLICATION TO TREAT PETROLEUM CONTAMINATED SOIL
May 1991

I. Minnesota Pollution Control Agency (MPCA) Site ID Number: LEAK# 3534

II. MPCA Project Manager: Chris Zadak

III. Source of Soil:

Facility Name: Food - N - Fuel
Street Address: 5493 Miller Trunk Highway
City, Sate, Zip: Duluth, MN 55811

Contact Name: Jack Curtis
Telephone: (218) 729-5501

IV. Contamination Details:

Weight of Soil (tons): (One cubic yard of soil is approximately equivalent to 1.4 tons.) 560 tons

Type Petroleum Contamination: Gasoline, diesel fuel, No. 2 fuel oil, waste oil* (circle one)

Contaminant Concentrations (parts per million)

Benzene:	70	___	___	___	___	
Toluene:	430	___	___	___	___	
Ethyl Benzene:	110	___	___	___	___	
Xylene:	560	___	___	___	___	
Total Lead:	24	___	___	___	___	
Total Hydrocarbons as Gasoline	4800	___	___	___	___	

Soil Type (sand, silt, clay,etc.) Sand and silty sand

*Note: If the petroleum contamination is waste oil, chromium, cadmium and polychlorinated biphenyls analyses will also be necessary.

V. Thermal Treatment Unit
Name: Dust Coating Inc
Address: 6925 D'Chene Lane
(if portable, where will plant be located)
City, State, Zip: Maple Plain, MN 55350

Plant Number or Model: Gencor 232
(if portable, separation distance in feet from nearest residence(s): 1200'.)

Contact Name: Mark Deutsch Title: Vice President Glacer Paving
Telephone: (218) 879-5473 Site Telephone: ___
Air Quality Permit Number: 2353-90-OT-1

1/10/91
Date

Signature of Authorized Thermal Treatment Unit Representative Accepting Soil

VI. Date treatment will be completed: OCT 16, 1992 (If stockpiled before being treated, all petroleum contaminated soil must be properly managed, handled, and protected from run-on, infiltration and run-off). POST BURN TESTING IS REQUIRED.

VII. Final Disposition of Treated Soil: (how used, location)

Material to be stockpiled and used as clean fill

VIII. Individual Submitting Request:

Company Name: Twin City Testing Corporation
Address: 4444 Airpark Blvd Date Inspected: _____
City, Sate, Zip: Duluth, MN 55811

Contact Name: Les Conway
Telephone: (218) 722-8433

Signature: Les Conway

Date: 1/10/92

Mail to: Project Manager
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks and Spills Section
520 Lafayette Road
St Paul, Minnesota 55155
Fax No: (612) 642-0465

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REPORT OF LABORATORY ANALYSIS

GME Consultants, Inc.
314 Garfield Avenue
Duluth, MN 55802

November 07, 1990
PACE Project
Number: 901020501

Attn: Ms. Marsha Meinders

Food& Fuel 30-153-01

PACE Sample Number:			10 0412015	10 0412023	10 0412031
Date Collected:			By Client	By Client	By Client
Date Received:			10/20/90	10/20/90	10/20/90
Parameter	Units	MDL	FF-SA-1	FF-SA-3-16	FF-SA-4
INORGANIC ANALYSIS					
INDIVIDUAL PARAMETERS					
Lead	mg/kg	5.0	24	5.8	ND
Moisture content	%	0.01	12	13	10
ORGANIC ANALYSIS					
VOLATILE PETROLEUM RELATED CMPDS IN SOIL					
Date Analyzed			10/26/90	10/26/90	10/26/90
Benzene	mg/kg	0.12	-	ND	ND
Benzene	mg/kg	0.60	70	-	-
Toluene	mg/kg	0.12	-	0.15	0.33
Toluene	mg/kg	0.60	430	-	-
Ethyl benzene	mg/kg	0.12	-	ND	0.24
Ethyl benzene	mg/kg	0.60	110	-	-
Xylene	mg/kg	0.12	-	040	1.6
Xylene	mg/kg	0.60	560	-	-
Total Hydrocarbons as gasoline	mg/kg	1.0	-	3.4	13
Total Hydrocarbons as gasoline	mg/kg	5.0	4800	-	-

MDL Method Detection Limit
ND Not detected at or above the MDL.

1710 Douglas Drive North
Minneapolis, MN 55422
TEL: 612-544-5543
FAX: 612 525 3377

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03845

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: GME Consultants
Address: P.O. Box 16070
Duluth, MN 55816
Phone: 218-722-4323

Report To: Marsha
Bill To: GME Consultants
P.O. # / Billing Reference:
Project Name / No.: Food & Fuel / 30453-01

Pace Client No.: 020179
Pace Project Manager: JLS
Pace Project No.: 9011 2630 1
*Requested Due Date: 11/12

Sampler By (PRINT): Marsha Meinders
Sampler Signature: Marsha Meinders
Date Sampled: 10/ 190

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA		ANALYSES REQUEST: BETX / TPHC as gas / Lead	REMARKS
1	FF-SA-1		Soil	41201.5	3						✓ ✓ ✓	
2	FF-SA-3-16		Soil	41202.3	2						✓ ✓ ✓	
3	FF-SA-4		Soil	41203.1	3						✓ ✓ ✓	
4	FF-SA-5		Soil	41204.0	3						✓ ✓ ✓	JV broken
5	FF-SA-6		Soil	41205.8	3						✓ ✓ ✓	GS broken
6	FF-WA-1		Water	41206.6	3						✓ ✓ ✓	
7												
8												

COOLER NOs.	BAILERS	SHIPMENT METHOD OUT / DATE	SHIPMENT METHOD RETURNED / DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					Marsha Meinders / GME	MEL - PCE	10/20	1:30

Additional Comments