DAHL
& ASSOCIATES, INC.
Environmental Consultants, Contractors & Engineers

October 13, 1992

Mr. David Scheer
MPCA Hazardous Waste Division
Tanks and Spill Section
520 Lafayette Road
St. Paul, MN 55155

Dear Mr. Scheer:

RE: Thermal Treatment Permit, Former Conoco Store #23034, 1126 South Robert Street, West St. Paul, Minnesota. LEAK #00000858

Enclosed is a copy of the permit application information submitted to C.S. McCrossan for the thermal treatment of petroleum contaminated soil. The soil was generated during the installation of the recovery well.

Mr. Don Hove, Assistant Fire Chief, City of West St. Paul, and Mr. Harlan Van Whye of the City of Maple Grove have been notified of the intent to treat petroleum contaminated soil at the C. S. McCrossan facility.

If you have any questions concerning this information or related to the project in general, please contact me at (612) 490-3778.

Sincerely,
DAHL & ASSOCIATES, INC.

R. Jonathan Paetz

R. Jonathan Paetz
Project Manager

rjp

enclosures

cc: Ms. Kelly S. Ahlschwede, Conoco Inc.

4390 McMenemy Road • Saint Paul, Minnesota 55127 • (612) 490-2905 • FAX (612) 490-3777

COPY

DAHL
& ASSOCIATES, INC.
Environmental Consultants, Contractors & Engineers

October 13, 1992

Mr. Don Hove
Assistant Fire Chief
City of West St. Paul
1616 Humboldt Ave.
West St. Paul, MN 55118

Dear Mr. Hove:

RE: Thermal Treatment Permit, Former Conoco Store #23034, 1126 South Robert Street, West St. Paul, Minnesota. LEAK #00000858

Dahl & Associates, Inc. (DAHL) has arranged for the treatment of approximately 12 cubic yards of petroleum contaminated soil from the above referenced site. The Minnesota Pollution Control Agency guidelines require that the City of West St. Paul be notified of the intent to treat petroleum contaminated soil at C.S. McCrossan, 7865 Jefferson Highway, Maple Grove. Enclosed is a copy of the information provided to C.S. McCrossan. The soil is to be transported from the site and treated per C.S. McCrossan's schedule.

If I can provide you with any additional information, please feel free to contact me.

Sincerely,
DAHL & ASSOCIATES, INC.

R. Jonathan Paetz

R. Jonathan Paetz
Project Manager

RJP/pc

enclosure

cc: Ms. Kelly S. Ahlschwede, Conoco, Inc. (w/o enclosure)
Mr. David Scheer, Minnesota Pollution Control Agency (w/o enclosure)

4390 McMenemy Road • Saint Paul, Minnesota 55127 • (612) 490-2905 • FAX (612) 490-3777

DAHL
& ASSOCIATES, INC.
Environmental Consultants, Contractors & Engineers

COPY

October 13, 1992

Mr. Harlan Van Whye
City of Maple Grove
9401 Fernbrook Lane
Maple Grove, MN 55369

Dear Mr. Van Whye:

RE: Thermal Treatment Permit, Former Conoco Store #23034, 1126 South Robert Street, West St. Paul, Minnesota. LEAK #00000858

Dahl & Associates, Inc. (DAHL) has arranged for the treatment of petroleum contaminated soil from the above referenced site. The enclosed information is provided to notify you of our intent to thermally treat petroleum contaminated soil at C.S. McCrossan, 7865 Jefferson Highway, Maple Grove. The soil is to be excavated from the site and treated by October 31, 1992.

Mr. Don Hove, Assistant Fire Chief, City of West St. Paul, has been notified that petroleum contaminated soil is to be generated from the above site.

If I can provide you with any additional information, please feel free to contact me at our office anytime.

Sincerely,
DAHL & ASSOCIATES, INC.

R. Jonathan Paetz

R. Jonathan Paetz
Project Manager

RJP/pc

cc: Ms. Kelly S. Ahlschwede, Conoco, Inc.
Mr. David Scheer, Minnesota Pollution Control Agency

4390 McMenemy Road • Saint Paul, Minnesota 55127 • (612) 490-2905 • FAX (612) 490-3777

APPLICATION TO TREAT PETROLEUM CONTAMINATED SOIL

MINNESOTA POLLUTION CONTROL AGENCY
APPLICATION TO THERMALLY TREAT PETROLEUM CONTAMINATED SOIL

May 1992

I. Minnesota Pollution Control Agency (MPCA) Site ID Number: Leak# 00000858

II. MPCA Project Manager: **Mr. David Scheer**

III. Source of Soil:

Facility Name: **Former Conoco Store #23034**
Address: **1126 S. Robert Street**
City, State, Zip: **West St. Paul, MN**

Contact Name: **Ms. Kelly S. Ahlschwede**
Telephone: **(713) 293-2867**

IV. Contamination Details:

Weight of Soil (tons): (One cubic yard of soil is approximately **17**
equivalent to 1.4 tons.)

Type Petroleum Contamination: **gasoline**, diesel fuel, #1 fuel oil, waste oil, #2 fuel oil, kerosene, used oil, (hydraulic fluid, cutting oil, motor oil, quench oil). (circle one)

Contaminant Concentration (ppm)

	MW-3
Benzene	**3.2**
Toluene	**29**
Ethyl Benzene	**19**
Xylene	**82**
Total Lead	
Total Hydrocarbons as Fuel Oil or Gasoline	**740**

Soil Type (sand, silt, clay, etc.): **Sand**

*Note: See Tanks and Spills Section document "Soil and Ground Water Analysis at Petroleum Release Sites" (Guidance Document 11) for additional analysis that may be necessary.

V. Thermal Treatment Unit:

Name: **C.S. McCrossan, Inc.**
Address: **P.O. Box 247, 7885 Jefferson Highway, Maple Grove, MN 55369**
(if portable, where will plant be located):

City, State, Zip:

Plant Number or Model:
(if portable, separation distance in feet from nearest residence(s):

Contact Name: **Bob Dongoske** Title:
Telephone: **(612)425-3123** Site Telephone:

Air Quality Permit Number: **785A-91-OT-2**

Date

Signature of Authorized Thermal Treatment Unit Representative Accepting Soil

VI. Date treatment will be completed:

VII. Individual Submitting Request:

Company Name: **Dahl & Associates**

Address: **4390 McMenemy St.**

City, State, Zip: **St. Paul, MN 55127**

Contact Name: **R. Jonathan Paetz**

Telephone: **(612) 490-2905**

Signature: R. Jonathan Paetz

Date: **October 13, 1992**

This application, if complete and confirmed by information submitted in the monthly log by the thermal treatment facility, constitutes an acceptable form of a soil corrective action plan. The signatures of the individual submitting the request and the authorized thermal treatment unit representative constitute certification that the concentration and the type of contamination in the contaminated soil falls within the criteria established by the MPCA's guidance document "Thermal Treatment of Petroleum Contaminated Soil" (Guidance Document 21) and that the thermal treatment facility is operating in compliance with its Air Quality emission permit.

Mail to: Project Manager **(David Scheer)**
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks & Spills Section
520 Lafayette Rd.
St. Paul, MN 55155
Fax Number: 612-642-0465

Plant Number or Model:
(If portable, separation distance in feet from nearest residence(s):

Contact Name: **Bob Pongoske** Title:
Telephone: **(612)425-3123** Site Telephone:

Air Quality Permit Number: **755A-91-OT-2**

10/13/92
Date

Signature of Authorized Thermal Treatment Unit Representative Accepting Soil

VI. Date treatment will be completed: 10/31/92

VII. Individual Submitting Request:

Company Name: **Dahl & Associates**

Address: **4390 McMenemy St.**

City, State, Zip: **St. Paul, MN 55127**

Contact Name: **R. Jonathan Paetz**

Telephone: **(612) 490-2905**

Signature: R. Jonathan Paetz

Date: **October 13, 1992**

This application, if complete and confirmed by information submitted in the monthly log by the thermal treatment facility, constitutes an acceptable form of a soil corrective action plan. The signatures of the individual submitting the request and the authorized thermal treatment unit representative constitute certification that the concentration and the type of contamination in the contaminated soil falls within the criteria established by the MPCA's guidance document "Thermal Treatment of Petroleum Contaminated Soil" (Guidance Document 21) and that the thermal treatment facility is operating in compliance with its Air Quality emission permit.

Mail to: Project Manager (**David Scheer**)
Minnesota Pollution Control Agency
Hazardous Waste Division
Tanks & Spills Section
520 Lafayette Rd.
St. Paul, MN 55155
Fax Number: 612-642-0465

twin city testing
corporation
662 CROMWELL AVENUE
ST. PAUL, MN 55114
PHONE 612/645-3601

REPORT OF: CHEMICAL ANALYSIS

PROJECT: MN 601

Conoco South Robert
DATE: December 6, 1989

REPORTED TO: Dahl & Associates
Attn: Bob Knowles
4390 McMenemy Drive
St. Paul, MN 55127

COPY

LABORATORY NO. 4410 90-0001

INTRODUCTION

This report presents the results of the analyses of eight soil samples received on October 11, 1989, from a representative of Dahl & Associates. The scope of our work was the determination of total hydrocarbons as gasoline, benzene, toluene, xylenes, and ethyl benzene using gas chromatographic techniques.

SAMPLE IDENTIFICATION

TB-1 - TCT #153912
MW-2 - TCT #153918
MW-3 - TCT #153917
MW-1 - TCT #153919
TB-2 - TCT #153913
TB-3 - TCT #153914
TB-4 - TCT #153915
TB-5 - TCT #153916

METHODOLOGY

Volatiles

Gasoline concentrations were determined using methods similar to EPA Method 8020 with a Tekmar Liquid Sample Concentrator on an HP5890A gas chromatograph equipped with a flame ionization detector. Compounds were identified by column retention time and quantified by peak area comparisons to those of known standards using a VG Laboratory data system.

High Concentration Volatiles

Gasoline concentrations were determined using methods similar to EPA SW-846 Method 5030. A portion of the samples was weighed and extracted with methanol. The extracts were then analyzed with a Tekmar Liquid Sample Concentrator on an HP5890A gas chromatograph equipped with a flame ionization detector. Compounds were identified by column retention time and quantified by peak area comparisons to those of known standards using a VG Laboratory data system.

RESULTS

The results are listed in the following tables.

twin city testing
corporation
662 CROMWELL AVENUE
ST. PAUL, MN 55114
PHONE 612/645-3601

REPORT OF: CHEMICAL ANALYSIS

LABORATORY No. 4410 90-0001

DATE: December 6, 1989

REMARKS

The samples were taken October 9, 1989, 1989. The samples were analyzed October 20, 1989, to October 21, 1989. The samples were consumed in the analyses.

TWIN CITY TESTING CORPORATION

Maureen Murray
Volatiles Group Leader

Chris Bremer, Manager
Chromatography Section

MM/CB/tw

TABLE 1

VOLATILE ANALYSIS

Parameter	MW-1	TB-2	TB-3	MDL (ug/kg)
Total Hydrocarbons as Gasoline	ND	6	ND	1
Benzene	ND	ND	ND	1
Toluene	ND	ND	ND	1
Xylenes	ND	ND	ND	1
Ethyl Benzene	ND	ND	ND	1

All values are in ug/kg. ug/kg is equal to parts-per-billion (ppb).

ND = Not Detected

MDL = Method Detection Limit

Laboratory No. 4410 90-0001

TABLE 1
(Continued)

VOLATILE ANALYSIS

Parameter	TB-4	TB-5	MDL (ug/kg)
Total Hydrocarbons as Gasoline	ND	ND	1
Benzene	ND	ND	1
Toluene	ND	ND	1
Xylenes	ND	ND	1
Ethyl Benzene	ND	ND	1

All values are in ug/kg. ug/kg is equal to parts-per-billion (ppb).

ND = Not Detected

MDL = Method Detection Limit

Laboratory No. 4410 90-0001

TABLE 2

HIGH CONCTRATION VOLATILE ANALYSIS

Parameter	TB-1	MW-2	MW-3	MDL (ug/kg)
Total Hydrocarbons as Gasoline	400,000	1,100,000	740,000	100
Benzene	5,000	8,700	3,200	100
Toluene	17,000	28,000	29,000	100
Xylenes	38,000	140,000	82,000	100
Ethyl Benzene	7,400	23,000	19,000	100

All values are in ug/kg. ug/kg is equal to parts-per-billion (ppb).

MDL = Method Detection Limit

Laboratory No. 4410 90-0001

twin city testing corporation
662 CROMWELL AVENUE
ST. PAUL, MN 55104
PHONE 612/645-3601

SAMPLE IDENTIFICATION

CHAIN-OF-CUSTODY RECORD

Check delivery method:
Samples hand carried from site to lab ☐
Samples shipped from site directly to lab ☐
Shipment method/carrier:
Custody seal #:
Attn:

DES

Project Number: MN-601

Project Name/Client: Dahl + Associates

Samplers: (Signature)

Item No.	Sample Number (Field ID Number)	Date	Time	Sampling Point Description	No. of Containers	MCA	B	D	See "Req for Chem Serv"	X = Susp. Hazard. Mtrl.	Sample Type (water, soil, etc)	Sample Container	Sample Lab Number
1	S-1	10/7/85	NA	TB#1	1	X	X				Soil	1 pt. glass	[illegible]
2	S-2	10/7/85	NA	TB#2	1	X	X				Soil	1 pt. glass	[illegible]
3	S-3	10/7/85	NA	TB#3	1	X	X				Soil	1 pt. glass	[illegible]
4	S-4	10/7/85	NA	TB#4	1	X	X				Soil	1 pt. glass	[illegible]
5	S-5	10/7/85	NA	TB#5	1	X	X				Soil	1 pt. glass	[illegible]
6			/										
7	M-1	10/10/85	NA	MW#3	1	X	X				Soil	1 pt. glass	F73.97
8	M-2	10/10/85	NA	MW#2	1	X	X				Soil	1 pt. glass	F73.98
9	M-3	10/10/85	NA	MW#1	1	X	X				Soil	1 pt. glass	F73.99
10													
11													
12													
13													
14													
15													
16													

Remarks:

Packed/Relinquished by: (Signature) — Date/Time: 10/18/85 11:30 — Item Numbers: — Received by: (Signature) — Date/Time:

Relinquished by: (Signature) — Date/Time: — Item Numbers: 1-5, 7-9 — Received by: (Signature) [Laboratory Personnel] — Date/Time: 10/18/85

Disposed of by: (Signature) — Items — Date/Time

Laboratory Receiving Notes:
Custody seal intact? NA
Temperature of shipping container: NA
Sample Condition: OK
Laboratory Invoice Number: AMG 75-0001

Send Lab Results To:

Comments:

Chain-of-Custody Record Number
TCT № 15041

C-813(4/88)
Copies: White - File (initial)
Yellow - Chemistry
Pi [illegible] (cor