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November 22, 2004

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

W.O. No. 02181.086.009

Re: Progress Report – May 1, 2004 to October 31, 2004
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 progress report for the 3M Tonawanda, NY facility for the period extending from May 1, 2004 to October 31, 2004. As required under the Order, the next progress report will be submitted to the New York State Department of Environmental Conservation (NYSDEC) in May 2005 and cover the six-month period ending April 30, 2005. This will complete five years of monitoring and reporting under the existing Order. Pursuant to the Order, 3M plans to conduct the 5-year performance evaluation of the implemented remedial action at the Tonawanda facility. The results of this evaluation will be provided to the NYSDEC in May 2005 and include recommendations concerning future site inspections, monitoring and reporting. If you have any comments or questions, please call us.

Very truly yours,

WESTON SOLUTIONS, INC.

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

- c: 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)
- K. Wrich, 3M (w/ enclosure)
- K. Held, 3M (w/ enclosure)



PROGRESS REPORT

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

Registry Number: 915148

Order on Consent: B9-0369-91-04

3M Project Contacts: Kelly Wrich (3M Corporate)
Keith Held (3M Tonawanda)

NYSDEC Project Lead: Glenn May

Reporting Period: May 1, 2004 to October 31, 2004

Background

The New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) (Registry No. 915148) for the 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 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. This was completed and was reported in the initial progress report for the period ending March 31, 2001.
- 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 CS₂.
- Inspecting the completed interim remedial measures (IRMs) (includes the CS₂ tank system, and the catch basin and associated swale) and maintaining the integrity of the IRMs.

This progress report provides a summary of the project activities that have occurred from May 1, 2004 to October 31, 2004.

1.0 Summary of Activities Performed During the Reporting Period

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

- Daily inspections of the CS₂ tank/secondary containment system and associated truck/rail unloading stations were conducted for evidence of spills, leaks and unpermitted discharges of water containing CS₂. None of these were observed during the daily inspections.
- Periodic visual inspections were conducted prior to and during the transfer of CS₂ into the storage tank for evidence of malfunctioning equipment. No deficiencies were noted during the visual inspections.
- Annual inspection of the CS₂ system was conducted on August 5, 2004. The emergency response equipment was also inspected and tested in August 2004, and no deficiencies were noted. Based on the findings of the annual inspection, the CS₂ tank system remains compliant with 6 NYCRR Parts 598 and 599. The Annual Inspection Report was included in the facility's Spill Prevention Report.
- The annual inspection of the catch basins and surrounding area was conducted during this reporting period. Due to site construction activities, the vegetation cover in this area was disturbed. Grading and reseeding of this site area was conducted in September 2004.
- Site groundwater monitoring was conducted on May 26, 2004 in accordance with procedures specified in the O&M Plan. The monitoring results are summarized in Section 3.0.

2.0 CS₂ Tank System Deficiencies Identified by 3M and Corrective Actions Taken

- No CS₂ tank system deficiencies were noted during this reporting period.

3.0 Groundwater Monitoring Results

Summary of Carbon Disulfide Groundwater Analytical Results (mg/L)

Date	Sample ID					
	MW-01	MW-02	MW-03	MW-04	LY-01	LY-02
5/26/04	ND	ND	ND	ND/ND*	NS	NS

Notes: ND – Not detected. The reporting limit for CS₂ is 5 µg/L.

* - Duplicate sample result.

NS - Not Sampled

As indicated in the above table, CS₂ was not detected in the groundwater samples collected from site monitor wells MW-01 through MW-04. Additionally, CS₂ was not detected in the field blank or trip blank. A copy of the analytical data package is provided in Attachment A.

The two site lysimeters were not sampled in May 2004. These lysimeters are sampled annually. Water samples for CS₂ analysis will be collected from the two lysimeters during the next semiannual sampling event in April 2005.

4.0 Activities Planned for the Next Reporting Period

The activities planned for the next reporting period (November 1, 2004 through April 30, 2005) include:

- Daily and periodic inspections of the CS₂ tank system (includes the containment system and unloading stations).
- Maintenance of the drainage swale, catch basins, and CS₂ tank system, as needed.
- Collection of groundwater samples from monitor wells MW-01 through MW-04 and lysimeters LY-01 and LY-02 for CS₂ analysis. The NYSDEC will be notified in advance of sampling. It is tentatively scheduled to occur in April 2005.

**ATTACHMENT A
LABORATORY ANALYTICAL PACKAGE
MAY 2004 SAMPLING EVENT**



STL

STL Buffalo

10 Hazelwood Drive, Suite 106
Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991
www.stl-inc.com

ANALYTICAL REPORT

Job#: A04-5012


STL Project#: NY1A8679

Site Name: 3M Tonawanda, NY - Semi-Annual Monitoring

Task: 3M Tonawanda, NY - Semi-Annual Monitoring

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

STL Buffalo


Mark A. Nenec
Project Manager

06/10/2004

STL Buffalo Current Certifications

STATE	Program	Cert # / Lab ID
A2LA (ISO 17025)	SDWA, CWA, RCRA	0732-01
Arkansas	SDWA, CWA, RCRA, SOIL	03-054-D/88-0686
California	NELAP SDWA, CWA, RCRA	01169CA
Canada	GENERAL	SCC 1007-15/10B
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida	NELAP RCRA	E87672
Georgia	SDWA	956
Illinois	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	CWA, RCRA	036-999-337
New Hampshire	NELAP SDWA, CWA	233701
New Jersey	SDWA, CWA, RCRA, CLP	NY455
New York	NELAP, AIR, SDWA, CWA, RCRA	10026
North Carolina	CWA	411
North Dakota	SDWA, CWA, RCRA	R-176
Oklahoma	CWA, RCRA	9421
Pennsylvania	Env. Lab Reg.	68-281
South Carolina	RCRA	91013
USDA	FOREIGN SOIL PERMIT	S-4650
Virginia	SDWA	278
Washington	CWA	C254
West Virginia	CWA	252
Wisconsin	CWA	998310390
Wyoming UST	UST	NA

SAMPLE SUMMARY

<u>LAB SAMPLE ID</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED</u>		<u>RECEIVED</u>	
		<u>DATE</u>	<u>TIME</u>	<u>DATE</u>	<u>TIME</u>
A4501206	FIELD BLANK	05/26/2004	16:00	05/26/2004	17:20
A4501201	MW-01	05/26/2004	16:45	05/26/2004	17:20
A4501202	MW-02	05/26/2004	15:10	05/26/2004	17:20
A4501203	MW-03	05/26/2004	16:30	05/26/2004	17:20
A4501204	MW-04	05/26/2004	14:15	05/26/2004	17:20
A4501205	MW-04 DUP	05/26/2004	14:15	05/26/2004	17:20
A4501207	TRIP BLANK	05/26/2004		05/26/2004	17:20

METHODS SUMMARY

Job#: A04-5012STL Project#: NY1A8679Site Name: 3M Tonawanda, NY - Semi-Annual Monitoring

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
METHOD 8260 - Carbon Disulfide	SW8463 8260/5ML

References:

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

NON-CONFORMANCE SUMMARY

Job#: A04-5012STL Project#: NY1A8679Site Name: 3M Tonawanda, NY - Semi-Annual MonitoringGeneral Comments

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

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A04-5012

Sample Cooler(s) were received at the following temperature(s); 6.0 °C
All samples were received in good condition.

GC/MS Volatile Data

The requested target analyte list does not include any spiking compounds routinely analyzed. Spike recovery data has not been included in the report.

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 at or above the reporting limit.
- 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.
- 1 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 at or above the reporting limit.
- 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: 06/10/2004
Time: 09:55:18

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

Rept: AN1246

Client ID	Lab ID	FIELD BLANK	MW-01	A4501201	MW-02	A4501202	MW-03	A4501203
Job No	Sample Date	A04-5012	A04-5012	A4501201	A04-5012	A4501202	A04-5012	A4501203
Analyte	Units	Sample Value	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	ND	5.0	ND	5.0	ND	5.0
IS/SURROGATE(S)								
Chlorobenzene-D5	X	73	71	50-200	68	50-200	67	50-200
1,4-Difluorobenzene	X	74	71	50-200	68	50-200	66	50-200
1,4-Dichlorobenzene-D4	X	65	62	50-200	60	50-200	62	50-200
Toluene-D8	X	101	102	77-122	101	77-122	98	77-122
p-Bromofluorobenzene	X	92	93	74-120	91	74-120	89	74-120
1,2-Dichloroethane-D4	X	112	114	73-136	116	73-136	115	73-136

Client ID	Lab ID	MW-04	MW-04 DUP	A4501205	MW-04	A4501205	MW-04	A4501205
Job No	Sample Date	A04-5012	A04-5012	A4501205	A04-5012	A4501205	A04-5012	A4501205
Analyte	Units	Sample Value	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	ND	5.0	ND	5.0	NA	
IS/SURROGATE(S)								
Chlorobenzene-D5	X	63	63	50-200	63	50-200	NA	
1,4-Difluorobenzene	X	63	63	50-200	63	50-200	NA	
1,4-Dichlorobenzene-D4	X	56	56	50-200	56	50-200	NA	
Toluene-D8	X	93	102	77-122	102	77-122	NA	
p-Bromofluorobenzene	X	84	93	74-120	93	74-120	NA	
1,2-Dichloroethane-D4	X	109	119	73-136	119	73-136	NA	

8/17

= Not Applicable ND = Not Detected

Chronology and QC Summary Package

Date: 06/10/2004
Time: 09:55:31

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

Rept: AN1246

Client ID	Job No	Lab ID	WBK34 A04-5012	A4B1059204	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value
Carbon Disulfide	UG/L	ND	5.0	NA	NA	NA	NA	NA	NA	NA
IS/SURROGATE(S)										
Chlorobenzene-D5	X	90	50-200	NA	NA	NA	NA	NA	NA	NA
1,4-Difluorobenzene	X	92	50-200	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene-D4	X	81	50-200	NA	NA	NA	NA	NA	NA	NA
Toluene-D8	X	102	77-122	NA	NA	NA	NA	NA	NA	NA
p-Bromofluorobenzene	X	96	74-120	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane-D4	X	104	73-136	NA	NA	NA	NA	NA	NA	NA

10/17

= Not Applicable ND = Not Detected

STL Buffalo

Date: 06/10/2004
 Time: 09:55:31

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

Rept: AN1246

Client ID	Lab ID	TRIP BLANK	A4501207	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value
Job No	Sample Date	A04-5012	05/26/2004	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value
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	NA	NA	NA	NA	NA	NA
IS/SURROGATE(S)									
Chlorobenzene-D5	X	76	50-200	NA	NA	NA	NA	NA	NA
1,4-Difluorobenzene	X	78	50-200	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene-D4	X	68	50-200	NA	NA	NA	NA	NA	NA
Toluene-D8	X	101	77-122	NA	NA	NA	NA	NA	NA
p-Bromofluorobenzene	X	94	74-120	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane-D4	X	112	73-136	NA	NA	NA	NA	NA	NA

11/17

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	FIELD BLANK A04-5012 A4501206	MW-01 A04-5012 A4501201	MW-02 A04-5012 A4501202	MW-03 A04-5012 A4501203	MW-04 A04-5012 A4501204
Sample Date	05/26/2004 16:00	05/26/2004 16:45	05/26/2004 15:10	05/26/2004 16:30	05/26/2004 14:15
Received Date	05/26/2004 17:20	05/26/2004 17:20	05/26/2004 17:20	05/26/2004 17:20	05/26/2004 17:20
Extraction Date	05/29/2004 01:19	05/29/2004 01:48	05/29/2004 02:17	05/29/2004 02:47	05/29/2004 03:16
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	GW	GW	GW	GW
Dilution Factor	1.0	1.0	1.0	1.0	1.0
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS
% Dry					

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	MW-04 DUP A04-5012 A4501205			
Sample Date	05/26/2004 14:15			
Received Date	05/26/2004 17:20			
Extraction Date	05/29/2004 03:45			
Analysis Date	-			
Extraction HT Met?	YES			
Analytical HT Met?	6W			
Sample Matrix	1.0			
Dilution Factor	0.005			
Sample wt/vol % Dry	LITERS			

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	TRIP BLANK A04-5012 A4501207			
Sample Date	05/26/2004			
Received Date	05/26/2004 17:20			
Extraction Date	05/29/2004 00:50			
Analysis Date	-			
Extraction HT Met?	YES			
Analytical HT Met?	WATER			
Sample Matrix	1.0			
Dilution Factor	0.005			
Sample wt/vol x Dry	LITERS			

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	VBLK34 A04-5012 A481059204			
Sample Date				
Received Date				
Extraction Date				
Analysis Date				
Extraction HT Met?	05/28/2004 23:23			
Analytical HT Met?	-			
Sample Matrix	WATER			
Dilution Factor	1.0			
Sample wt/vol	0.005 LITERS			
X Dry				

Chain of Custody

Chain of Custody Record

STL-4124 (0901)

CS² ONLY
* 5 ppb *



Severn Trent Laboratories, Inc.

Client: 3M Western Solutions
 Address: 3M Western Way
 City: Wchester
 State: PA Zip Code: 19380
 Project Name and Location (State): 3M TONAWANDA
 Contract/Purchase Order/Order No.: 19380

Project Manager: Mark Demec
 Telephone Number (Area Code)/Fax Number: 610/701-7302
 Site Contact: Tom Drew
 Carrier/Waybill Number: Tom Drew

Date: 5/26/04
 Lab Number: 165901
 Page 1 of 1

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix						Containers & Preservatives						Special Instructions/ Conditions of Receipt					
			Ac	Ag	Sd	So	Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc	NHCl							
MW-1	5/26/04	1645	✓									4								
MW-2		1510	✓									4								
MW-3		1630	✓									4								
MW-4		1415	✓									4								
MW-4 Dup		1415	✓									4								
Field Blank		1600	✓									4								
Trip Blank		1200	✓									4								

Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant Poison B Unknown Return To Client Disposal By Lab Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required:
 24 Hours 48 Hours 7 Days 14 Days 21 Days Other _____

QC Requirements (Specify):
 1. Received By: Tom Drew Date: 05/26/04 Time: 1720
 2. Received By: _____ Date: _____ Time: _____
 3. Received By: _____ Date: _____ Time: _____

Comments: 6.02

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy