

DAHL

& ASSOCIATES, INC.

Environmental Consultants, Contractors & Engineers

February 26, 1996

RECEIVED

FEB 29 1996

MPCA, HAZARDOUS
WASTE DIVISION

Ms. Cathy Malave
Project Manager
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155

Dear Ms. Malave:

**RE: Proposed Remediation System Upgrade, Former Conoco Store #23034, 1126
South Robert, West St. Paul, Minnesota, LEAK#00000858**

In response to your letter dated January 2, 1996, Dahl & Associates, Inc. (DAHL) recommends the following modifications be incorporated into the remediation system at the above referenced site:

- ◆ Although active remediation is warranted in the vicinity of the recovery well, pump and treat activities should cease. DAHL is recommending the installation of four groundwater vents (air sparging structures) as an alternative technology in this area. The structures will be installed near or between existing soil ventilation structures to assure capture of vapors being generated during sparging activities. The recovery well is vacuum enhanced and will also provide an additional soil vapor ventilation point in this area. Enclosed is a map of the proposed location of the four groundwater vents (GWV's) in this area.
- ◆ DAHL is also recommending modifications in the vicinity of GWV-1, on the west side of the site. This was the former dispenser island area; it was not fully investigated until system installation when elevated petroleum hydrocarbons were detected and GWV-1 was installed. However, to enhance remedial activities in this area, DAHL is recommending two additional GWV's be installed and that soil vapor probes (SVP) 1, 2, and 3 be manifolded to the existing soil ventilation system. These modifications were discussed in a telephone conversation between Mr. Dave Scheer (MPCA) and me on December 7, 1995. The enclosed map illustrates the proposed locations of the GWV's.

The proposed upgrade activities will take approximately two weeks to complete. Upon completion, a pilot study can be conducted. Air samples will be collected at 12 hours, 7 and 14 days to assure that significant emission rates (SER's) are not being exceeded. Monthly site visits will then be conducted to monitor the performance of the system. A



Ms. Catherine Malave

February 27, 1996

Page 2

soil ventilation system effluent sample and groundwater samples from the monitoring wells will be collected quarterly for benzene, ethyl benzene, toluene, xylene (BETX), methyl tertiary butyl ether (MTBE - groundwater), and gasoline range organics (GRO).

Pending approval of the proposed upgrade, installation activities can begin to be coordinated immediately.

If you would like to discuss this proposal in more detail, please contact me at your convenience. DAHL will continue with the current monitoring schedule unless directed otherwise by the MPCA. On behalf of Conoco Inc., thank you for your consideration of this request.

Sincerely,

DAHL & ASSOCIATES, INC.



Mike Watson
Project Manager

MPW

enclosure

cc: Mr. Mark Silverstone, Conoco Inc.

DAIRY QUEEN

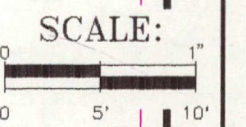
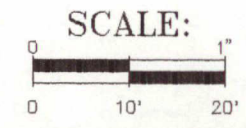
NORTH



EXPLANATION

NOTE :
This drawing (including property lines, structures, and locations of buried utilities) is not exact. For precise locations, consult a registered land surveyor and appropriate utility company.

- ⊙ MW- MONITORING WELL
 - ⊠ RW- RECOVERY WELL
 - * SW- SOIL VAPOR VENT
 - ⊕ SVP- SOIL VAPOR PROBE
 - ⊙ GWV- EXISTING GROUNDWATER VENT
 - ⊙ GWV- PROPOSED GROUNDWATER VENT
-
- UTILITY POLE
 - E — ELECTRIC
 - T — TELEPHONE LINE
 - ST — STORM SEWER
 - SS — SANITARY SEWER
 - W — WATER
 - G — GAS



BUTLER AVENUE

SOUTH ROBERT STREET

FORMER CONOCO STORE #23034

NANCY RADDATZ DANCE

SYSTEMS BUILDING

SEE ENLARGED PLAN

DTECO 13-16'

Not any more

SWV are all trenched in and operational

PROPOSED SYSTEM UPGRADE

DAHL
& Associates, Inc.
Environmental Consultants, Contractors & Engineers

Offices: Santa Barbara, CA - Bettendorf, IA - Ann Arbor, MI
St. Paul, MN - Ponca City, OK - Tulsa, OK - Fort Worth, TX

S. ROBERT STREET MINNESOTA
WEST ST. PAUL

DAHL STD NO: VEMN0601-B-00-B

PLOT SCALE 1" = 20'

AutoCAD FILE NAME 0601-16F

PLOT DATE 02/14/96

DATE DRAWN	01/30/96
DRAWN BY	K. Pageler
REVISION DATE	
DRAWING NUMBER	B-16-F
PROJECT NUMBER	VEMN0601
FIGURE NUMBER	