

# 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

RECEIVED  
OCT 15 1992  
MPCA, HAZARDOUS  
WASTE DIVISION

Dear Mr. Scheer:

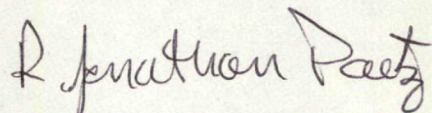
RE: Thermal Treatment Permit, Former Conoco Store #23034, 1126 South Robert Street, West St. Paul, Minnesota. LEAK #00000858

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  
Project Manager

rjp

enclosures

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

# DAHL

& ASSOCIATES, INC.

Environmental Consultants, Contractors & Engineers

COPY

October 13, 1992

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

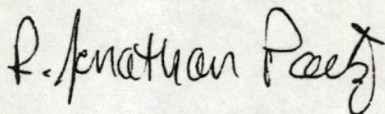
Dear Mr. Hove:

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  
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)

**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:

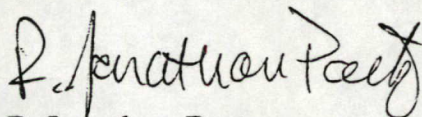
**RE: Thermal Treatment Permit, Former Conoco Store #23034, 1126 South Robert Street, West St. Paul, Minnesota. LEAK #00000858**

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  
Project Manager

RJP/pc

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

**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)

|                                                  |             |
|--------------------------------------------------|-------------|
|                                                  | <b>MW-3</b> |
| Benzene                                          | <b>3.2</b>  |
| Toluene                                          | <b>29</b>   |
| Ethyl Benzene                                    | <b>19</b>   |
| Xylene                                           | <b>82</b>   |
| Total Lead                                       |             |
| Total Hydrocarbons<br>as Fuel Oil or<br>Gasoline | <b>740</b>  |

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:

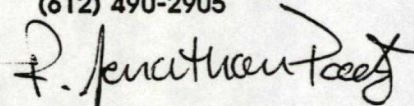
Air Quality Permit Number: **785A-91-OT-2**

\_\_\_\_\_ 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:   
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.

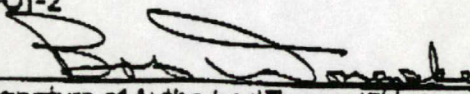
Mail to: **Project Manager (David Scheer)**  
Minnesota Pollution Control Agency  
Hazardous Waste Division  
Tanks & Spills Section  
520 Lafayette Rd.  
St. Paul, MN 55155  
Fax Number: 612-642-0465

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

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

Air Quality Permit Number: 785A-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:

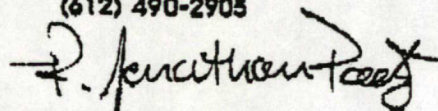
Company Name: Dahl & Associates

Address: 4390 McMenemy St.

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

Contact Name: R. Jonathan Paetz

Telephone: (612) 490-2905

Signature: 

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 | TB-2 - TCT #153913 |
| MW-2 - TCT #153918 | TB-3 - TCT #153914 |
| MW-3 - TCT #153917 | TB-4 - TCT #153915 |
| MW-1 - TCT #153919 | 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

PAGE: 2

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*  
Maureen Murray  
Volatiles Group Leader

*Chris Bremer*  
Chris Bremer, Manager  
Chromatography Section

MM/CB/tw

TABLE 1

VOLATILE ANALYSIS

| <u>Parameter</u>                  | <u>MW-1</u> | <u>TB-2</u> | <u>TB-3</u> | <u>MDL (ug/kg)</u> |
|-----------------------------------|-------------|-------------|-------------|--------------------|
| Total Hydrocarbons<br>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

| <u>Parameter</u>                  | <u>TB-4</u> | <u>TB-5</u> | <u>MDL (ug/kg)</u> |
|-----------------------------------|-------------|-------------|--------------------|
| Total Hydrocarbons<br>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 CONCENTRATION VOLATILE ANALYSIS

| <u>Parameter</u>                  | <u>TB-1</u> | <u>MW-2</u> | <u>MW-3</u> | <u>MDL (ug/kg)</u> |
|-----------------------------------|-------------|-------------|-------------|--------------------|
| Total Hydrocarbons<br>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

**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 |                                 | Project Name/Client |      |                            | No. of Containers | Analyses Required |   |   |                                                   | Sample Type (water, soil, etc) | Sample Container | Remarks | Sample Lab Number |
|----------------|---------------------------------|---------------------|------|----------------------------|-------------------|-------------------|---|---|---------------------------------------------------|--------------------------------|------------------|---------|-------------------|
| MN-6017        |                                 | Dohi & Associates   |      |                            |                   | MCA               | B | D | See "Req for Chem Serv"<br>X = Susp. Hazard. Mat. |                                |                  |         |                   |
| Item No.       | Sample Number (Field ID Number) | Date                | Time | Sampling Point Description |                   |                   |   |   |                                                   |                                |                  |         |                   |
| 1              | S-1                             | 10/7/89             | NA   | TB#1                       | 1                 | X                 | X |   |                                                   | Soil                           | 1 pt. glass      | 153 711 |                   |
| 2              | S-2                             | 10/7/89             | NA   | TB#2                       | 1                 | X                 | X |   |                                                   | Soil                           | 1 pt. glass      | 153 712 |                   |
| 3              | S-3                             | 10/7/89             | NA   | TB#3                       | 1                 | X                 | X |   |                                                   | Soil                           | 1 pt. glass      | 153 713 |                   |
| 4              | S-4                             | 10/7/89             | NA   | TB#4                       | 1                 | X                 | X |   |                                                   | Soil                           | 1 pt. glass      | 153 714 |                   |
| 5              | S-5                             | 10/7/89             | NA   | TB#5                       | 1                 | X                 | X |   |                                                   | Soil                           | 1 pt. glass      | 153 715 |                   |
| 6              |                                 |                     |      |                            |                   |                   |   |   |                                                   |                                |                  |         |                   |
| 7              | M-1                             | 10/10/89            | NA   | MW#3                       | 1                 | X                 | X |   |                                                   | Soil                           | 1 pt. glass      | 153 717 |                   |
| 8              | M-2                             | 10/10/89            | NA   | MW#2                       | 1                 | X                 | X |   |                                                   | Soil                           | 1 pt. glass      | 153 718 |                   |
| 9              | M-3                             | 10/12/89            | NA   | MW#1                       | 1                 | X                 | X |   |                                                   | Soil                           | 1 pt. glass      | 153 719 |                   |
| 10             |                                 |                     |      |                            |                   |                   |   |   |                                                   |                                |                  |         |                   |
| 11             |                                 |                     |      |                            |                   |                   |   |   |                                                   |                                |                  |         |                   |
| 12             |                                 |                     |      |                            |                   |                   |   |   |                                                   |                                |                  |         |                   |
| 13             |                                 |                     |      |                            |                   |                   |   |   |                                                   |                                |                  |         |                   |
| 14             |                                 |                     |      |                            |                   |                   |   |   |                                                   |                                |                  |         |                   |
| 15             |                                 |                     |      |                            |                   |                   |   |   |                                                   |                                |                  |         |                   |
| 16             |                                 |                     |      |                            |                   |                   |   |   |                                                   |                                |                  |         |                   |

|                                     |       |                |                                                 |                                                    |                                                              |
|-------------------------------------|-------|----------------|-------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------|
| Packed/Relinquished by: (Signature) |       | Date/Time      | Item Numbers:                                   | Received by: (Signature)                           | Date/Time                                                    |
| Relinquished by: (Signature)        |       | 10/11/89 11:21 | 1-5, 7-9                                        | Received by: (Signature)<br>[Laboratory Personnel] | 10/11/89 11:21                                               |
| Disposed of by: (Signature)         | Items | Date/Time      | Laboratory Receiving Notes:                     |                                                    | <b>Chain-of-Custody Record Number</b><br><b>TCT No 15041</b> |
| Send Lab Results To:                |       |                | Custody seal intact? <i>NA</i>                  |                                                    |                                                              |
| Comments:                           |       |                | Temperature of shipping container: <i>NA</i>    |                                                    |                                                              |
|                                     |       |                | Sample Condition: <i>NA</i>                     |                                                    |                                                              |
|                                     |       |                | Laboratory Invoice Number: <i>4116 71 - 001</i> |                                                    |                                                              |