



Roy F. Weston, Inc.  
1400 Weston Way  
P.O. Box 2653  
West Chester, Pennsylvania 19380  
610-701-3000 • Fax 610-701-3186  
www.rfweston.com

Gmm

bps

RECEIVED

May 4, 2001

MAY 7 2001

NYSDEC - REG. 9  
FOIL  
☒ REL ☐ UNREL

Mr. Glenn May  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 14203

Re: Initial Progress Report - Period Ending March 31, 2001  
3M Tonawanda, New York Facility  
Order on Consent # B9-0369-91-04, Site Code #915148

Dear Mr. May:

In accordance with the referenced Order on Consent (Order) and at 3M's direction, I am submitting the initial progress report for the 3M Tonawanda, New York, facility, period ending March 31, 2001. As required under the Order, the next progress report will be submitted to the New York State Department of Environmental Conservation in October 2001 and cover the six-month period ending September 30, 2001. If you have any comments or questions, please call us.

Sincerely,

Thomas A. Drew, P.G.  
Principal Project Manager

cc: Division of Environmental Remediation, Albany (w/o enclosure)  
Director, Bureau of Environmental Exposure Investigation, Troy (w/o enclosure)  
Division of Environmental Enforcement, Buffalo (w/o enclosure)  
C. O'Connor, New York State Department of Health, Buffalo (w/enclosure)  
T. Marks, 3M (w/enclosure)  
G. Stubbs, 3M (w/enclosure)





RECEIVED

**INITIAL PROGRESS REPORT**

MAY 7 2001

NYSDEC - REG. 9  
FOIL  
REL UNREL

**Site Name and Location:** 3M Facility, Tonawanda, New York

**Registry Number:** 915148

**Order on Consent:** B9-0369-91-04

**3M Project Contacts:** Tim Marks (3M Corporate)  
Greg Stubbs (3M Tonawanda)

**NYSDEC Project Lead:** Glenn May

**Reporting Period:** Initial Reporting Period Ending March 31, 2001

**Background**

The New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) (Registry No. 915148) for the Minnesota Mining and Manufacturing Company (3M) facility in Tonawanda, New York. This ROD presents the selected remedial action for the Tonawanda facility based on the site's Administrative Record and public input. Following ROD issuance, the NYSDEC reclassified the 3M Tonawanda site from "Class 3 – Does not present a significant threat to the public health or environment – action may be deferred", to "Class 4 – Site properly closed – requires continued management." 3M was notified of the site's reclassification in correspondence from the NYSDEC (Attachment A).

3M is implementing the selected ROD remedy, No Further Action with Monitoring, under an Order on Consent (Index # B9-0369-91-04) (Order) according to the NYSDEC-approved Operation and Maintenance Work Plan (O&M Work Plan), which was made part of the Order. The O&M Work Plan calls for:

- Filing a Declaration of Covenants and Restrictions with the property deed at the Erie County Clerk's Office.
- Performing long-term groundwater monitoring. Involves semiannual sampling of site monitor wells MW-1, MW-2, MW-3, and MW-4 and annual sampling of the two site lysimeters, LY-1 and LY-2, with groundwater samples analyzed for CS<sub>2</sub>.



- Inspecting the completed interim remedial measures (IRMs)(includes the CS<sub>2</sub> tank system, and the catch basin and associated swale) and maintaining the integrity of the IRMs.

Representatives from the NYSDEC, 3M, and WESTON held a project kickoff meeting on 16 November 2000 to review the details of the ensuing O&M operations. This initial progress report provides a summary of the project activities that have occurred from the kickoff meeting through March 31, 2001 (the initial reporting period). In compliance with the Order and agreement reached with the NYSDEC, future progress reports will be submitted to the NYSDEC on a semiannual basis (i.e. by October 31 and April 30 of each year).

### **1.0 Summary of Activities Performed During Initial Reporting Period**

The following is a summary of activities performed by 3M during the initial reporting period:

- A fully executed Declaration of Covenants and Restrictions, signed by 3M, was filed with the Erie County Clerk's Office on March 20, 2001 (recorded in Deed Book 10978 at page 3905&c). Pursuant to Order requirements, this document provides notice that the property is subject to the provisions of the above noted Order and also prohibits the use of a portion of the 3M property for residential purposes. A copy of the Declaration of Covenants and Restrictions is provided in Attachment B.
- Daily inspections of the CS<sub>2</sub> tank/secondary containment system and associated truck/rail unloading stations were conducted for evidence of spills, leaks, unpermitted discharges of water containing CS<sub>2</sub>, and maintenance requirements. None of these were observed during the daily inspections.
- Periodic visual inspections were conducted prior to and during the transfer of CS<sub>2</sub> into the storage tank for evidence of malfunctioning equipment. Some deficiencies were noted and corrective actions taken as summarized in Section 2.0.
- Maintained functional use of catch basins, however surrounding area has been disturbed from ongoing facility construction activities.
- Site groundwater monitoring was conducted on January 19, 2001 in accordance with procedures specified in the O&M Plan. The monitoring results are summarized in Section 3.0.

## 2.0 CS<sub>2</sub> Tank System Deficiencies Identified by 3M and Corrective Actions Taken

- During a periodic inspection of transfer operations on December 28, 2000, a small CS<sub>2</sub> leak was observed in the transfer pipe from the carbon adsorption system at the connection to the CS<sub>2</sub> storage tank. The cause was corrosion of the pipe. The corroded pipe was replaced.
- During a periodic inspection of transfer operations on March 9, 2001, a small CS<sub>2</sub> leak was observed in the braided connection hose between the unloading pipe and the rail car. The braided hose was replaced with a spare hose.

Both CS<sub>2</sub> leaks were very small quantity releases to the secondary concrete containment system.

## 3.0 Groundwater Monitoring Results

### Summary of Carbon Disulfide Groundwater Analytical Results

Sample ID						
Date	MW-01	MW-02	MW-03	MW-04	LY-01	LY-02
1/19/01	ND	ND	ND	ND	NS	NS

Notes: ND – Not detected. The reporting limit for CS<sub>2</sub> is 5 µg/L.  
NS – Not sampled.

As indicated in the above table, CS<sub>2</sub> was not detected in the groundwater samples collected from site monitor wells MW-01 through MW-04 in January 2001. Additionally, CS<sub>2</sub> was not detected in the field blank or trip blank and there were no data quality issues. A copy of the analytical data package is provided in Attachment C.

The groundwater samples were split with the NYSDEC. CS<sub>2</sub> was not detected in the split samples.

Pursuant to agreement reached with NYSDEC, annual sampling of the site lysimeters (LY-01 and LY-02) will be performed during the next round of groundwater sampling.

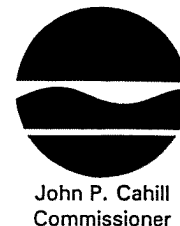
#### **4.0 Activities Planned for the Next Reporting Period**

The activities planned for the next reporting period (April 1 through September 30, 2001) include:

- Daily and periodic inspections of the CS<sub>2</sub> tank system (includes the containment system and unloading stations).
- Maintenance of the drainage swale, catch basins, and CS<sub>2</sub> tank system, as needed. Regrade and revegetate disturbed areas of the drainage swale provided that facility construction activities are complete.
- Annual inspection of the CS<sub>2</sub> tank system and catch basin/surrounding area, and conduct of a regulatory compliance review pursuant to Order requirements. 3M will notify NYSDEC at least 10 days in advance of conducting the annual field inspection.
- Collection of groundwater samples from monitor wells MW-01 through MW-04 and lysimeters LY-01 and LY-02 for CS<sub>2</sub> analysis. NYSDEC will be notified at least 10 days in advance of sampling commencement.

**ATTACHMENT A**  
**SITE RECLASSIFICATION**

**New York State Department of Environmental Conservation**  
**Division of Environmental Remediation**  
**Bureau of Hazardous Site Control, Room 252**  
50 Wolf Road, Albany, New York 12233-7010  
Phone: (518) 457-8807 FAX: (518) 457-8989



**MAR 31 1999**

3M O-Cel-O Sponge Co.  
305 Sawyer Avenue  
Tonawanda, NY 14150

Dear Sir/Madam:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (NYSDEC) must maintain a Registry of all inactive disposal sites suspected or known to contain hazardous waste. The ECL also mandates that this Department notify the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites as to changes in site classification.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of change in the classification of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

DEC Site No.: 915148  
Site Name: 3M O-Cel-O Sponge Site  
Site Address: 305 Sawyer Avenue, Tonawanda, NY 14150

Classification change from 3 to 4

The reason for the change is as follows:

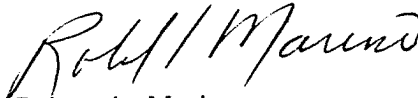
- Although contaminated subsurface soils remain on site, the Interim Remedial Measure (IRMs) have adequately addressed the significant threat originally posed by hazardous waste at the site. A No Further Action Record of Decision (ROD) that requires long term groundwater monitoring and maintenance of the IRMs has been issued for this site.

Enclosed is a copy of the New York State Department of Environmental Conservation, Division of Environmental Remediation, Inactive Hazardous Waste Disposal Site Report form as it appears in the Registry and Annual Report, and an explanation of the site classifications. The Law allows the owner and/or operator of a site listed in the Registry to petition the Commissioner of the New York State Department of Environmental Conservation for deletion of such site, modification of site classification, or modification of any information regarding such site, by submitting a written statement setting forth the grounds of the petition. Such petition may be addressed to:

John P. Cahill  
Commissioner  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, New York 12233-0001

For additional information, please contact me at (518) 457-0747.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert L. Marino". The signature is fluid and cursive, with the first name "Robert" and last name "Marino" clearly distinguishable.

Robert L. Marino  
Chief  
Site Control Section  
Bureau of Hazardous Site Control  
Division of Environmental Remediation

Enclosures



NEW YORK ST. DEPARTMENT OF ENVIRONMENTAL CON VATION  
Division of Hazardous Waste Remediation  
**Inactive Hazardous Waste Disposal Report**

Site Name: O-Cel-O Sponge Plant	Site Code: 915148
Class Code: 4	EPA Id:
Region: 9	County: Erie
Address: 305 Sawyer Avenue	City: Tonawanda
Latitude: 42 58' 34"	Longitude: 78 55' 3"
Site Type: Dump	Estimated Size: < 1 Acres

Site Owner / Operator Information:		
Current Owner(s) Name:	3M, O-Cel-O Sponge Co.	
Current Owner(s) Address:	305 Sawyer Ave	Tonawanda NY 141505102
Owner(s) during disposal:	O-Cel-O Sponge Co., Div. of Gen. Mills	
Operator(s) during disposal:	O-Cel-O Sponge Co., Div. of Gen. Mills	
Stated Operator(s) Address:	305 Sawyer Ave.	Tonawanda NY
Hazardous Waste Disposal Period:	From 1950's	To Present

**Site Description:**

For at least 30 years, during routine transfers from railroad tank cars to a 16,000 gallon above ground storage tank, carbon disulfide had spilled into a drainage swale and leached into the surrounding soils. Carbon disulfide in these soils was first observed in the fall of 1988 during the repair of the concrete dike surrounding the storage tank. These repairs involved chipping spalled concrete with pneumatic jackhammers to establish sound areas where new cement grout could be placed. During this jackhammering, ignition of the carbon disulfide materials was noted. In 1991 and 1992 some of the soils contaminated with carbon disulfide were excavated. Because two confirmatory samples contained carbon disulfide at significant concentrations (390 and 590 ppm, respectively), remedial activities were halted and a Supplemental Site Characterization study was implemented by O-Cel-O and submitted to the Department. The PRP subsequently signed an Order on Consent for a Remedial Investigation/Feasibility Study (RI/FS) and Interim Remedial Measures.

The RI, FS and IRM activities have been completed. The RI, FS and IRM reports have been submitted to the Department and approved. Based upon the success of the IRMs the RI concluded that the IRMs have adequately addressed the significant threat originally posed by hazardous waste at the site. The IRMs undertaken at this site included: (1) installation of a new carbon disulfide storage tank system; (2) closure of the former carbon disulfide storage tank; (3) Removal of approximately 300 cubic yards of carbon disulfide contaminated soil from the drainage swale; and (4) Upgrading of the former drainage swale to reduce infiltration and promote more effective storm water management. A "No Further Action" ROD was executed for this site in March 1999. Long-term groundwater monitoring and maintenance of the IRMs will be required to ensure that human health and the environment remain adequately protected.

**Confirmed Hazardous Waste Disposal:**

Carbon Disulfide (F005)

**Quantity:**

Unknown

Analytical Data Available for:	Groundwater	Surface Water	Soil
Applicable Standards Exceeded in:	Groundwater		
Geotechnical Information:		Depth to	
Soil/Rock Type: dense silty clay, reddish brown, over shale bedrock		Groundwater:	approx. 5 ft.
Legal Action: Type: State Consent Order		Status:	Order Signed
Remedial Action: Complete		Nature of action:	Soil Removal

**Assessment of Environmental Problems:**

Due to the effectiveness of the completed IRMs, future environmental impacts associated with this site are not expected.

**Assessment of Health Problems:**

Exposures by direct contact or inhalation are not expected because public access is restricted at this active facility and the remaining contamination is well below the ground surface. Exposures via drinking water are not expected because the area is served by public water.

THE FOLLOWING ARE THE PRIORITY AND CLASSIFICATION CODES ASSIGNED TO ALL  
INACTIVE HAZARDOUS WASTE SITES IN NEW YORK STATE

- 1 - Causing or presenting an imminent danger of causing irreversible or irreparable damage to the public health or environment - immediate action required.
- 2 - Significant threat to the public health or environment - action required.
- 2a - Temporary classification assigned to sites that have inadequate and/or insufficient data for inclusion in any of the other classifications.
- 3 - Does not present a significant threat to the public health or environment - action may be deferred.
- 4 - Site properly closed - requires continued management.
- 5 - Site properly closed, no evidence of present or potential adverse impact - no further action required.
- D1 - No hazardous waste disposal has been documented.
- D2 - Remedial construction actions and/or monitoring programs have been completed and approved by NYSDEC and all hazardous wastes was removed.
- D3 - a) Site identification numbers have been consolidated; or  
b) Sites were numbered incorrectly; or  
c) Sites were added in error and subsequently removed.

**ATTACHMENT B**

**DECLARATION OF COVENANTS AND RESTRICTIONS**

## DECLARATION OF COVENANTS AND RESTRICTIONS

THIS DECLARATION dated as of February 21, 2001, by Minnesota Mining and Manufacturing Company, a Delaware Corporation (Declarant);

### Recitals:

WHEREAS, Declarant is the owner of certain real property locally known as 305 Sawyer Avenue, Tonawanda, Erie County, New York and legally described on Exhibit "A" (Property) attached hereto and made a part hereof; and

WHEREAS, the Property is subject to the provisions of a certain Order on Consent dated March 27, 2000 (Index No. B9-0369-91-04), between the New York State Department of Environmental Conservation and Declarant; the restrictions are specifically limited to that portion of the property indicated on the drawing attached hereto as Exhibit "B" (Restricted Property);

WHEREAS, the Declarant requires that the Restricted Property be made subject to certain restrictions more fully set forth herein.

### Covenants and Restrictions:

NOW, THEREFORE, in consideration of the foregoing premises, Declarant hereby declares the following:

1. Residential use of Restricted Property by the Declarant or other corporations or individuals is prohibited;
2. The provisions of this Declaration shall run with the Property and shall be binding upon Declarant and all others who may acquire an interest in the Property.

IN WITNESS WHEREOF, Declarant has executed this Declaration as of the date first above written.

MINNESOTA MINING AND  
MANUFACTURING COMPANY

By: Ronald R. Belschner 2/21/01  
Its Vice President - Ronald R. Belschner

By: Gregg M. Larson 2/21/01  
Its Assistant Secretary - Gregg M. Larson

FILED

MAR 20 2001

ERIE COUNTY  
CLERK'S OFFICE

STATE OF MINNESOTA )

COUNTY OF RAMSEY )

On this 21st day of February, 2001, before me, a  
Notary Public within and for said County, personally appeared  
Ronald R. Belschner and Gregg M. Larson

to me known, who being by me duly sworn, did say that they are the Vice President and  
Assistant Secretary, respectively, of Minnesota Mining and Manufacturing Company  
named in the foregoing instrument and that the seal affixed to said instrument is the  
corporate seal of said corporation, and that said instrument was signed and sealed in  
behalf of said corporation by authority of its Board of Directors, and said

Ronald R. Belschner and Gregg M. Larson  
acknowledged said instrument to be the free act and deed of said corporation.

*Roseann C. David*  
Notary Public

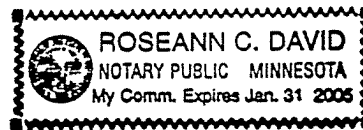


EXHIBIT 'A'

Legal Description

305 Sawyer Avenue, Tonawanda, New York

## EXHIBIT A

### LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Tonawanda, County of Erie and State of New York, being part of Lot No. 99 of the New York State Reservation, bounded and described as follows:

BEGINNING at the intersection of the southeasterly line of lands conveyed to the Niagara Falls Power Company by deed recorded in the Erie County Clerk's Office in Liber 1636 of Deeds at page 274 with the southwesterly line of lands conveyed to General Mills, Inc. by deed recorded in the Erie County Clerk's Office in Liber 5223 of Deeds at page 251; thence southeasterly along the southwesterly line of lands so conveyed, 393.20 feet to a point of curve; thence continuing along the southwesterly line of lands so conveyed southeasterly along a curve having a radius of 375 feet, an arc distance of 589.05 feet to a point in the south line of said Lot No. 99, which said line is tangent to said curve; thence westerly along said south line of Lot No. 99, 616.66 feet to a point therein, 2224.14 feet easterly from the east line of River Road; thence northerly along a line at right angles to said south line of Lot No. 99, 786.79 feet to the southeasterly line of lands of said Niagara Falls Power Company; thence easterly along the southeasterly line of said lands, 242.27 feet to the southwest line of lands conveyed to General Mills, Inc., as aforesaid, the point of beginning.

TOGETHER with the right, in so far as they pertain to the premises hereby conveyed, to use in common with The Acheson Graphite Co., its successors and assigns all of the rights, benefits and easements subject to all of the limitations therein contained and described in deed from Acheson Graphite Company to the Niagara Falls Power Company recorded on May 9, 1922 in Liber 1636 of Deeds at page 274.

ALSO ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Tonawanda, County of Erie and State of New York, being part of Lot No. 99 of the New York State Reservation. bounded and described as follows:

BEGINNING in the southerly line of Niagara Falls Power Company's right of way at the point of intersection of said right of way line with the easterly line of the lands now or formerly owned by Buffalo Wash Tray Works, Inc.; running thence southerly along the east line of lands of the Buffalo Wash Tray Works, Inc., aforesaid, 392.02 feet to a point of curve; thence continuing along the easterly line of land of the Buffalo Wash Tray Works, Inc. southeasterly along a curve having a radius of 375 feet, an arc distance of 589.05 feet to a point in the south line of said Lot No. 99, which said line is tangent to said curve; running thence easterly along the south line of said Lot No. 99, 497.17 feet; running thence northerly on a line drawn at right angles to the south line of said Lot No. 99, 699.33 feet to the southerly line of Niagara Falls Power Company's right of way; and running thence westerly along the southerly line of said Niagara Falls Power Company's right of way, 874.80 feet to the point or place of beginning, containing 14 acres of land, more or less.

TOGETHER with all the rights to cross the said lands of Niagara Falls Power Company lying between the premises above described and Sawyer Avenue reserved and set forth in a deed from Wonalancet Company to said Niagara Falls Power Company dated August 15, 1921 and recorded in the Erie County Clerk's Office in Liber 1544 of Deeds at page 551 on August 22, 1921.

EXHIBIT "B"

Restricted Property



# EXHIBIT B

RESTRICTED PROPERTY

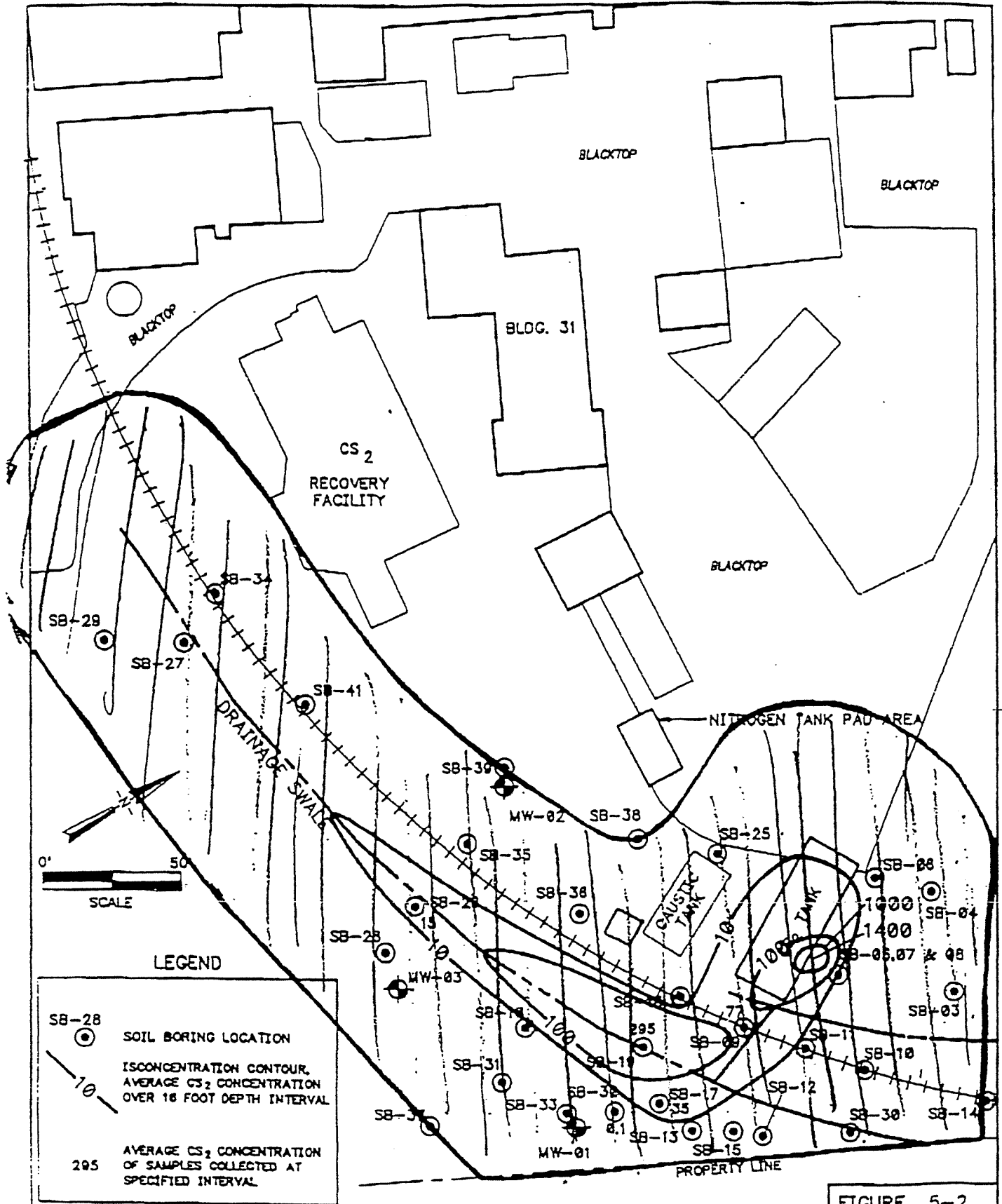


FIGURE 5-2

**WESTON**  
MANAGERS DESIGNERS/CONSULTANTS

Three Hawthorn Parkway  
Vernon Hills, Illinois  
60061

ISOCONCENTRATION MAP  
AVERAGE CARBON DISULFIDE CONCENTRATION (mg/kg)  
IN SOILS FROM 683-593 FEET ABOVE MSL  
3M / O-CEL-0  
Tonawanda, New York

**ATTACHMENT C**

**SEMIANNUAL ANALYTICAL DATA PACKAGE  
JANUARY 19, 2001**

**SEVERN**  
**TRENT**  
**SERVICES**

February 14, 2001

Mr. Tom Drew  
Roy F. Weston, Inc.  
1400 Weston Way  
West Chester, PA 19380

**STL Buffalo**  
10 Hazelwood Drive  
Suite 106  
Amherst, NY 14228  
  
Tel: 716 691 2600  
Fax: 716 691 7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Drew:

Please find enclosed analytical results concerning the samples recently submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY95-481  
Project Name: 3M Tonawanda, NY - Semi-Annual Monitoring  
Matrix: Water  
Sample Received: 01/19/01  
Sample Date: 01/19/01

If you have any questions concerning these data, please contact me at (716) 691-2600 and refer to the I.D. number listed below. It has been our pleasure to provide Roy F. Weston, Inc. with environmental testing services. We look forward to serving you in the future.

Sincerely,

STL Buffalo



Mark A. Nemec  
Program Manager

MAN/csm  
Enclosure

I.D. #A01-0561  
#NY1A8679

This report contains 15 pages which are individually numbered.



## ANALYTICAL RESULTS

Prepared for:

STL Buffalo

Roy F. Weston, Inc.  
1400 Weston Way  
West Chester, PA 19380

Prepared by:

STL Buffalo  
10 Hazelwood Drive, Suite 106  
Amherst, NY 14228-2298

METHODOLOGY

The specific methodologies employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following U.S. Environmental Protection Agency references:

- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Third Edition, Update III, December 1996, U.S. Environmental Protection Agency Office of Solid Waste.

COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

The Reporting Limits (RL) for Method 8260 Organic analyses are representative of Laboratory Specific Quantitation Limits.

The cooler was received at a temperature of 2°C.

METHOD 8260

No deviations from protocol that affected the acceptability of the analytical results were encountered during the analytical procedures.

"The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety."

## DATA COMMENT PAGE

### ORGANIC DATA QUALIFIERS

ND or U Indicates compound was analyzed for, but not detected.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

C This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B This flag is used when the analyte is found in the associated blank, as well as in the sample.

E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.

D This flag identifies all compounds identified in an analysis at the secondary dilution factor.

N Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.

P This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the data page and flagged with a "P".

A This flag indicates that a TIC is a suspected aldol-condensation product.

<sup>1</sup> Indicates coelution.

\* Indicates analysis is not within the quality control limits.

### INORGANIC DATA QUALIFIERS

ND or U Indicates element was analyzed for, but not detected. Report with the detection limit value.

J or B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

N Indicates spike sample recovery is not within the quality control limits.

K Indicates the post digestion spike recovery is not within the quality control limits.

S Indicates value determined by the Method of Standard Addition.

M Indicates duplicate injection results exceeded quality control limits.

W Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.

E Indicates a value estimated or not reported due to the presence of interferences.

H Indicates analytical holding time exceedance. The value obtained should be considered an estimate.

\* Indicates analysis is not within the quality control limits.

+ Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

# Sample Data Package

Date: 02/14/2001  
Time: 12:13:48

3M Tonawanda, NY - Semi-Annual Monitoring  
3M Tonawanda, NY - Semi-Annual Monitoring  
METHOD 8260 - CARBON DISULFIDE

Rept: AN0326

Client ID Job No Sample Date	Lab ID	FIELD BLANK A01-0561 01/19/2001	A1056105	MW-01 A01-0561 01/19/2001	A1056101	MW-02 A01-0561 01/19/2001	A1056102	MW-03 A01-0561 01/19/2001	A1056103
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	118	50-200	123	50-200	119	50-200	118	50-200
1,4-Difluorobenzene	%	107	50-200	108	50-200	108	50-200	105	50-200
1,4-Dichlorobenzene-D4	%	118	50-200	119	50-200	114	50-200	120	50-200
Toluene-D8	%	98	83-111	100	83-111	101	83-111	96	83-111
p-Bromofluorobenzene	%	97	71-119	88	71-119	94	71-119	90	71-119
1,2-Dichloroethane-D4	%	94	73-122	91	73-122	90	73-122	95	73-122

Client ID Job No Sample Date	Lab ID	MW-04 A01-0561 01/19/2001	A1056104	MW-04 FD A01-0561 01/19/2001	A1056104FD	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	NA	5.0	NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	121	50-200	121	50-200	NA	50-200	NA	
1,4-Difluorobenzene	%	111	50-200	111	50-200	NA	50-200	NA	
1,4-Dichlorobenzene-D4	%	115	50-200	124	50-200	NA	50-200	NA	
Toluene-D8	%	99	83-111	99	83-111	NA	83-111	NA	
p-Bromofluorobenzene	%	87	71-119	93	71-119	NA	71-119	NA	
1,2-Dichloroethane-D4	%	90	73-122	93	73-122	NA	73-122	NA	

000004

NA = Not Applicable ND = Not Detected

STL Buffalo

# **Chronology and QC Summary Package**



Client ID Job No Sample Date	Lab ID	Units	VBLK69 A01-0561		VBLK74 A01-0561		A1056109			
			Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide		UG/L	ND	5.0	ND	5.0	NA		NA	
IS/SURROGATE(S)										
Chlorobenzene-D5		%	114	50-200	88	50-200	NA		NA	
1,4-Difluorobenzene		%	101	50-200	90	50-200	NA		NA	
1,4-Dichlorobenzene-D4		%	117	50-200	89	50-200	NA		NA	
Toluene-D8		%	101	83-111	96	83-111	NA		NA	
p-Bromofluorobenzene		%	89	71-119	97	71-119	NA		NA	
1,2-Dichloroethane-D4		%	98	73-122	102	73-122	NA		NA	

0000006

Client ID Job No Sample Date	Lab ID	MSB A01-0561		A1056108		MSB A01-0561		A1056110		MW-02 MS A01-0561 01/19/2001		A1056102MS		MW-02 SD A01-0561 01/19/2001		A1056102SD	
		Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide			UG/L	41	5.0			47	5.0	42	5.0			18	5.0		
IS/SURROGATE(S)																	
Chlorobenzene-D5			%	111	50-200	97	50-200	100	50-200	113	50-200		50-200	98	50-200		50-200
1,4-Difluorobenzene			%	110	50-200	102	50-200	102	50-200	109	50-200		50-200	99	50-200		50-200
1,4-Dichlorobenzene-D4			%	97	50-200	106	50-200	99	83-111	101	50-200		50-200	102	50-200		50-200
Toluene-D8			%	106	83-111	86	71-119	101	71-119	107	83-111		83-111	95	83-111		83-111
p-Bromofluorobenzene			%	86	71-119	80	73-122	90	73-122	89	71-119		71-119	96	71-119		71-119
1,2-Dichloroethane-D4			%	80	73-122					82	73-122		73-122	92	73-122		73-122

Date: 02/14/2001  
Time: 12:13:48

3M Tonawanda, NY - Semi-Annual Monitoring  
3M Tonawanda, NY - Semi-Annual Monitoring  
METHOD 8260 - CARBON DISULFIDE

Rept: AN0326

Client ID Job No Sample Date	Lab ID	Units	TRIP BLANK A01-0561 01/19/2001		A1056106					
			Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide		UG/L	ND	5.0	NA		NA		NA	
IS/SURROGATE(S)										
Chlorobenzene-D5		%	123	50-200	NA		NA		NA	
1,4-Difluorobenzene		%	107	50-200	NA		NA		NA	
1,4-Dichlorobenzene-D4		%	120	50-200	NA		NA		NA	
Toluene-D8		%	95	83-111	NA		NA		NA	
p-Bromofluorobenzene		%	91	71-119	NA		NA		NA	
1,2-Dichloroethane-D4		%	95	73-122	NA		NA		NA	

0000008

Date: 02/14/2001  
Time: 12:13:59

ROY F WESTON  
SAMPLE CHRONOLOGY

Rept: AN0374  
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METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	FIELD BLANK A01-0561 A1056105	MW-01 A01-0561 A1056101	MW-02 A01-0561 A1056102	MW-03 A01-0561 A1056103	MW-04 A01-0561 A1056104
Sample Date	01/19/2001 09:00	01/19/2001 09:10	01/19/2001 09:25	01/19/2001 12:00	01/19/2001 11:10
Received Date	01/19/2001 12:40	01/19/2001 12:40	01/19/2001 12:40	01/19/2001 12:40	01/19/2001 12:40
Extraction Date	01/30/2001 21:04	01/30/2001 16:40	01/30/2001 17:18	01/30/2001 19:12	01/30/2001 19:49
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	1.0	1.0	1.0	1.0
Sample wt/vol % Dry	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS

000009

METHOD 8260 - CARBON DISULFIDE

Job No & Lab Sample ID	Client Sample ID	MW-04 FD A01-0561	A1056104FD			
Sample Date	01/19/2001	11:10				
Received Date	01/19/2001	12:40				
Extraction Date	01/30/2001	20:27				
Extraction HT Met?	-					
Analytical HT Met?	YES					
Sample Matrix	WATER					
Dilution Factor	1.0					
Sample wt/vol	0.005	LITERS				
% Dry						

000010

Date: 02/14/2001  
Time: 12:13:59

ROY F WESTON  
QC SAMPLE CHRONOLOGY

Rept: AN0374  
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METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	TRIP BLANK A01-0561 A1056106				
Sample Date Received Date Extraction Date Analysis Date Extraction HT Met? Analytical HT Met? Sample Matrix Dilution Factor Sample wt/vol % Dry	01/19/2001 01/19/2001 12:40 01/30/2001 21:42 - YES WATER 1.0 0.005 LITERS				

000011

Date: 02/14/2001  
Time: 12:13:59

ROY F WESTON  
QC SAMPLE CHRONOLOGY

Rept: AN0374  
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METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	MSB A01-0561 A1056108	MSB A01-0561 A1056110	MW-02 MS A01-0561 A1056102MS	MW-02 SD A01-0561 A1056102SD	
Sample Date Received Date Extraction Date Analysis Date Extraction HT Met? Analytical HT Met? Sample Matrix Dilution Factor Sample wt/vol % Dry	01/30/2001 18:34 - - - - - WATER 1.0 0.005 LITERS	02/02/2001 14:33 - - - - - WATER 1.0 0.005 LITERS	01/19/2001 09:25 01/19/2001 12:40 01/30/2001 17:56 - - YES WATER 1.0 0.005 LITERS	01/19/2001 09:25 01/19/2001 12:40 02/02/2001 17:42 - - YES WATER 1.0 0.005 LITERS	

000012

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	VBLK69 A01-0561 A1056107	VBLK74 A01-0561 A1056109		
Sample Date Received Date Extraction Date Analysis Date Extraction HT Met? Analytical HT Met? Sample Matrix Dilution Factor Sample wt/vol % Dry	01/30/2001 14:47 - WATER 1.0 0.005 LITERS	02/02/2001 15:11 - WATER 1.0 0.005 LITERS		

000013



# **Chronology and QC Summary Package**

