



Momentive Performance Materials Inc.
260 Hudson River Road
Waterford, NY 12188
momentive.com

**Momentive Performance Materials Silicones, LLC
Waterford, New York**

NYSDEC Part 373 Hazardous Waste Permit Application

EPA ID No. NYD002080034

June, 2007

**Revised
January 25, 2011
December 28, 2011
November 12, 2012**

Volume I



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*Confidential Business Information Documents Available In Volume II

9. Legal Owner (Continued) Address	Street or P. O. Box: Same		
	City, Town, or Village:		
	State:		
	Country:	Zip Code:	

10. Type of Regulated Waste Activity
 Mark "Yes" or "No" for all activities; complete any additional boxes as instructed. (See instructions on pages 18 to 21.)

A. Hazardous Waste Activities
 Complete all parts for 1 through 6.

<p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1. Generator of Hazardous Waste If "Yes", choose only one of the following - a, b, or c.</p> <p><input checked="" type="checkbox"/> a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.) of non-acute hazardous waste; or</p> <p><input type="checkbox"/> b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo.) of non-acute hazardous waste; or</p> <p><input type="checkbox"/> c. CESQG: Less than 100 kg/mo (220 lbs./mo.) of non-acute hazardous waste</p> <p>In addition, indicate other generator activities.</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> d. United States Importer of Hazardous Waste</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> e. Mixed Waste (hazardous and radioactive) Generator</p>	<p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> 2. Transporter of Hazardous Waste</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 3. Treater, Storer, or Disposer of Hazardous Waste (at your site) Note: A hazardous waste permit is required for this activity.</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> 4. Recycler of Hazardous Waste (at your site)</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> 5. Exempt Boiler and/or Industrial Furnace If "Yes", mark each that applies.</p> <p><input type="checkbox"/> a. Small Quantity On-site Burner Exemption</p> <p><input type="checkbox"/> b. Smelting, Melting, and Refining Furnace Exemption</p> <p><input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> 6. Underground Injection Control</p>
---	--

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste (accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste generated and/or accumulated at your site. If "Yes", mark all boxes that apply:

	<u>Generate</u>	<u>Accumulate</u>
a. Batteries	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>
c. Thermostats	<input type="checkbox"/>	<input type="checkbox"/>
d. Lamps	<input type="checkbox"/>	<input type="checkbox"/>
e. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
f. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>

2. Destination Facility for Universal Waste
 Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities
 Mark all boxes that apply.

1. Used Oil Transporter
 If "Yes", mark each that applies.

a. Transporter

b. Transfer Facility

2. Used Oil Processor and/or Re-refiner
 If "Yes", mark each that applies.

a. Processor

b. Re-refiner

3. Off-Specification Used Oil Burner

4. Used Oil Fuel Marketer
 If "Yes", mark each that applies.

a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner

b. Marketer Who First Claims the Used Oil Meets the Specifications

11. Description of Hazardous Wastes (See instructions on page 22.)

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001	D002	D003	D004	D005	D006	D007
D008	D009	D010	D011	D018	D021	D035
F002	F003	F005	F039	U002	U037	U122

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed for waste codes.

B004						

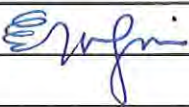
12. Comments (See instructions on page 22.)

Section 10 hazardous waste generation is based upon MPM's 2011 Annual Hazardous Waste Reduction Report, as submitted in 2012.

Section 11 waste codes are based upon waste descriptions in GEN/OFFEROR, Waste Shipped by Waste Code report (Search criteria: Generator equals 'hyd002080034'. Date Shipped is between 01/01/2011 and 11/01/2012).

Section 11.A. and Section 10 include waste codes for wastes generated by non-routine plant operations.

13. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all operator(s) and owner(s) must sign (see 40 CFR 270.10 (b) and 270.11). (See instructions on page 22.)

Signature of operator, owner, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	E. JOSHUA SPAIN, WATERFORD PLANT OPERATIONS MANAGER	02/11/2013

11. Description of Hazardous Wastes (See instructions on page 22.)						
A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed. CONTINUED						
U220						

United States Environmental Protection Agency
HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact (See instructions on page 23)	First Name: Kirsten	MI:	Last Name: Pink											
	Phone Number: (518) 233-3536		Phone Number Extension:											
2. Facility Permit Contact Mailing Address (See instructions on page 23)	Street or P.O. Box: 260 Hudson River Road													
	City, Town, or Village: Waterford													
	State: NY													
	Country: USA	Zip Code: 12188												
3. Operator Mailing Address and Telephone Number (See instructions on page 23)	Street or P.O. Box: Same as Site Contact													
	City, Town, or Village:													
	State:													
	Country:	Zip Code:	Phone Number											
4. Legal Owner Mailing Address and Telephone Number (See instructions on page 23)	Street or P.O. Box: Same as Site Contact													
	City, Town, or Village:													
	State:													
	Country:	Zip Code:	Phone Number											
5. Facility Existence Date (See instructions on page 24)	Facility Existence Date (mm/dd/yyyy): 05/19/1947													
6. Other Environmental Permits (See instructions on page 24)														
A. Permit Type (Enter code)	B. Permit Number										C. Description			
N	N	Y	0	0	0	0	8	6	0	5			New York State SPDES Permit	
E	5	4	1	5	4	0	0	0	0	2	0	35	71	New York State Part 373 HW Permit
E	5	4	1	5	4	0	0	0	0	2	/0	17	43	Title V Air Permit
7. Nature of Business (Provide a brief description; see instructions on page 24)														
Research, develop and manufacture silicones and related materials.														

8. Process Codes and Design Capacities (See Instructions on page 24) - Enter information in the Sections on Form Page 3.

A. PROCESS CODE - Enter the code from the list of process codes in the table below that best describes each process to be used at the facility. Fifteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), enter the process information in Item 9 (including a description).

B. PROCESS DESIGN CAPACITY - For each code entered in Section A, enter the capacity of the process.

- 1. AMOUNT** - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
- 2. UNIT OF MEASURE** - For each amount entered in Section B(1), enter the code in Section B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	<u>Disposal:</u>			<u>Treatment (continued):</u>	
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	Cement Kiln	For T81-T93:
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure in Code Table Below	T86	Blast Furnace	
	<u>Storage:</u>		T87	Smelting, Melting, or Refining Furnace	Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T89	Methane Reforming Furnace	
S03	Waste Pile	Cubic Yards or Cubic Meters	T90	Pulping Liquor Recovery Furnace	
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T91	Combustion Device Used in The Recovery Of Sulfur Values From Spent Sulfuric Acid	
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	T92	Halogen Acid Furnaces	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T93	Other Industrial Furnaces Listed In 40 CFR §260.10	
S99	Other Storage	Any Unit of Measure in Code Table Below	T94	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
	<u>Treatment:</u>			<u>Miscellaneous (Subpart X):</u>	
T01	Tank Treatment	Gallons Per Day; Liters Per Day	X01	Open Burning/Open Detonation	Any Unit of Measure in Code Table Below
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons.....	G	Short Tons Per Hour.....	D	Cubic Yards.....	Y
Gallons Per Hour.....	E	Metric Tons Per Hour.....	W	Cubic Meters.....	C
Gallons Per Day.....	U	Short Tons Per Day.....	N	Acres.....	B
Liters.....	L	Metric Tons Per Day.....	S	Acre-feet.....	A
Liters Per Hour.....	H	Pounds Per Hour.....	J	Hectares.....	Q
Liters Per Day.....	V	Kilograms Per Hour.....	R	Hectare-meter.....	F
		Million Btu Per Hour.....	X	Btu Per Hour.....	I

8. Process Codes and Design Capacities (Continued)

EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number	A. Process Code (From list above)				B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	For Official Use Only					
					(1) Amount (Specify)	(2) Unit of Measure (Enter code)							
X 1	S	0	2		5 3 3 . 7 8 8	G	0 0 1						
1	S	0	1		217800 . 0	G	002						
2	S	0	2		7245 . 0	G	001						
3	S	0	2		5275 . 0	G	001						
4	S	0	2		5275 . 0	G	001						
5	S	0	2		5274 . 0	G	001						
6	S	0	2		7447 . 0	G	001						
7	S	0	2		7447 . 0	G	001						
8	S	0	2		5000 . 0	G	001						
9	S	0	2		10000 . 0	G	001						
1 0	S	0	2		10000 . 0	G	001						
1 1	S	0	2		10000 . 0	G	001						
1 2	S	0	2		20148 . 0	G	001						
1 3	S	0	2		20153 . 0	G	001						
1 4	S	0	2		4950 . 0	G	001						
1 5	S	0	2		6500 . 0	G	001						

NOTE: If you need to list more than 15 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.

9. Other Processes (See instructions on page 25 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes)

Line Number (Enter #s in sequence with Item 8)	A. Process Code (From list above)				B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	D. Description of Process
					(1) Amount (Specify)	(2) Unit of Measure (Enter code)		
X 2	T	0	4		1 0 0 . 0 0 0	U	0 0 1	In-situ Vitrification
2 4	S	9	9		84000 . 0	G	11	Max amount of materials in on-site transfer areas

8. Process Codes and Design Capacities (Continued)										
Line Number	A. Process Code			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	For Official Use Only			
				(1) Amount (Specify)	(2) Unit of Measure (Enter Code)					
1	6	S	0	2	6,423.000	G	1			
1	7	S	0	2	16,500.000	G	1			
1	8	S	0	2	19,344.000	G	1			
1	9	S	0	2	19,344.000	G	1			
2	0	S	0	2	11,000.000	G	1			
2	1	T	0	1	34,000.000	U	1			
2	2	T	0	3	40,000,000	I	1			
2	3	T	0	3	54,700,000	I	1			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages 5a, etc.)													
Line Number	A. EPA Hazardous Waste No. (Enter code)			B. Estimated Annual Quantity of Waste	C. Unit of Measure Code (Enter code)	D. PROCESSES							
	(1) PROCESS CODES (Enter code)						(2) PROCESS DESCRIPTION						
x 1	D	0	0	1	8	T	S	0	1	T	0	3	Acetoxyl Catalyst
x 2	D	0	0	3									
x 3	F	0	0	3									
x 4	F	0	0	5									
x 5	D	0	0	1	51	T	S	0	1	S	0	2	T 0 3 Acetyl Chloride
x 6	D	0	0	2									
x 7	D	0	0	7									
x 8	F	0	0	5									
x 9	D	0	0	1	3,451	T	S	0	1	S	0	2	T 0 1 Acid Polar Solvent (APS)
1 0	D	0	0	2			T	0	3				
1 1	F	0	0	3									
1 2	F	0	0	5									
1 3	D	0	0	1	2	T	S	0	1				Aerosol Cans
1 4	D	0	0	1	7	T	S	0	1	T	0	3	Caustic Liquid Low pH
1 5	D	0	0	2									
1 6	D	0	0	1	36	T	S	0	1	T	0	3	Caustic Liquid High pH
1 7	D	0	0	2									
1 8	D	0	0	2	389	T	S	0	1				Cracker Wash - currently live loaded
1 9	F	0	3	9	711,964	T	S	0	4				Groundwater; Exempt - WWTU
2 0	D	0	0	1	698	T	S	0	1	S	0	2	T 0 3 Halogenated Silanes
2 1	D	0	0	3									
2 2	F	0	0	5									
2 3	F	0	0	2	746	T	S	0	1	T	0	3	Incinerator Ash / Clinker
2 4	F	0	0	3									
2 5	F	0	0	5									
2 6	F	0	3	9									
2 7	F	0	3	9	1,882	T	S	0	4				Leachate; Exempt - WWTU
2 8	D	0	0	9	100	P	S	0	1				Mercury
2 9	D	0	0	1	18	T	S	0	1				Methyl Hydrogen (MeH) Silicones Liquids
3 0	D	0	0	2									
3 1	D	0	0	3									
3 2	D	0	0	6									
3 3	D	0	0	7									
3 4	D	0	0	9									
3 5	F	0	0	3									
3 6	F	0	0	5									
3 7	D	0	0	3	146	T	S	0	1	T	0	3	Methyl Hydrogen (MeH) Silicones solids (P-7035)
3 8	F	0	0	3									
3 9	F	0	0	5									
4 0	D	0	0	1	5,025	T	S	0	1	T	0	3	Methyl Slurry
4 1	D	0	0	3									
4 2	D	0	0	7									
4 3	D	0	0	8									
4 4	D	0	0	1									
4 5	D	0	0	1	170	T	S	0	1	T	0	3	Miscellaneous Wastes-UV Light Ends
4 6	D	0	0	3									
4 7	F	0	0	3									
4 8	F	0	0	5									
4 9	D	0	0	1	10	T	S	0	1	T	0	3	Miscellaneous Wastes-HMDZ
5 0	D	0	0	2									
5 1	D	0	0	3									
5 2	F	0	0	3									
5 3	F	0	0	5									
5 4	D	0	0	1	3,325	T	S	0	1	S	0	2	T 0 1 Non-Polar Solvents (NPS)
5 5	D	0	0	9			T	0	3				
5 6	D	0	1	1									
5 7	F	0	0	3									
5 8	F	0	0	5									
5 9	D	0	0	1	314	T	S	0	1	T	0	3	Silicone Solids - various (see Section III of Permit Application)
6 0	D	0	0	2									
6 1	D	0	0	3									
6 2	D	0	1	8									
6 3	D	0	2	1									

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages 5a, etc.)																	
Line Number	A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure Code (Enter code)	D. PROCESSES										
							(1) PROCESS CODES (Enter code)				(2) PROCESS DESCRIPTION						
6	4	F	0	0	2									Silicone Solids - continued			
6	5	F	0	0	3												
6	6	F	0	0	5												
6	7	F	0	3	9												
6	8	D	0	0	1	5	T	S	0	1	S	0	2	T	0	3	Siloxanes
6	9	D	0	0	2												
7	0	F	0	0	3												
7	1	F	0	0	5												
7	2	B	0	0	4	0.11	T	S	0	1							Spent PCB Ballasts
7	3	F	0	0	2	22,647	T	S	9	9	D	9	9				WWTP Sludge - 90-day pad storage & off site disposal
7	4	F	0	0	3												
7	5	F	0	0	5												
7	6	F	0	3	9												
7	7	D	0	0	2	7,484,368	T	S	0	4							Process Sewer; Exempt - WWTU
7	8	F	0	0	2												
7	9	F	0	0	3												
8	0	F	0	0	5												
8	1	F	0	3	9												
8	2	D	0	0	2	6,068,653	T	S	0	4							Incinerator Scrubber Water; Exempt -
8	3	F	0	0	2												
8	4	F	0	0	3												
8	5	F	0	0	5												
8	6	F	0	3	9												
8	7	D	0	0	4	0.4	T	S	0	1							Non routine waste: Arsenic
8	8	D	0	0	5	0.22	T	S	0	1							Non routine waste: Barium
8	9	D	0	0	8	0.22	T	S	0	1							Non routine waste: Lead
9	0	D	0	1	0	0.22	T	S	0	1							Non routine waste: Selenium
9	1	D	0	3	5	0.22	T	S	0	1							Non routine waste: Methyl Ethyl Ketone
9	2	D	0	3	9	0.22	T	S	0	2							Non routine waste: Tetrachloroethylene
9	3	U	0	0	2	0.22	T	S	0	1							Non routine waste: Acetone
9	4	U	0	3	7	0.8	T	S	0	1							Non routine waste: Chlorobenzene
9	5	U	1	2	2	0.22	T	S	0	1							Non routine waste: Formaldehyde
9	6	U	2	2	0	0.22	T	S	0	1							Non routine waste: Toluene

11. Map (See instructions on pages 25 and 26) See Attached

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

12. Facility Drawing (See instructions on page 26) See Attached

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

13. Photographs (See instructions on page 26) See Attached

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

14. Comments (See instructions on page 26)

Empty text area for comments.



SOURCE: USGS 1:100,000 QUADRANGLE OF ALBANY, NY (1989)

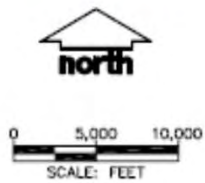
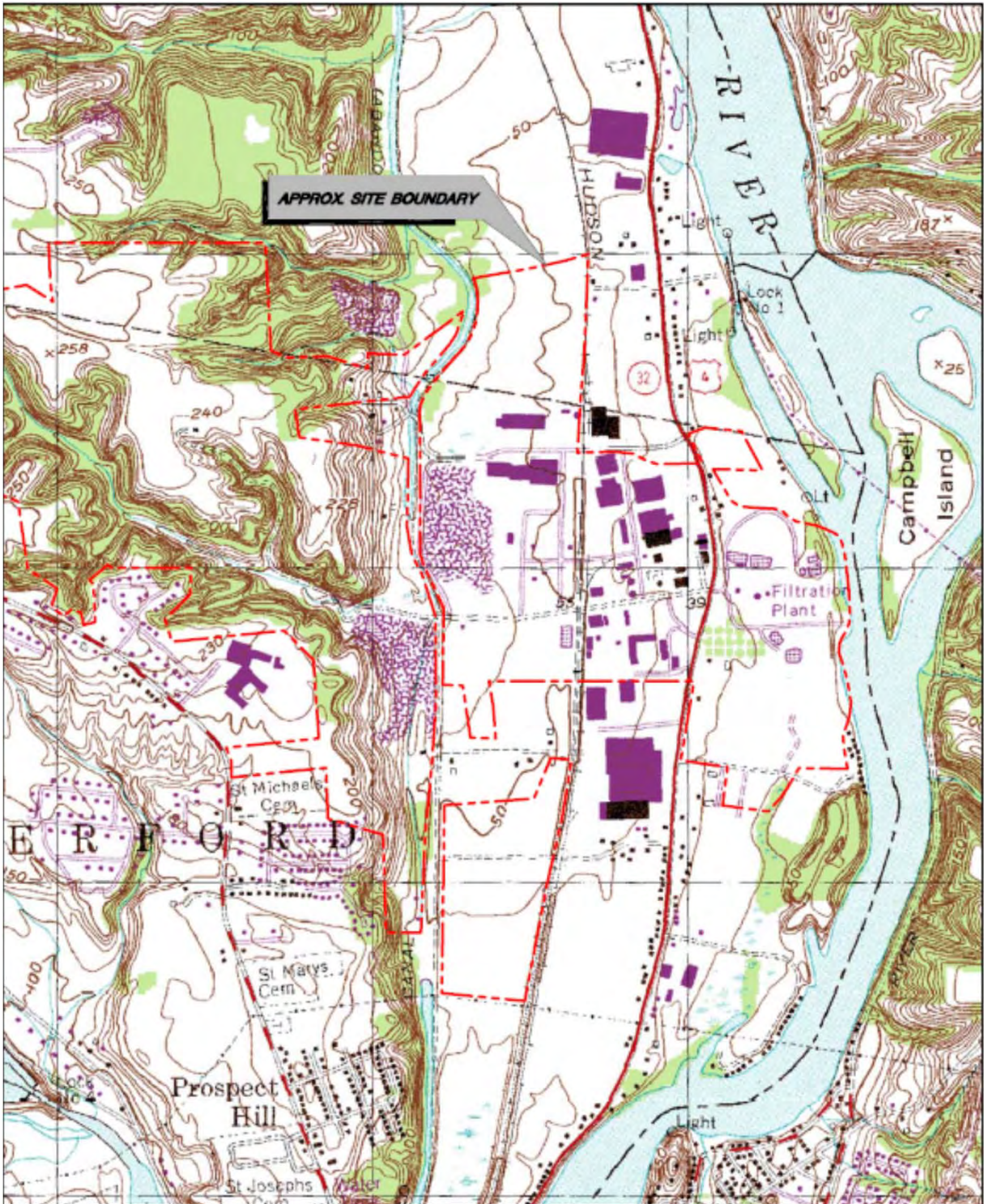


Figure I-1-1
Regional Map of Plant Site

MOMENTIVE™



SOURCE: USGS 1:24,000 QUADRANGLE OF TROY NORTH, NY (1996)

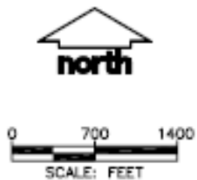
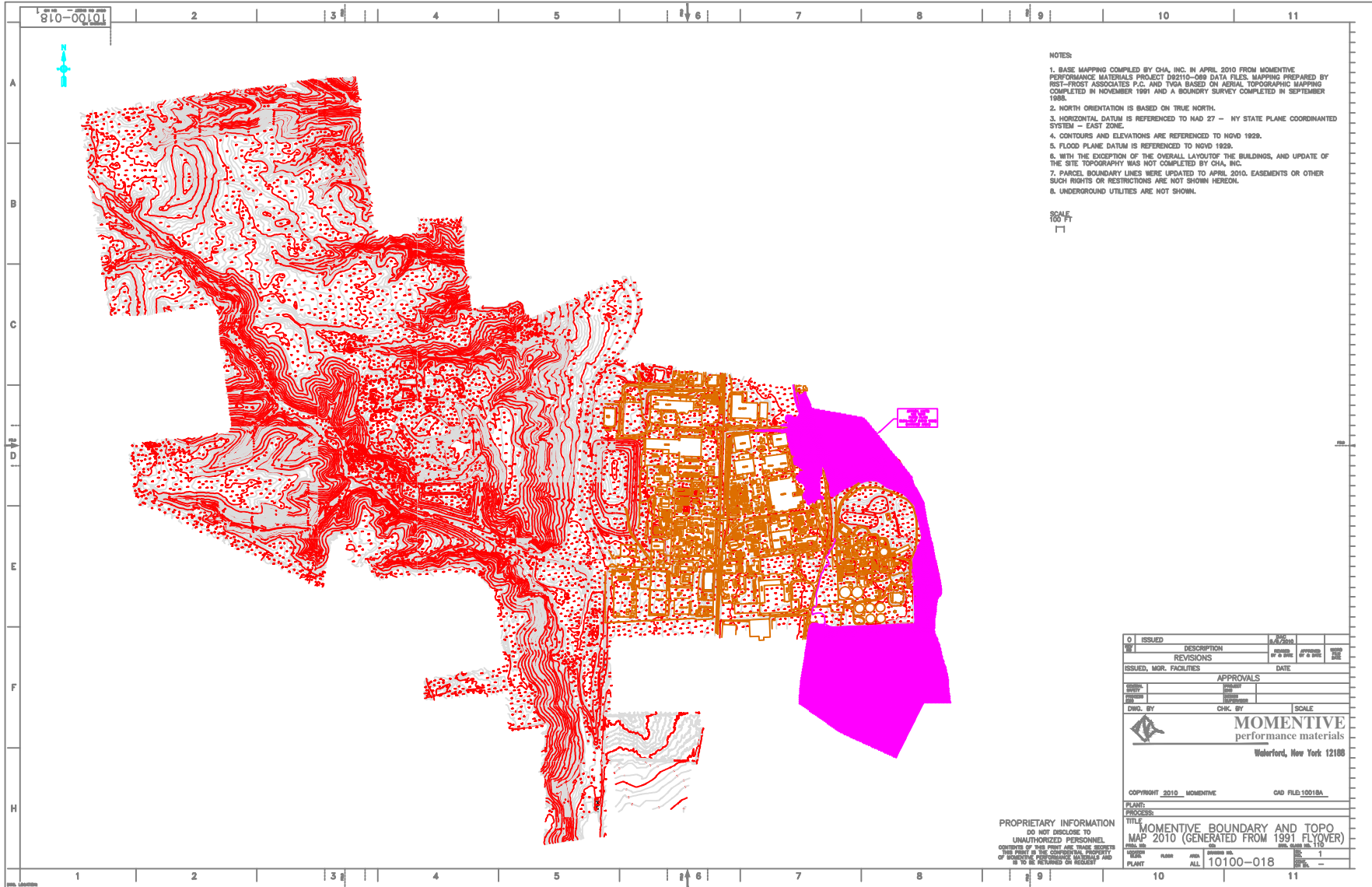


Figure I-1-2
Plant Location Map





- NOTES:
1. BASE MAPPING COMPILED BY CHA, INC. IN APRIL 2010 FROM MOMENTIVE PERFORMANCE MATERIALS PROJECT 102010-008 DATA FILES. MAPPING PREPARED BY RST-FROST ASSOCIATES P.C. AND TVGA BASED ON AERIAL TOPOGRAPHIC MAPPING COMPLETED IN NOVEMBER 1991 AND A BOUNDARY SURVEY COMPLETED IN SEPTEMBER 1988.
 2. NORTH ORIENTATION IS BASED ON TRUE NORTH.
 3. HORIZONTAL DATUM IS REFERENCED TO NAD 27 - NY STATE PLANE COORDINATED SYSTEM - EAST ZONE.
 4. CONTOURS AND ELEVATIONS ARE REFERENCED TO NGVD 1929.
 5. FLOOD PLANE DATUM IS REFERENCED TO NGVD 1929.
 6. WITH THE EXCEPTION OF THE OVERALL LAYOUT OF THE BUILDINGS, AND UPDATE OF THE SITE TOPOGRAPHY WAS NOT COMPLETED BY CHA, INC.
 7. PARCEL BOUNDARY LINES WERE UPDATED TO APRIL 2010. EASEMENTS OR OTHER SUCH RIGHTS OR RESTRICTIONS ARE NOT SHOWN HEREON.
 8. UNDERGROUND UTILITIES ARE NOT SHOWN.

SCALE
100 FT

0	ISSUED	DATE	BY
1	REVISIONS	DATE	BY
ISSUED, MOD. FACILITIES		DATE	
APPROVALS			
DESIGN	CHECKED	DATE	
DRAWN	APPROVED	DATE	
DWG. BY	CHK. BY	SCALE	
 MOMENTIVE performance materials Waterford, New York 12188			
COPYRIGHT 2010 MOMENTIVE		CAD FILE: 10018A	
PLANT PROCESS			
TITLE MOMENTIVE BOUNDARY AND TOPO MAP 2010 (GENERATED FROM 1991 FLYOVER)			
PLANT	PLANT	PLANT	PLANT
ALL	10100-018	1	1

PROPRIETARY INFORMATION
DO NOT DISCLOSE TO
UNAUTHORIZED PERSONNEL
CONTENTS OF THIS PRINT ARE TRADE SECRETS
AND PART OF THE CONFIDENTIAL PROPERTY
OF MOMENTIVE PERFORMANCE MATERIALS AND
IS TO BE RETURNED ON REQUEST

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FIGURES

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*Confidential Business Information Documents Available In Volume II

SECTION II: FACILITY DESCRIPTION

On December 4, 2006, MPM Silicones, LLC (Momentive) acquired the Waterford, NY silicones manufacturing plant from GE Silicones, LLC. In all applicable locations within this application, reference to ownership of the Waterford facility has been changed to Momentive. Certain historical documents such as drawings, figures, and photocopied monitoring plans have not yet been modified to indicate this change. As such, any reference to GE Silicones or GES may be interpreted to mean the owner of the facility, which is now Momentive.

A. DESIGN AND OPERATION OF FACILITY (373-1.5(a)(2), 373-2.3(b))

- (1) Momentive Performance Materials (Momentive) maintains and operates the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by 6 NYCRR 373-2.3 (b).
- (2) Momentive treats, stores, and disposes primarily the hazardous wastes specified in Section III. Since the manufacturing and research operations conducted at the site are dynamic processes, new wastes may be generated periodically. These wastes are either treated on site, if approved by permit, or are sent off-site for disposal at an approved facility.
- (3) A general description of the facility is presented below, as required by 6 NYCRR 373-1.5 (a) (i). A topographic map is included as Figure II-1-2, as specified by 6 NYCRR 373-1.5(a)(2).
- (4) General Facility Description (373-1.5(a)(2)) Momentive operates a major silicone production facility in Saratoga County, New York, in the Town of Waterford. The plant is approximately 12 miles from Albany, New York, as shown in Figure II-1-1. The Hudson River flows southward along the east boundary of the plant as shown in Figure II-1-2. The property of the Momentive Waterford facility is zoned "Manufacturing" by the Towns of Waterford and Halfmoon as shown in the two zoning maps presented in Figures II-1-3a and II-1-3b. The property surrounding the Momentive Waterford facility is zoned "Commercial" (C₂), "Manufacturing" (M₁), "Land Conservation" (LC) and "Residential" (R₁₀₀). Figure II-1-6 is the Boundary Exhibit Plan Lands of MPM Silicones LLC.

a. General Process Description (373-1.5(a)(2)(i))

Momentive, formerly the General Electric Silicones Products Division, was established in 1947 to develop, manufacture and market silicone products from basic raw materials to finished products. These products

are classified in three primary categories: fluids, resins, and elastomers. The name "Silicone" denotes a polymer,



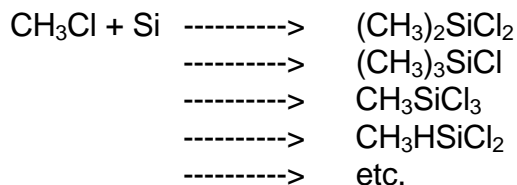
where n is between 0 and 3 and m is 2 or larger. It contains a repeating silicon-oxygen backbone and has organic groups, R, attached to a significant proportion of the silicon atoms by silicon-carbon bonds. In commercial silicones, most of the R groups are methyl; longer alkyl, fluoroalkyl, phenyl, vinyl, and a few others are substituted for specific purposes. These polymers are combined with fillers, additives, and solvents to make products that are loosely classed as silicones.

The silicone production facilities at Momentive are comprised of continuous systems resembling petro-chemical type units, specialty chemical systems, batch systems, and finishing and packaging operations.

In addition to the major raw materials (silicon metal, methyl chloride, methanol, hydrogen chloride) utilized in silicone manufacturing, more than 400 additional raw materials and 1,000 intermediates may be involved in the manufacturing various finished products. As many as 15 manufacturing or process steps may be required to make a single commercial product.

The actual chemistry involved in the manufacture of silicones is complex, and this discussion is limited to typical silicone manufacturing processes. A simplified flow chart of manufacturing processes used to produce silicones is illustrated in Figure II-1-4.

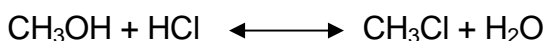
The initial step in silicones manufacturing is the synthesis of silane monomers from elemental silicon and organic chloride. A catalyst is required to initiate and sustain this reaction, which is the backbone of silicone manufacturing. The most common reaction in silane monomer synthesis is the reaction of methyl chloride (chloromethane) with silicon to form various methylchlorosilanes:



The basic reactions for silane monomers produce a mixture of products and by-products. By-products include miscellaneous silicon compounds and hydrocarbons. Distillation is required to separate the silane monomers from the by-products.

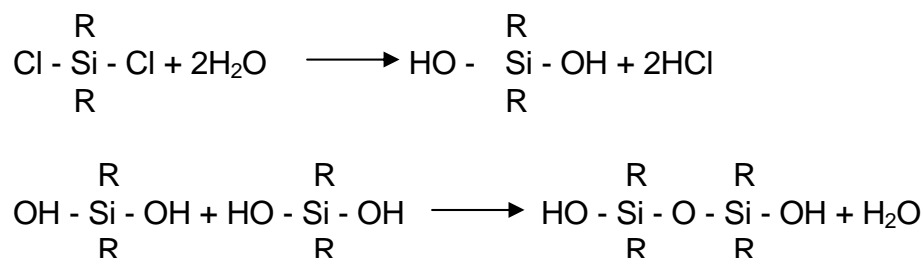
Other organosilanes, such as phenylchlorosilanes and vinylchlorosilanes are purchased for use at the silicone plant.

To supply manufacturing operations with an adequate supply of methyl chloride, large amounts of methyl chloride are produced on-site, rather than obtaining it from external sources. Methyl chloride is produced by reacting methanol and hydrogen chloride:



Internal production of methyl chloride by silicone manufacturers greatly reduces the volume of certain by-products because of recycling opportunities.

The next step in silicone production, after the manufacture of silane monomers, is the synthesis of siloxanes. Silane monomers readily undergo hydrolysis to form silanols and hydrochloric acid. These silanols condense to form siloxanes and water. A typical reaction series would be:



Where R is an organic group.

These siloxanes may be processed further to form hydroxyl end-blocked polymers or cyclics. To enhance phase separation of siloxanes from the hydrochloric acid, hydrocarbon solvents are commonly used. After this step in silicones manufacturing, numerous specialized processes are used to manufacture a broad family of useful polymers varying in physical form from fluids to elastomers to solids. Some of these processes are performed in solvent systems that generate waste streams containing organics. Many processes are performed as batch operations.

b. General Unit Descriptions (373-1.5(a)(2)(i))

The three types of active hazardous waste management units at the Momentive facility are containers, tanks, and incinerators. The capacity of each unit can be found in the following sections of this application:

Unit	Application Section
▪ Containers <ul style="list-style-type: none">• Drum storage Structure (1 Year Pad)• RKI Feed Pad• Transfer Stations	IV-B
▪ Hazardous Waste Tanks	IV-C
▪ Hazardous Waste Incinerators <ul style="list-style-type: none">• Rotary Kiln Incinerator (RKI)• Fixed Box Incinerator	IV-D
▪ Miscellaneous Units <ul style="list-style-type: none">• API Pad• RKI Transfer Station• Truck Wash Pad	X

The principal hazardous waste management process at the Momentive Waterford facility is incineration. Other hazardous waste management units support the incineration facilities through transport and storage of the waste streams. The hazardous waste management unit locations are shown on the maps in Volume II.

Landfills

All landfills on site are closed and are currently under post-closure care.

Containers

The Drum Storage Structure (1 Year Pad) is a central area for storing containers containing hazardous wastes. At the Drum Storage Structure (1 Year Pad), hazardous wastes are stored, repacked or solidified using absorbent materials to facilitate incineration. The RKI Feed Pad is adjacent to the RKI and is dedicated to storing drums before incineration. There are 11 additional container storage areas designed to load or unload hazardous waste tank wagons. Refer to Section IV-B-Storage in

Containers for detailed information concerning the use and management of containers and transfer stations.

Tanks

Tanks are used to store hazardous wastes prior to incineration. Refer to Section IV-C-Storage in Tanks for detailed information concerning the operation and maintenance of these tanks.

Incinerators

Incinerator units are operated and maintained for the treatment of hazardous and non hazardous wastes at the Momentive Waterford facility. Section IV-D provides information regarding testing of the Rotary Kiln Incinerator (RKI) and Fixed Box Incinerator (FBI).

c. Topographic Map (373-1.5(a)(2)(xix))

A topographic map of the Momentive facility and surrounding area is shown in Figure II-1-2. A wind rose showing wind speed and direction is shown in Figure II-1-5.

d. Traffic Information (373-1.5(a)(2)(x))

All roads on the plant are utilized for transporting wastes from generation points to the hazardous waste management units. The route for containers originates at the less than ninety (90) day storage areas or hazardous waste transfer station areas, and proceeds to the Drum Storage Structure (1 Year Pad) and/or hazardous waste transfer areas that have incinerator feeds. The plant roads are all two-way travel. Most employee vehicles are confined to the parking lots outside the plant fence line. Vehicular traffic within the plant primarily consists of company vehicles, delivery trucks, contractor vehicles, and construction equipment. The primary hazardous waste haul routes are shown in Figure II-1-7.

Traffic Control

Vehicle operation requires that each driver obey road signs, speed limits and company policies. Drivers are required to comply with all local, state, and federal laws associated with the safe use of motor vehicles. All intersections on plant property are 4-way stops. Railroad crossing signs are provided at railroad track crossings. Additionally, there is a traffic light on State Highway 4/32 at the main gate to the incinerator/closed surface impoundment/WWTP area.

Access Road Surfacing

Plant roads are constructed of bituminous concrete surfacing material (2 1/2" to 3 1/2"), bituminous base course material (3" to 10") and compacted sub-base material (6" to 12").

Load-Bearing Capacity

All plant roads, including access roads, are capable of supporting the maximum gross vehicle weight of our hazardous waste trailers. The maximum gross vehicle weight of these trailers is 115,000 pounds. The plant roads can safely support the weight of all waste vehicles used on site.

Rail yard

The Momentive Waterford facility has a rail spur for chemical material supply and shipment of materials off-site.

- B. REQUIRED NOTICES (NOT APPLICABLE)
- C. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE (373-2.2(i))

Momentive takes precautions to prevent accidental ignition or reaction of ignitable or reactive waste as required by 6 NYCRR 373-2.2(i) and as outlined below.

- (1) Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste (373-2.2(i)(1))

Momentive has various rules and procedures in place to prevent accidental ignition or reaction of ignitable or reactive wastes. Smoking is allowed only in plant areas where a smoking permit is specifically posted. Smoking is strictly prohibited in all other plant areas. Employees are instructed to assume that an area is a non-smoking area if a smoking permit is not visible in the area. Spark free tools are utilized to open containers with potentially flammable contents, and trucks are properly grounded prior to loading or unloading of potentially ignitable wastes. Momentive also has site safety policies regarding flammable and combustible liquid handling, intrinsically safe portable devices and a Safe Work Permit system in place to prevent the ignition of flammable vapors.

- (2) General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste (373-2.2(i)(2))

Momentive takes precautions to prevent reactions which generate extreme heat or pressure, fire or explosions, violent reactions, produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantity to threaten human

health or the environment. Momentive also actively prevents reactions that produce uncontrolled flammable fumes or gases in sufficient quantity to pose a risk of fire or explosions, damage the structural integrity of the device or facility, or may, through other like means, threaten human health and the environment.

MSDSs, generator knowledge, and other third party technical information are the primary basis for evaluating waste stream compatibilities and ensuring incompatible wastes are not mixed. Vendor-supplied MSDSs and technical specifications are available for materials used as process inputs or intermediates. MSDSs generated by Momentive for materials manufactured on-site are also available; these latter MSDSs are developed according to an established procedure that includes laboratory testing and regulatory analysis. Additionally, process knowledge is used for evaluating waste compatibility to provide waste stream characterizations at various points in the process.

Further, Momentive personnel are trained to ensure proper waste characterization and management. To ensure Momentive personnel are able to characterize waste properly, area specific tools have been developed and implemented. Training includes guidance on proper packaging and marking requirements. Momentive personnel are also trained to contact their supervisor, or the site waste leader, in the event that they have questions regarding proper waste management. This training is supplemented by Momentive's robust Hazard Communication training program, described in Section VII of this permit application.

Momentive keeps standard operating procedures current via the Management of Change (MOC) process. The MOC process is followed every time a new material is introduced onto the site or when a process is modified. The MOC process triggers a series of regulatory reviews, including waste management, which ensures the waste management information remains current and available.

The specific precautions taken to handle ignitable, reactive, or incompatible waste for each type of waste management units are addressed in more detail in the appropriate sections, addressing containers, tanks, and incinerators. Momentive's Integrated Contingency Plan (ICP) fulfills the spill prevention and emergency response requirements of the various federal and state regulations that Momentive is required to comply with. The sections of the ICP relative to hazardous wastes are available in Section VI of this permit application.

D. LOCATION STANDARDS (373-1.5(a)(2)(xi), 373-2.2(j))

Momentive operates and maintains the facility to prevent washout of any hazardous waste by a 100 year flood, as required by 6 NYCRR 373-2.2(j)(1) and as specified below.

The portion of the facility west of Routes 4 and 32 is not in the 100-year floodplain. Prior to construction of the flood dike and pump station, the portion of the Momentive Waterford facility east of Routes 4 and 32 was in the 100-year floodplain. The flood dike is at an elevation of approximately 39 feet, which is above the 100-year floodplain elevation. The Plant Site Map in Volume II shows the location of the flood dike.

A flood dike evaluation performed in 1984 was included in the previous Part 373 application and was subsequently approved for permitting. A simplified operating procedure for the pump station is presented below.

(1) Operating Procedure for Flood Pump Station

The Hudson River level is monitored by operations once each shift. When the height of the river reaches a predetermined level, the start-up procedure for the Flood Pumping Facilities begins. An operator first starts the generators. Treated wastewater, or non-process water (after first flush is collected) and treated wastewater are diverted into the Flood Wet Weather Wet Well using diversion gates. At a set water level in the wet well, the flood pumps are started. As the flow increases or decreases, additional pumps are started or stopped.

E. MANIFEST SYSTEM

Momentive complies with the manifest requirements of 6 NYCRR Part 372.

F. RECORDKEEPING AND REPORTING (373-2.5)

(1) Operating Record (373-2.5(e))

Momentive maintains a written operating record at the facility in accordance with the applicable portions of 6 NYCRR 373-2.5 (c).

(2) Availability, Retention, and Disposition of Records (373-2.5(c) (2) & (d))

All records, including plans, are available to the department in accordance with 6 NYCRR 373-2.5 (d) (1). Retention period for all records is extended automatically during any unresolved enforcement action regarding the facility or as requested by the Commissioner. A copy of records of waste disposal locations and quantities under 6 NYCRR 373-2.5 (c) (2) will be submitted to the

Commissioner and local land authority upon closure or partial closure of the facility as required by 6 NYCRR 373-2.5 (d) (3).

(3) Annual Report (373-2.5(e))

Momentive will comply with the annual report requirements of 6 NYCRR 373-2.5 (e).

G. WASTE MINIMIZATION (373-2.5(c)(2)(ix))

In accordance with a 6 NYCRR 373-2.5(c)(2)(ix), Momentive will submit to the Commissioner, at least annually, a waste minimization certification signed by the Owner or Operator. Momentive certifies that:

- (1) A program is in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by Momentive to be economically practicable; and
- (2) The proposed method of treatment, storage or disposal is the most practicable method currently available to Momentive that minimizes the present and future threat to human health and the environment.

This information is contained in the Hazardous Waste Reduction Plan submitted separately from this application.

H. OTHER FEDERAL LAWS

Momentive's Waterford plant is a large chemical manufacturing facility, which is engaged in numerous activities regulated under federal and state laws and regulations such as the Clean Water Act, Safe Drinking Water Act, Clean Air Act, and other solid waste regulations. The site Environmental Compliance Operation is responsible to ensure compliance of these facilities with other applicable federal and state laws and regulations. Momentive is actively involved with the appropriate regulatory agencies to maintain compliance of the facility.



SOURCE: USGS 1:100,000 QUADRANGLE OF ALBANY, NY (1989)

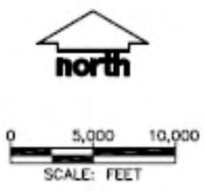
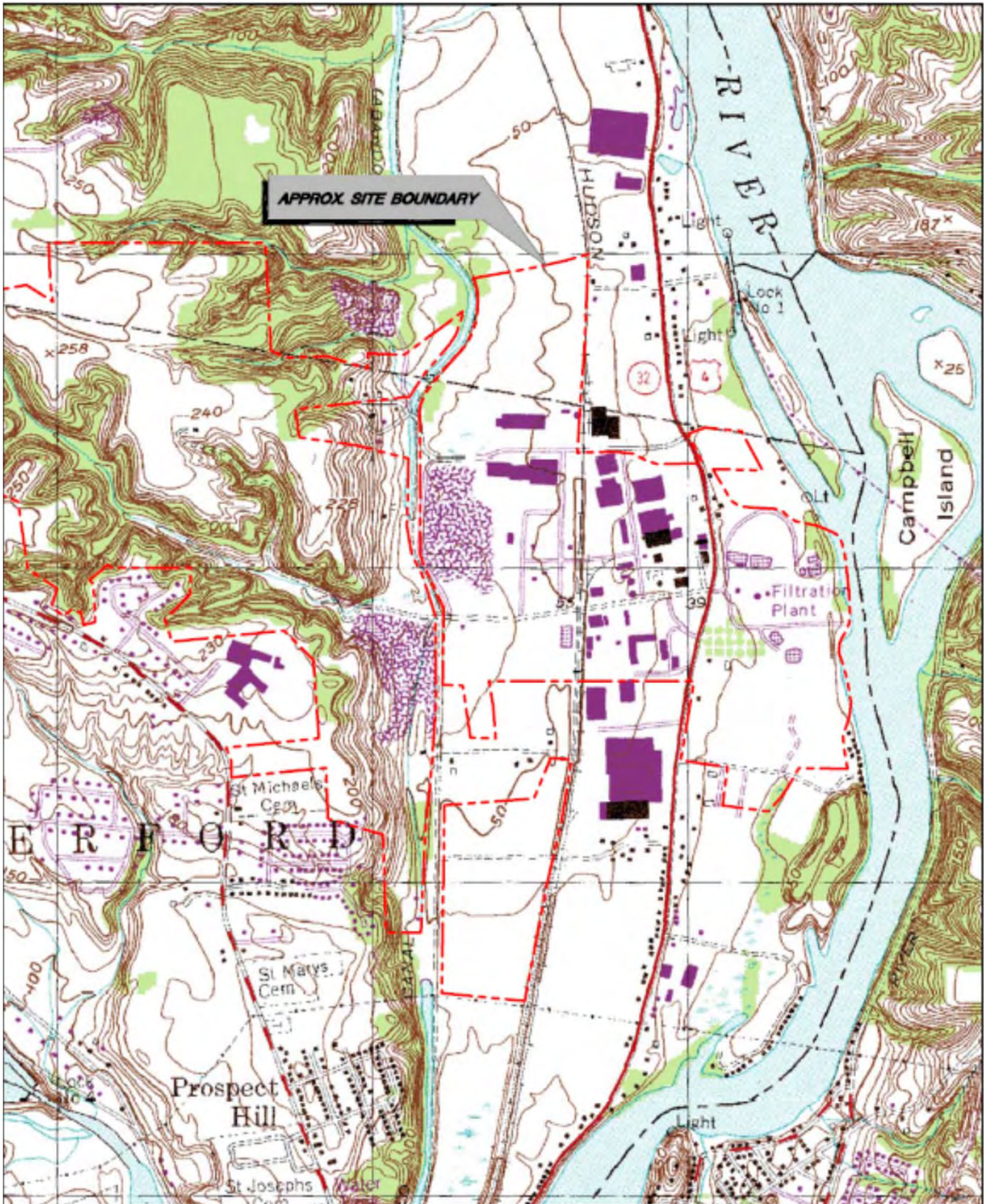


Figure II-1-1
Regional Map of Plant Site





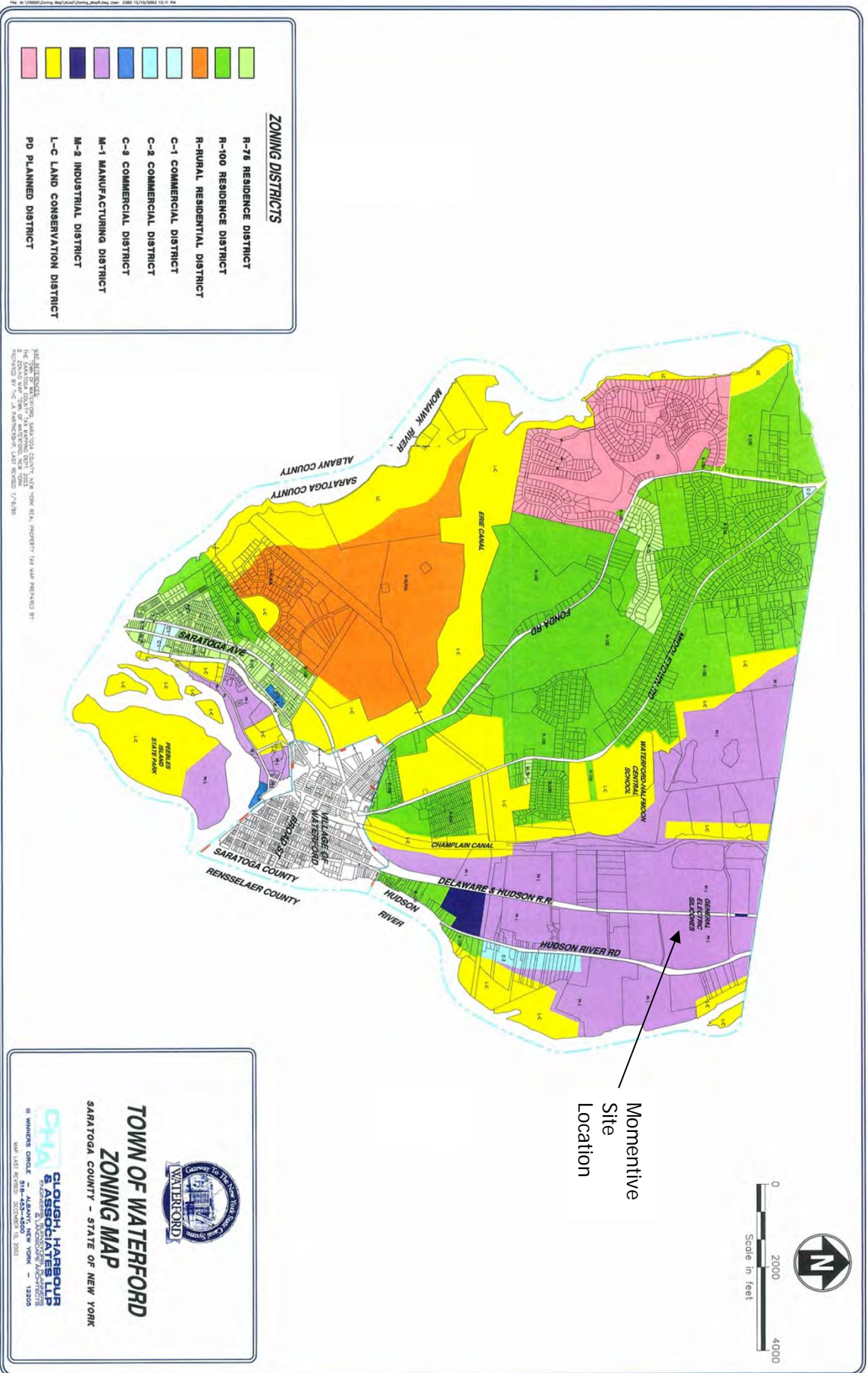
SOURCE: USGS 1:24,000 QUADRANGLE OF TROY NORTH, NY (1996)



Figure II-1-2
Plant Location Map

MOMENTIVE

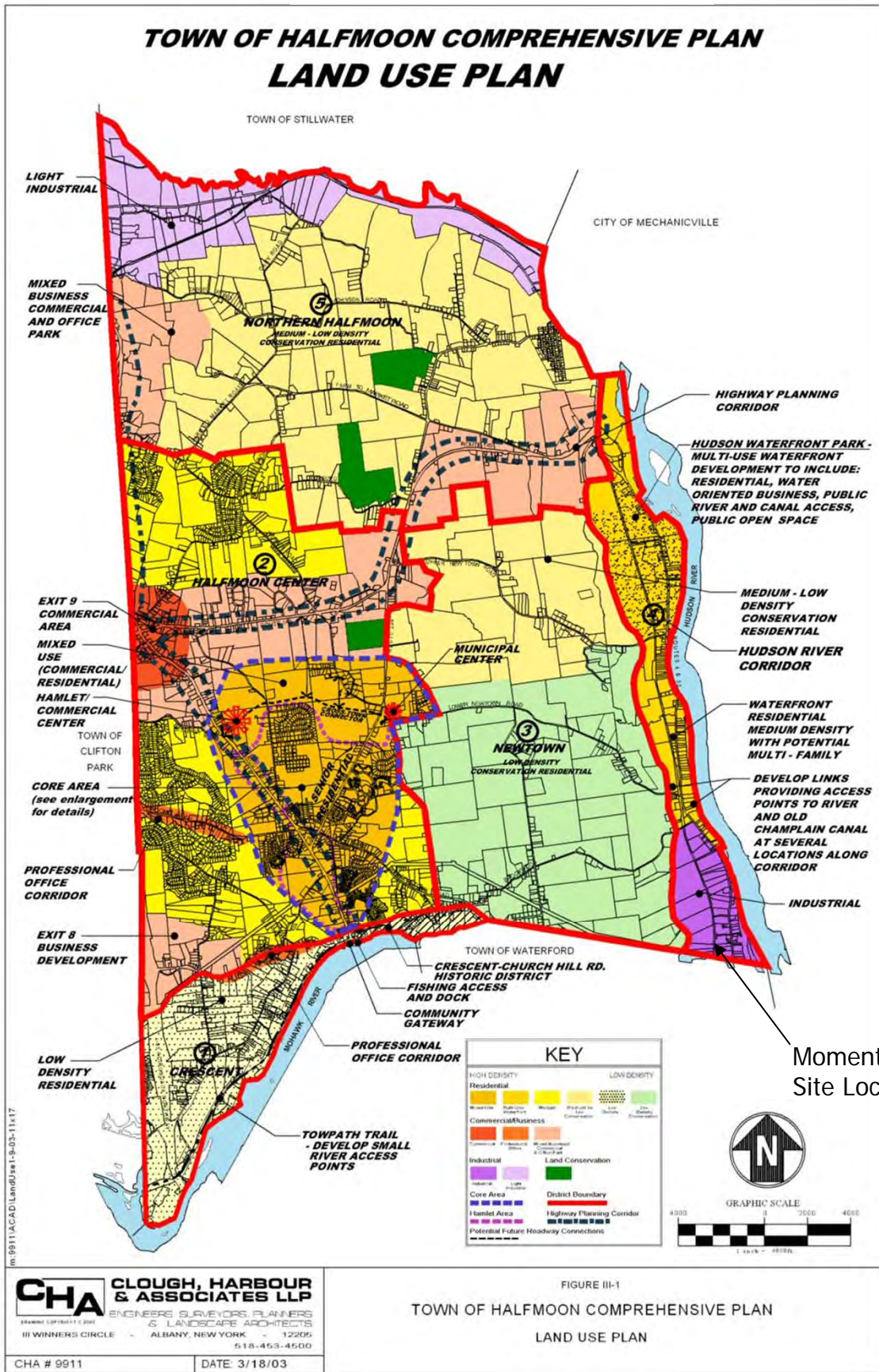
Figure 11-1-3a
Town of Waterford, New York Zoning Map



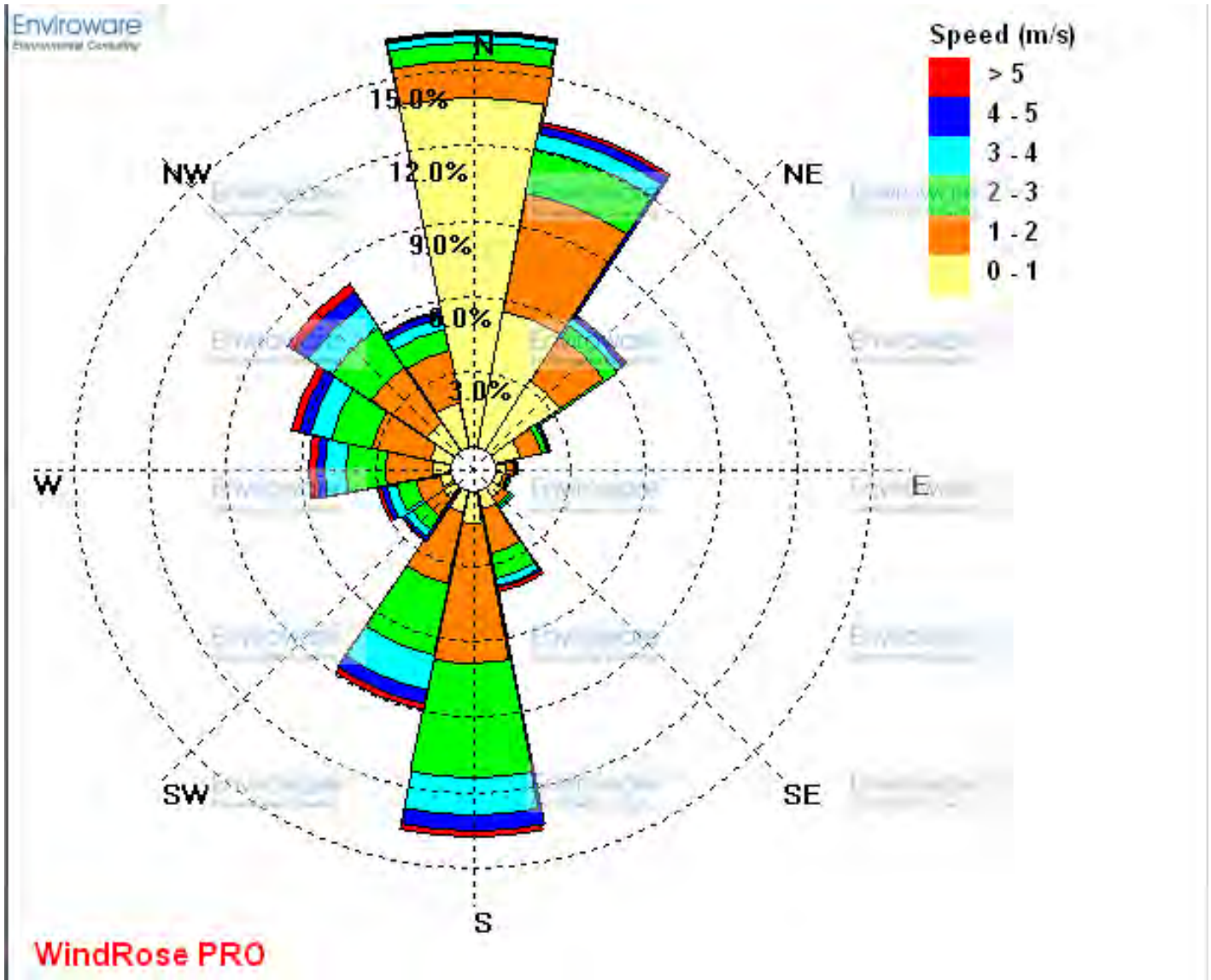
SEE REFERENCES
 1. TOWN OF WATERFORD, SARATOGA COUNTY, NEW YORK, INCORPORATED MAP PREPARED BY
 THE TOWN OF WATERFORD, NEW YORK
 2. ZONING MAP OF WATERFORD, NEW YORK
 3. ZONING MAP OF WATERFORD, NEW YORK
 4. ZONING MAP OF WATERFORD, NEW YORK


TOWN OF WATERFORD
ZONING MAP
 SARATOGA COUNTY - STATE OF NEW YORK

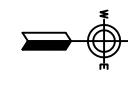
GLAUGH, HARBOUR
 PLANNING & DESIGN
 111 WINDERS DRIVE - ALBANY, NEW YORK - 12208
 MAP LAST REVISED - JANUARY 10, 2013



**Figure II-1-5
Windrose Albany New York, 5 Years Meteorological Data**



Developed from meteorological data from Momentive's on-site tower between 2005 and 2009.



NOTE:
 1. ALL ROADS ARE 2-WAY TRAVEL.
 2. ROUTES SUBJECT TO CHANGE.

LEGEND:
 HAZARDOUS WASTE TRANSFER AREA

PROPRIETARY INFORMATION
 DO NOT DISCLOSE TO
 UNAUTHORIZED PERSONNEL.
 CONTENTS OF THIS PRINT ARE TRADE SECRETS
 OF MOMENTIVE. PERFORMANCE MATERIALS AND
 IS TO BE RETURNED ON REQUEST.

1	PER RCRA PERMIT	SRK	AS	8/9/12	8/9/12
0	ISSUED FOR RCRA	JIS	KP	12/30/09	12/30/09
REV	DESCRIPTION	REVISED BY & DATE	APPROVED BY & DATE	ISSUED DATE	REVISION DATE
ISSUED, MGR. FACILITIES		APPROVALS			
GENERAL MANAGER	PROJECT SUPERVISOR	PROJECT DESIGN SUPERVISOR	CHK. BY	SCALE	
DWG. BY JS	CHK. BY				

MOMENTIVE
 Watford, New York 12188

COPYRIGHT 1997 MOMENTIVE CAD FILE: 09077A
 PLANT: B19 ENGINEERING/FACILITIES
 PROCESS: B19 ENG
 TITLE: PRIMARY HAZARDOUS WASTE HAUL ROUTES
 PROJ. NO. 09730-077
 DWG. CLASS NO. 730
 SHEET NO. 1

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SECTION III: WASTE CHARACTERISTICS AND ANALYSIS**A. WASTE CHARACTERISTICS (373-1.5(a) (ii), 373-2.2(e) (1))**

The hazardous waste streams at the Momentive facility are characterized using process knowledge and analytical data collected in accordance with the Waste Analysis Plan.

Volume II includes a summary of the characterization of each waste stream. This information was developed, in part, for the 2003 RCRA Permit Application submittal using 5 years of WAP data (95th UPL, July 1, 2006 through July 1, 2011, except for silver that was based upon data collected between September 1, 2006 and September 1, 2011). The information in Volume II is also included in the Waste Analysis Plan and QA/QC Plan, a stand-alone document provided under separate cover.

Waste characterization data supporting the summaries is also available on the CD provided with this permit application. Momentive makes hazardous waste determinations at the point of generation. Wastes are assigned waste codes to facilitate proper management and disposal in accordance with the characteristics of each waste.

Momentive's Hazardous Waste Reduction Plan contains additional information regarding hazardous waste generation at the facility. The plan describes the following for each major waste stream: general description of the waste, a description of the source(s) of the waste, processing and disposal information, and waste reduction options. Numerous flow diagrams and chemical reactions are included in this document, and it is updated on an annual basis. Momentive's Hazardous Waste Reduction Plan is a confidential document that is submitted under a separate cover to the NYSDEC.

B. GENERAL WASTE ANALYSIS

Momentive complies with 373-2.2 (e) and follows the procedures, including quality assurance protocol, described in the Waste Analysis Plan and the Quality Assurance/Quality Control (QA/QC) Plan.

The Waste Analysis Plan is part of the quality assurance program. The quality assurance program is in accordance with current EPA practices (Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Third Edition, 1986) or equivalent methods approved by NYSDEC. Momentive maintains functional instruments, uses approved sampling and analytical methods, as specified in 6NYCRR Part 371, Appendices 19, 20 and 21, assures the validity of sampling and analytical procedures and performs correct calculations as specified in the



Momentive QA/QC Plan. Alternatively, Momentive uses contract laboratories certified by the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) for the parameters being analyzed.

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A. POST-CLOSURE ACTIVITIES - CLOSED REGULATED UNITS

- A. POST-CLOSURE ACTIVITIES - LANDFILLS NO. 1, NO. 3 AND NO. 6
- B. POST -CLOSURE ACTIVITIES FOR SURFACE IMPOUNDMENTS (373-2.7 (g)(1), 373-2.7 (h), 373-2.11(f))

SECTION IV-A: PROCESS DESCRIPTION – CLOSED REGULATED UNITS**A. DESCRIPTION OF THE CLOSED REGULATED UNITS****(1) Landfill No. 1 – Southeast Ravine**

The Landfill No. 1 - Southeast Ravine contains approximately 35 feet of sludge fill overlying as much as 24 feet of non-hazardous solid waste. This non-hazardous fill consists of trash, rubble, car bodies and other debris. The portion of the landfill containing hazardous waste has overall plan dimensions of approximately 710 by 380 feet, with an approximate surface area of 6 acres. The volume of sludge fill contained in the Landfill No. 1 - Southeast Ravine is approximately 150,000 cubic yards, based on the known capacity of the landfill and the quantity of waste generated.

(2) Landfill No. 3

Landfill No. 3 is approximately 600 feet by 1200 feet in plan dimension and covers an area of approximately 16.5 acres. Waste disposal began in 1960 and materials present in the landfill include: plant trash, scrap silicone and hydrolyzed methyl silanes, dewatered solids from the wastewater treatment plant, spent silicone-copper slurry, and incinerator residue. The landfill contains approximately 550,000 cubic yards of waste material.

Within the southeast quadrant of Landfill No. 3, a special cell was constructed in 1979. This area (termed Chemical Waste Disposal Area) has a total capacity of 2,000 barrels. These barrels contain primarily reactive waste. The Chemical Waste Disposal Area contains a leachate collection system; a 4-inch bentonite-clay liner and an under drain collection system.

(3) Landfill No. 1 – Southeast Ravine and Landfill No. 3 Caps

Landfills No. 1 – Southeast Ravine and No. 3 were capped during 1990 and 1991. The final covers were constructed in the following sequence:

- a. Prepare and reshape the landfill surface to accept the cover.
- b. Construct soil barrier; two feet of compacted clay with permeability of 1×10^{-7} cm/sec or less.
- c. Install low permeability 40 mil, High Density Polyethylene (HDPE) membrane.
- d. Install drainage layer; 12 inches of sand with permeability of 1×10^{-3} cm/sec or more.

- e. Install geotextile.
- f. Construct vegetative layer; soil able to sustain vegetative growth.
- g. Seeding and mulching to establish vegetative growth.

(4) Landfill No. 6

Landfill No. 6 is approximately 750 feet by 350 feet in plan dimension and covers an area of approximately 6 acres. Waste disposal began in 1989 and materials disposed in this cell include: dewatered solids from the wastewater treatment plant, incinerator residue, asbestos-containing material, silicone filler and boiler clean-out residue. The landfill contains approximately 310,000 cubic yards of waste material.

Closure activities for Landfill No. 6 were performed in 2003. The New York State Department of Environmental Conservation (NYSDEC) approved the Closure Certification on December 26, 2007. The final cover was constructed in the following sequence:

- a. Prepare and reshape the landfill surface to accept the cover.
- b. Install gas vents.
- c. Install geosynthetic clay liner.
- d. Install 40 mil textured FML.
- e. Construct drainage layer.
- f. Construct protective soil layer.
- g. Construct topsoil layer.
- h. Seeding.

(5) Description of Surface Impoundments

There are five closed hazardous waste surface impoundments at the facility.

a. Shot Pond

This 1 million gallon capacity emergency wastewater holding pond formerly received solids from incinerated hazardous waste and leachate from land disposal of hazardous waste. The shot pond is

directly over a portion of the existing slurry wall that surrounds an inactive landfill. As a result, the pond is partially inside, and partially outside, the landfill. The area inside the slurry wall was closed as a landfill with a final cover consisting of (bottom to top) 24 inch compacted clay, a 30 mil. synthetic plastic membrane, 12 inch sand layer for drainage, and 36 inch soil cover to support vegetation. The area outside the slurry wall was cleaned of waste inventory and was backfilled with clean soil.

b. East and West Tailings Ponds

These 1.5 million gallon capacity ponds were used for emergency sludge storage. These ponds also received solids from incinerated hazardous waste and leachate from land disposal of hazardous waste. Since the East and West Tailings Ponds are adjacent, one final cover grading was used to cover both units. The waste within these ponds was partially removed since they were on an inactive landfill with slurry wall containment. Approximately 740 cubic yards of filter press sludge was left in the West Tailings Pond. Approximately 40 cubic yards of filter press sludge was left in the East Tailings Pond. These ponds also have a cap of compacted clay, 30 mil. synthetic plastic membrane (plastic membrane on East pond only), sand layer, and vegetative soil cover.

c. Lagoon No. 3

This was a 0.5 million gallon capacity wastewater treatment plant effluent polishing lagoon. This lagoon also received solids from incinerated hazardous wastes. During closure, all waste inventory from Lagoon No. 3 was removed for on-site disposal and backfilled with stone base below the groundwater table. After the stone base was extended above the groundwater table, a geotextile was laid over the surface and topped with natural clean fill.

d. Lagoon No. 2

This was a 1.2 million gallon capacity spill protection storage lagoon. This lagoon also received solids from incinerated hazardous wastes and leachate from land disposal of hazardous waste. The lagoon was cleaned of all waste inventory as part of closure activities. Momentive did not intend to backfill this lagoon. This lagoon was reconstructed to allow for continued use as a non-contact (non-hazardous) cooling water and storm water detention pond which is regulated under the facility's State Pollutant Discharge Elimination System permit.

B. POST CLOSURE PLANS (373-2.7 (g)(1) & (h))

Momentive maintains and follows Post-Closure Plans for the following closed on-site disposal facilities:

- Landfill No. 1 – Southeast Ravine
- Landfill No. 3
- Landfill No. 6
- East Tailings Pond
- West Tailings Pond
- Shot Pond

The general facility Post-Closure Plan is presented in Section VIII. Post-closure activities for Landfill No. 1 – Southeast Ravine, Landfill No. 3, Landfill No. 6, and the surface impoundments are summarized in Attachment A. Specific monitoring and maintenance activities for each facility can be found in the Momentive Operation and Maintenance (O&M) Part V operating manual for closed regulated units. Post-closure cost estimates and applicable notices are discussed in the general Post-Closure Plan in Section VIII.

**ATTACHMENT A
POST-CLOSURE ACTIVITIES – CLOSED REGULATED UNITS**

A. POST-CLOSURE ACTIVITIES - LANDFILLS NO. 1, NO. 3 AND NO. 6

(1) General Procedures

The Post-Closure Plan describes the ongoing monitoring and maintenance program that will be followed throughout the Post-Closure Care Period for Landfills No. 1 – Southeast Ravine, No. 3 and No. 6 in accordance with the requirements of 6 NYCRR 373-1.5(a) (2), 373-1.5(d) (7), 373-1.5(e) (9), 373-1.5(h) (5), 373-3.7(h), 373-3.11(f) (2), 373-3.11(f) (3), 373-3.13(h) (3), 373-3.14(g) (2) and 40 CFR 270.14(b) (13), 270.17(g), 270.18(i), 270.21(e), 265.118, 265.228(b), 265.228(c) (1), 265.280(c) and 265.310(b).

During the post-closure care period, approximately six acres are maintained for Landfill No. 1 – Southeast Ravine, 17 acres are maintained for Landfill No. 3, and approximately six acres are maintained for Landfill No. 6. Maintenance activities are performed as required by inspection. The schedule of inspections and the scope of potential maintenance procedures are identified in the following sections. Routine activities associated with post-closure care include sampling groundwater in monitoring wells and inspecting both leachate collection and runoff control systems.

The goal of Momentive's Post-Closure Plan is to maintain the function and integrity of the final cover, as well as the monitoring system. To this end, a three-point Post-Closure Plan has been developed to secure, monitor, and maintain the site.

(2) Inspection Plan

Momentive inspects the closed landfill facilities a minimum of four times per year, and always after major storm events (25 year, 24-hour storm exceeding rainfall of 4.8 inches), as determined by readings from the meteorological station located within the facility boundaries. Areas requiring maintenance are recorded so appropriate activities can be performed. Inspection criteria can be found in the Momentive O&M manual for closed regulated units (O&M Manual).

(3) Reporting

a. Post Closure Activities (373-2.7(g)(2), 373-2.7(h)(2)(ii))

Section IX, Corrective Action, of this application describes the post closure groundwater monitoring plan. Momentive has instituted a remedial program in accordance with Civil Action No. 83-CV-77 and the resulting Consent Decree between New York State and GE Silicones (now Momentive). Momentive is currently managing this remedial program in accordance with a July 8, 2005 letter to the New York State Department of Environmental Conservation (NYSDEC) regarding “proposed modification to groundwater remedial systems, General Electric Advanced Materials – Silicones, Waterford, New York.” NYSDEC provided formal approval of this remedial program in a letter dated January 6, 2006. The approved remedial program provides the necessary protection of human health and the environment required under 6 NYCRR Part 373-2.6(a)(6).

b. Quarterly Status Reports

Momentive will provide quarterly reports detailing monitoring and maintenance activities associated with each closed landfill unit to the NYSDEC. Reports will also include results of groundwater monitoring when applicable. Reporting will be combined with quarterly status reports on Remedial Plan Activities.

c. Immediate Reporting

Momentive will notify the Commissioner within 3 working days of any of the following occurrences:

- Inspection findings that cannot readily be resolved with routine maintenance procedures,
- Findings or conditions that could potentially threaten human health or the environment.

(4) Groundwater Monitoring

Momentive monitors groundwater in the vicinity of the closed landfills. It is Momentive’s intention to continue monitoring for the duration of the Post-Closure Care period of the landfills. A Groundwater Corrective Measures Program was submitted to NYSDEC in March 1988. The Corrective Measures Program has three objectives; to define the extent of concentrations in the Primary Aquifer (PA) and Secondary Transient Zone (STZ) in specific areas; to relate concentrations in the PA and STZ to

potential sources in the landfill; and to evaluate the rate and direction of constituent migration from specific areas.

(5) Leachate Collection and Removal

- a. Landfill No. 1 – Southeast Ravine and Landfill No. 3 contain passive under-drains that convey accumulated leachate to the plant process sewer.
- b. Landfill No. 6 has an existing leachate collection system that discharges into the Leachate Collection System (LTS). The LTS is a double walled high density polyethylene (HDPE) pipeline which conveys leachate to Momentive's on-site Waste Treatment Plant head works. Inspection manholes extend up above grade at regular intervals. These manholes are visually inspected on a quarterly basis to verify the system's integrity. Liquid found in these manholes is removed and transported for proper treatment. Momentive hydrostatically pressure tests the carrier pipe between the Landfill No. 6 pump house and MH-A-1A on a biennial basis (once every two years) using a NYSDEC approved procedure.

(6) Leak Detection Between Liners

- a. Landfill No. 1 – Southeast Ravine and Landfill No. 3 do not have double-liner systems. Therefore, this item is not applicable.
- b. For Landfill No. 6, samples from the Primary and Secondary Leachate Collection Systems (PLCS, SLCS) are collected on a schedule established in the O&M Manual. Operating conditions of each system are also monitored on an ongoing basis to assure proper operation.

(7) Landfill No. 6 Groundwater Monitoring

- a. Landfill No. 6: Applicability

Momentive complies with groundwater monitoring requirements set forth in 6 NYCRR 373-2.6.

Momentive will modify the groundwater monitoring program so as to maintain compliance with any future changes in 6 NYCRR 373-2.6 within ninety (90) days of the effective date of such changes.

Momentive maintains and follows the Detection Monitoring Program as established in the "Operations and Maintenance Manual, Closed Regulated and Non-Regulated Units."

B. POST-CLOSURE ACTIVITIES FOR SURFACE IMPOUNDMENTS (373-2.7 (g)(1), 373-2.7 (h), 373-2.11(f))

(1) General Procedures

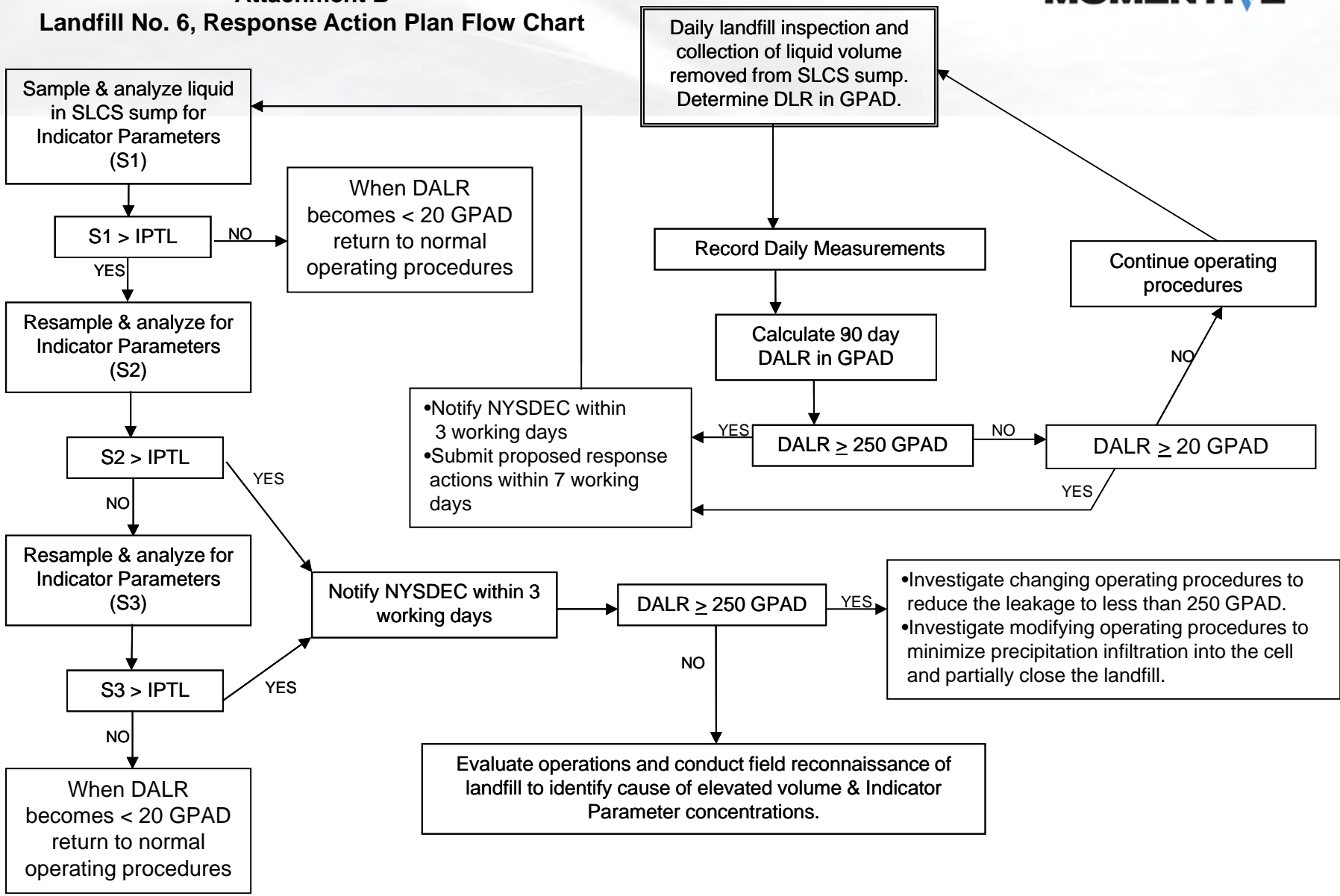
This Post-Closure Plan describes the activities that will be performed to monitor the impoundments throughout the post-closure care period. These activities will develop documentation and promote actions to protect human health and the environment.

Since all waste inventory was removed during closure of Lagoon No. 2 and Lagoon No. 3, no post-closure plans are presented for these lagoons. The other closed ponds will be monitored and maintained throughout the post-closure care period. Activities consist of periodic inspections, groundwater monitoring and maintenance of all observable features. Inspection items for the ponds are the cover surfaces, the gas vent risers and adjacent run-off diversion ditches. Detailed monitoring and maintenance procedures for surface impoundments can be found in the O&M Manual. Groundwater monitoring wells within this area are monitored and maintained as part of the overall site-monitoring program described in Section IX of this permit application.

(2) Reporting

Significant deficiencies observed during quarterly inspections or as a result of spot inspections will be reported to the NYSDEC within three working days. Significant deficiencies will be considered those which cannot readily be corrected utilizing standard maintenance methods and materials, or those that pose a potential threat to human health or the environment.

Attachment B
Landfill No. 6, Response Action Plan Flow Chart



Acronyms

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TABLES

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FIGURE IV-B-1	MAXIMUM DRUM STORAGE PLAN*
FIGURE IV-B-2	RKI FEED PAD, MAXIMUM DRUM STORAGE*

*Confidential Business Information Documents Available In Volume II

SECTION IV-B: PROCESS DESCRIPTION – STORAGE IN CONTAINERS**A. AUTHORIZED STORAGE AREAS, WASTE TYPES AND STORAGE VOLUME**

In accordance with the definition of a container in 6NYCRR 370.2(b)(34), Momentive stores solid wastes generated on-site in drums, totes, portable tank wagons, liquid transport trailers, and dump trailers or roll-offs. Table IV-B-1 lists the permitted storage areas and designated transfer areas where materials are loaded and unloaded. Table IV-B-1 also shows the maximum permitted container storage volumes at the facility.

The quantity of each type of waste Momentive generates is presented in Section I of this permit application. The maps in Volume II show the location of the container storage areas. Figures IV-B-1 and IV-B-2 show the maximum storage arrangement of the Drum Storage Structure (1 Year Pad) and the typical storage arrangement of the RKI Feed Pad. Volume II also includes drawings of the tanks and containment areas and transfer stations.

B. CONTAINMENT

Momentive maintains the containment systems in accordance with the requirements of 6 NYCRR 373-2.9(f) and as specified below.

- (1) Design, Dimensions, and Materials of Construction (373-1.5(b)(1)(i), 373-2.9(f)(1)(i))

The hazardous waste container storage area containment systems were designed to provide an area for safe handling, storage and containment of containers holding hazardous wastes. The design parameters include proper selection of construction materials, sizing and grading to achieve design goals. Drawings of both the storage and transfer structures are presented in Volume II of the application. Person(s) certified by the National Association of Corrosion Engineers (NACE), or with equivalent training and experience, verify the chemical compatibility and performance criteria for all containment coating systems.

Drum Storage Structure (1 Year Pad)

The Drum Storage Structure (1 Year Pad) is northeast of the Rotary Kiln Incinerator at the Waste Treatment Plant (WTP). It is approximately 200 by 54 feet and has four separate storage bays. The Drum Storage Structure (1 Year Pad) is a free-standing, rectangular structure set on a six-inch thick crushed stone sub base. The foundation, itself, is constructed of high strength poured concrete. There is also 12-inch high concrete curbing on three sides of the structure and a 6-inch high rounded berm on the fourth, southeastern, side of the structure. The storage bays have concrete diking between them, and the floors in each bay slope to a blind sump. The foundation, berm, and concrete diking have a chemical resistant coating.

Compatible water stops are installed at the joints of the pad. Thus, the base is essentially compatible with all wastes stored in the structure. A roof covers the entire structure. Heavy weight poly sheeting hangs down from the roof on portions of the north and west sides of the structure to help protect stored containers from the weather.

The Drum Storage Structure (1 Year Pad) is used to store containers of hazardous waste for up to one year. Hazardous wastes stored in this area are described in Table IV-B-1. The western most storage bay also has a work area. Inspection procedures are utilized to minimize prolonged exposure to caustic wastes that may weaken the surface.

RKI Feed Pad

The RKI Feed Pad is adjacent to the north of the RKI. It is approximately 60 by 48 feet. The secondary containment system for the RKI Feed Pad consists of a sloped concrete pad, a full roof, and a dead end sump. The foundation of the RKI Feed Pad is set on compacted gravel fill and is constructed of reinforced concrete that is one-foot thick. The RKI Feed Pad slab is graded to drain to a blind sump and has a chemical resistant coating. The RKI Feed Pad is entirely covered by a roof and surrounded by concrete curbing.

Typically, only drums containing solids are stored on the RKI Feed Pad. Absorbent materials are added as necessary to solidify residual liquids in drums stored in this area. Occasionally, drums containing liquid hazardous wastes are stored here prior to being moved to a designated storage area.

APS Transfer Station

The APS Transfer Station is at the southwest corner of the WTP tank farm, south of the lab and the “water side” control room buildings in the WTP. It has one transfer dock for a tanker, is approximately 58 by 12 feet, and slopes down into a sump at the north end. Curbing is present on the north, east, and west sides of this transfer bay.

This area is used for transferring NPS and APS into tanks T-15, T-28A, T-28B, T-250, T-251, T-539A, and T- 539B. Additionally, the area can be used for transferring NPS into tank T-252 and Siloxanes into tank T-26C.

Fixed Box Transfer Station

The Fixed Box Transfer Station is south of the lab and “water side” control room buildings in the WTP. It has three transfer docks for tankers, is approximately 46 by 63 feet, and slopes down to a sump at the south end. Concrete diking is present on the south, east, and west sides of this transfer bay.

This area is used for transferring Methyl Slurry into tanks T-39 and T-40 and Siloxanes into tank T-26C. Additionally, the docking connections in this area are used for the direct burn of Acetyl Chloride and Miscellaneous waste streams in the Fixed Box Incinerator (FBI).

RKI Transfer Station

The RKI Transfer Station is east of the RKI and on the south and east sides of the containment dike for tanks T-61 and T-62. It has four docks for tankers: three are south of the containment dike, and one is parallel to the eastern wall of the dike. The four docks are contiguous and comprise a single L-shaped transfer bay. The area south of the containment dike is approximately 50 by 21 feet, and the contiguous eastern area is 28 by 50 feet. The area slopes down to a sump at the north end of the eastern-most dock. Concrete diking is present on the north, east, and west sides of this transfer station.

This area is used for transferring Methyl Slurry into tanks T-61 and T-62. Additionally, the docking connections in this area are used for the direct burn of Acetyl Chloride and Miscellaneous waste streams in the Rotary Kiln Incinerator (RKI).

The RKI Transfer Station is also used for slurry pump cleaning, washing packing materials from the countercurrent scrubbers and ionizing wet scrubbers, and cleaning pipes from the incineration processes. Trailers may be staged in this area, and may be dewatered in this area.

Building 23 Transfer Station

The Building 23 Transfer Station is north of Building 23 and west of Building 25. It has six docks for tankers; the two eastern-most docks, 5 and 6, are used for transferring hazardous waste. The transfer area for hazardous waste is approximately 32 by 61 feet. The transfer bay slopes down to a sump on the north end. Concrete diking is present on the north, east and west ends of this transfer bay. The diking on the western side separates the bay for docks 5 and 6 from the rest of the transfer station.

This area is used for transferring APS into tankers.

Building 30 Transfer Station

The Building 30 Transfer Station is at the southwest corner of Building 30. It has one dock for tankers and is approximately 48 by 23 feet. A rounded berm is present on the south side of the station. The transfer station slopes down to a sump in the northwest corner of the station. Concrete diking is present on the north, east, and west ends of the transfer station.

This area is used for transferring Miscellaneous-HMDZ (hexamethyldisilazine) into a tanker.

Building 35 Transfer Station

The Building 35 Transfer Station is north of Building 35, at the southeastern end of Building 37. It has two docks for tankers; the southern-most dock is used for transferring hazardous waste. This southern dock is in a separate bay within the transfer station and is approximately 55 by 16 feet. A rounded berm is present on the eastern end of the entire transfer station. The entire transfer station slopes down to a sump on the western end. Concrete diking is present on the north, south, and west ends of the transfer station. There is a pad between the two transfer bays.

This area is used for transferring caustic waste into tankers.

Building 71 Transfer Station

The Building 71 Transfer Station is north of Building 71. It has five docks for tankers; the southern-most dock is used for transferring hazardous waste. This southern dock is in a separate bay within the transfer station and is approximately 59 by 62 feet. A rounded berm is present on the western end of the entire transfer station. The entire transfer station slopes down to a sump on the eastern end. Concrete diking is present on the north, east, and west ends of the southern transfer bay. The diking on the northern side separates the southern-most bay from the rest of the transfer station.

This dock is used for transferring APS into tankers.

Building 76 Transfer Station

The Building 76 Transfer Station is south of Building 76. It has five docks for tankers; docks 1 South and 2 South are used for transferring hazardous waste. The transfer station is approximately 42 by 45 feet and slopes down to a blind sump in the southeastern corner of the area.

Dock 1 South is used for transferring APS and NPS and dock 2 South is used for transferring Acetyl Chloride into tankers.

Building 78 Transfer Station

The Building 78 Transfer Station is north of Building 78. It has four docks for tankers; dock 3 is used for transferring hazardous waste. The transfer station is approximately 60 by 56 feet. The western end of the transfer station is pitched up from the road. The transfer station itself slopes down to a sump on the eastern end. Concrete diking is present on the north and south ends of the transfer station.

Dock 3 is used for transferring Miscellaneous-UVLE wastes into tankers.

Tank 538 Transfer Station

The Tank 538 Transfer Station is south of Building 30 and east of Building 21. It has one transfer dock for a tanker, is approximately 51.5 by 14.5 feet, and slopes down into a sump at the east end. The transfer bay has curbing on the north, east, and west sides of it.

This area is used for transferring NPS and APS into tankers.

MCS/R² Tank Slurry Transfer Station

The MCS/R² Tank Slurry Transfer Station is southeast of Building 62A. It has two docks for tankers and is approximately 57 by 59 feet. Rounded berms are present on the north and eastern sides of the station. The transfer station slopes down to a sump in the middle of the bay. Concrete diking is present on the west and southern sides of the station.

This area is used for transferring Methyl Slurry into tankers.

(2) Containment System Drainage (373-1.5(b)(1)(ii), 373-2.9(f)(1)(ii))

Each hazardous waste transfer station is pitched to drain liquids into a sump. Percent slope of the grades can be determined from the drawings contained in Volume II.

Stormwater that accumulates in containment systems is removed within 24 hours and treated at the WTP. Released materials in containment areas are removed for proper disposal as soon as is practicable.

Drum Storage Structure (1 Year Pad)

The floor in each of the four bays within the Drum Storage Structure (1 Year Pad) slopes, directing released material to the blind containment sumps in each bay.

RKI Feed Pad

The floor of the RKI Feed Pad is graded at 0.5% slope to encourage drainage to a blind sump. The sump contains piping that can be connected to suction pumps to remove the contents of the sump.

APS Transfer Station

The sump at the APS Transfer Station is drained via a transfer pump to APS waste storage tanks. If the sump fills above a certain level, the sump will drain through a double-walled pipe to the subterranean T-28B vault. In turn, the T-28B vault is drained via a steam eductor to the process sewer and the WTP.

Fixed Box Transfer Station

The sump at the Fixed Box Transfer Station is drained via a steam eductor to the process sewer. If the sump fills above a certain level, the sump will drain through a double-walled pipe to the subterranean T-28B vault. In turn, the T-28B vault is drained via a steam eductor to the process sewer and the WTP.

RKI Transfer Station

Momentive has the infrastructure present to pump precipitation out of the sump in this area to the incinerator neutralizer, through clarifier 3 and the incinerator back neutralizer. After this treatment is completed, the wastewater is discharged through outfall 002.

Alternatively, Momentive has a procedure for vacuuming precipitation out of this sump into a tanker. The precipitation is transferred in the tanker to the API pad, at the head of the waste water treatment works.

Both management options are conducted in accordance with Momentive's New York State Pollutant Discharge Elimination System (SPDES) permit.

Building 23 Transfer Station

The sump in this area drains to a spill containment vault, "Cadigan's Tomb". A valve in Cadigan's Tomb allows it to drain to the WTP.

Building 30 Transfer Station

When the sump in the northwest corner of this transfer station fills to a certain level, a pump turns on and pushes the material through the trench drain on the southern side of the transfer station and out into the process sewer and the WTP.

Building 35 Transfer Station

The sump in this area has a pump and associated piping that drains to the process sewer and the WTP.

71 Transfer Station

The sump in this area has a pump and associated piping that drains to the process sewer and the WTP.

Building 76 Transfer Station

The sumps in this area are interconnected and drain to the process sewer and the WTP.

Building 78 Transfer Station

The sump in this area has a pump that discharges to the process sewer and the WTP.

Tank 538 Transfer Station

The sump in this area has a pump and associated piping that drains to Cadigan's Tomb. A valve in Cadigan's Tomb allows it to drain to the process sewer and the WTP.

MCS/R² Tank Slurry Load Station

The sump at the R² transfer area has a pump that discharges to the process sewer and the WTP.

- (3) Containment System Capacity (373-1.5(b)(1)(iii), 373-2.9(f)(1)(iii))

Drum Storage Structure (1 Year Pad)

The Drum Storage Structure (1 Year Pad) can store 3,480 55-gallon drums for a total storage volume of 191,400 gallons. The containment system can hold approximately 28,480 gallons, which exceeds the ten percent secondary containment requirement, 19,140 gallons. These volumes include sump capacities and exclude the volume occupied by pallets.

Although the partially open sides of the Drum Storage Structure (1 Year Pad) and run on over the apron may allow a minimal amount of precipitation to enter the structure, the containment volume of the area is sufficient to accommodate up to 9,340 gallons of run-on.

RKI Feed Pad

The RKI Feed Pad can store 480 fifty-five gallon drums for a total storage volume of 26,400 gallons. Curbing in this area provides containment for 2,620 gallons, and the floor is pitched toward a sump that provides an additional 60 gallons of containment. The total containment capacity of approximately 2,680 gallons is greater than ten percent of the maximum volume of waste stored in the structure.

The roof overhanging the RKI Feed Pad, the sloping of the surrounding pavement, and the proximity of B96 are sufficient to prevent appreciable amounts of stormwater from entering the RKI Feed Pad. Incidental amounts of stormwater may enter the structure if there is a significant cross wind during a storm event. However, this stormwater collects in the 60-gallon sump and is pumped out within 24 hours.

APS Transfer Station

The APS Transfer Station is designed for one tanker up to 6,000 gallons in size. The containment volume capacity is approximately 36,733 gallons, and the rainfall allowance is approximately 2,722 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 26,011 gallons. The excess 20,011 gallons of containment capacity is sufficient to contain run-on which might enter the system;

furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

Fixed Box Incinerator Transfer Station

The Fixed Box Incinerator Transfer Station is designed for up to three tankers, each up to 6,000 gallons in size. The containment volume capacity is approximately 42,233 gallons, and the rainfall allowance is approximately 5,555 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 28,677 gallons. The excess 22,666 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

RKI Transfer Station

The RKI Transfer Station is designed for up to four tankers, each up to 2,000 gallons in size. The containment volume capacity is approximately 16,724 gallons and the rainfall allowance is approximately 9,441 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 7,283 gallons. The excess 5,283 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

Building 23 Transfer Station

The Building 23 Transfer Station is designed for up to two tankers, each up to 6,500 gallons in size. The containment capacity is approximately 60,519 gallons and the rainfall allowance is approximately 5,722 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 54,797 gallons. The excess 48,297 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

Building 30 Transfer Station

The Building 30 Transfer Station is designed for one tanker up to 1,000 gallons in size. The containment capacity is approximately 11,329 gallons and the rainfall allowance is approximately 3,869 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 7,460 gallons. The excess 6,460 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

Building 35 Transfer Station

The Building 35 Transfer Station is designed for one tanker up to 6,500 gallons in size. The containment capacity is approximately 16,871 gallons

and the rainfall allowance is approximately 5,682 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 11,189 gallons. The excess 4,689 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

71 Transfer Station

The Building 71 Transfer Station is designed for one tanker up to 6,000 gallons in size. The containment capacity is approximately 30,647 gallons and the rainfall allowance is approximately 12,132 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 18,515 gallons. The excess 12,515 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

Building 76 Transfer Station

The Building 76 Transfer Station is designed for up to two tankers, one up to 2,000 gallons, and the other up to 6,500 gallons in size. The containment capacity is approximately 30,837 gallons and the rainfall allowance is approximately 12,556 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 18,281 gallons. The excess 11,781 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

Building 78 Transfer Station

The Building 78 Transfer Station is managed to store one tank wagon up to 6,500 gallons in size. An engineering design that accounts for secondary containment capacities will be developed.

Tank 538 Transfer Station

The Tank 538 Transfer Station is designed for one tanker up to 6,500 gallons in size. The containment capacity is approximately 64,411 gallons and the rainfall allowance is approximately 3,591 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 60,820 gallons. The excess 54,320 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

MCS/R² Tank Slurry Transfer Station

The MCS/R² Tank Slurry Transfer Station is designed for up to three tankers, each up to 1,500 gallons in size. The containment capacity is

approximately 10,804 gallons and the rainfall allowance is approximately 6,041 gallons, based upon 4.8 inches of rainfall. This amounts to an available containment capacity of approximately 4,764 gallons. The excess 3,264 gallons of containment capacity is sufficient to contain run-on which might enter the system; furthermore, stormwater that accumulates in the sump is pumped out within 24 hours.

(4) Run-on Control (373-1.5(b)(1)(iv), 373-2.9(f)(1)(iv))

The Drum Storage Structure (1 Year Pad) and the RKI Feed Pad are covered by roofs, which direct precipitation away from these structures. Curbing around these structures also prevents run-on from entering these structures. Grading outside these structures has been designed to direct sheet flow away from the facility.

The paved areas around each transfer station slopes away from the entrance to each transfer area. This prevents run-on of precipitation that does not directly fall on the containment area. Further, concrete diking and curbing around each transfer station reduces the amount of run-on entering each containment area.

(5) Prevention of Overflow (373-1.5(b)(1)(v), 373-2.9(f)(1)(v))

Overflow from the Drum Storage Structure (1 Year Pad) and the RKI Feed Pad is prevented by design. The control of run-on and the use of sumps and curbing prevents material from leaving the containment system. When stormwater is detected in the sumps, it is removed by a vacuum pump within 24-hours and transferred to the WTP. When contaminated stormwater or spilled material is detected in the sumps, it is disposed of in an approved manner as soon as is practicable.

Overflow of the transfer areas is prevented by design. Curbing and sloped surfaces are used to prevent run on and to prevent materials from leaving the containment system. The containment sumps are manually pumped or gravity drained into the process sewer to prevent overflow.

(6) Containment System Assessment Procedure

The secondary containment structures associated with each container storage area and transfer area will be evaluated for deterioration annually using the protocol in Attachment A.

C. CONDITION OF CONTAINERS (373.2.9(b))

If a container holding hazardous waste is not in good condition (e.g., severe rusting or visible structural defects) or if it begins to leak, trained Momentive

personnel will transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with 6 NYCRR 373-2.9 and 40 CFR 264 Subpart I. In some circumstances (for example, if there is significant damage to a container or to enable safe handling of the container), it may be necessary to overpack it, instead of repacking the container. Leaking containers are emptied to meet RCRA empty requirements and managed accordingly.

In the event that a leak associated with tank wagons, tank trailers, sludge trailers, or clinker trailers is discovered, the equipment is held at the containment area where the leak was discovered until the leak is stopped or the material can be transferred to another container. If any leaking container threatens off-site human health or the environment, the Integrated Contingency Plan referenced in Section VI is activated.

D. COMPATIBILITY OF WASTE WITH CONTAINERS (373-2.9(c))

Momentive assures that containers containing waste are not impaired, as required by 6 NYCRR 373-2.9(c). Further, hazardous wastes are placed in containers that are compatible with their contents. Drums that are destined to hold chlorosilane wastes are constructed of, or lined with, appropriate material to protect the drum from coming in contact with this waste. Momentive maintains a controlled document that describes the appropriate containers for specific wastes. This document is available to waste handling personnel.

Although each container typically contains one type of waste, there is the potential that there will also be trace amounts of other types of wastes in a container. These trace materials are identified on container labels; however, waste container types are not chosen based upon the presence of trace contents.

E. MANAGEMENT OF CONTAINERS

Momentive manages containers as required by 6NYCRR 373-2.9 (d) and as described below.

(1) Handling and Storage (372.2 (a)(8)(i)(b) and 373-2.9(d))

Hazardous waste is collected in a variety of containers on-site, usually either drums, totes, or tankers, at satellite accumulation areas that are under operator control. Containers of hazardous wastes remain closed during storage, except when it is necessary to add or remove waste, repack the containers, or inspect them. Repacking includes removing waste from a damaged container, and placing it in a sound container. In some circumstances (for example, if there is significant damage to a container or to enable safe handling of the container), it may be necessary to overpack it,

instead of repacking the container. This work may be done in either satellite accumulation areas, less than 90 day storage areas, or permitted storage areas.

Momentive may place wastes in a lab pack in the event that there are several small intact containers of compatible materials that need to be disposed of properly. Additionally, unknown materials may be placed in lab packs once they have been sampled and analyzed by a laboratory to facilitate proper disposal. Momentive or contract personnel may conduct lab packing on site. In either event, MSDSs, generator knowledge, and other third party technical information are used to evaluate the compatibilities of materials placed in a lab pack, and to ensure incompatible wastes are not mixed. Vendor-supplied MSDSs and technical specifications are available for materials not manufactured on site. MSDSs generated by Momentive for materials manufactured on-site are also available; these latter MSDSs are developed according to an established procedure that includes laboratory testing and regulatory analysis. Additionally, process knowledge is used for evaluating waste compatibility to provide waste stream characterizations at various points in the process.

When a satellite accumulation container becomes full, or the contents of the container exceed 55-gallons, the container is dated. Drums, totes, or other non bulk containers that are dated are stored at a less than 90 day storage area. Containers are checked to ensure they are properly labeled, closed, and staged on pallets prior to transferring them to the Drum Storage Structure (1 Year Pad) or the RKI Feed Pad. Proper labeling includes a clear designation that hazardous waste is in the container, the contents of the container, and the date.

Momentive schedules waste container transfers from the less than 90-day storage areas at times when there is staff available to receive the waste containers at the Drum Storage Structure (1 Year Pad) or the RKI Feed Pad. Precautions are taken during handling to ensure that while opening, handling, or storing the drums, they are not ruptured or caused to leak.

Hazardous waste containers are visually inspected again on arrival at the Drum Storage Structure (1 Year Pad) or the RKI Feed Pad. In the event that a problem is observed with a container, it is returned to the less than 90 day storage area where it originated if it is safe for transferring, and within 90-days of being filled. Drums that are not safe for transferring will be repackaged at the Drum Storage Structure (1 Year Pad). Containers repackaged at the less than 90 day storage area where it originated are returned to the Drum Storage Structure (1 Year Pad) when the problem is remedied.

Containers of hazardous waste that will be incinerated in the RKI are also checked for liquid. In the event that there is liquid in a drum that will be incinerated in the RKI, the liquid is solidified by putting absorbent materials into the drum. Bar codes are placed on each drum by the RKI's drum scale system. The drum scale system weighs each drum and records the information.

Containers received at the Drum Storage Structure (1 Year Pad) are stored, sorted, overpacked or handled inside one of the bays of the structure. Containers passing inspection are stored in designated locations, depending on waste type, waste compatibility, priority for repacking, and priority for incineration. The Drum Storage Structure (1 Year Pad) and the RKI Feed Pad are the only places at the plant that store hazardous waste in containers, other than tankers, after 90 days have passed since the date they were originally filled, or filled past 55-gallons.

As noted above, hazardous waste may also be collected in tankers at any of the following areas: Building 23, 30, 35, 71, 76 or 78, Tank 538, or MCS/R² Tank Slurry Transfer Station. Transfer areas are inspected daily as part of the transfer area inspection. When tankers are full, or the WTP operators need fuel, tankers are hauled to Momentive's WTP. Hazardous waste is transferred from the tankers to the APS Transfer Station, Fixed Box Transfer Station, or the RKI Transfer Station at the WTP. From these docks, hazardous waste is either transferred to hazardous waste storage tanks, or incinerated ('direct burned') at either the RKI or the FBI.

Paragraph A of this section lists the container volumes stored in each area and Paragraph F of this section discusses the inspections required for all the hazardous waste container storage areas.

Personnel who handle hazardous waste are trained per the OSHA standard. Trained personnel place pallets on flatbed trucks using forklifts and deliver the palletized containers to either the Drum Storage Structure (1 Year Pad) or the RKI Feed Pad. Driving forklifts on the berm on the southern side of the Drum Storage Structure (1 Year Pad) is limited to staging containers for shipment, or if it is necessary to move a container to protect human health or the environment. Alternatively, personnel may use walkies or other mechanical aids to safely manage these containers. Tank wagons are moved on-site by trained personnel from the hazardous waste transfer areas at the APS Transfer Station, Fixed Box Transfer Station, RKI Transfer Station, Buildings 23, 30, 35, 71, 76, and 78 Transfer Stations, the Tank 538 Transfer Station, and the MCS/R² Tank Slurry Transfer Station.

In the Drum Storage Structure (1 Year Pad) and the RKI Feed Pad, single pallet rows are set back by 6-inches from the back concrete berm and 9-inches from the side concrete berms. Aisles are required to be at least 18-

inches wide, allowing for the unobstructed movement of personnel, fire protection equipment and decontamination equipment in the event of an emergency. Spill response equipment such as hoses, floor dry, brooms, and pig mats may be used to respond to an emergency. Pallets are stacked no more than three high for any hazardous waste.

(2) RECORDKEEPING (373-2.5(c)(2)(ii))

Momentive has an inspection system that assists in the proper management of containers holding hazardous wastes. Containers are tracked as they are received at the Drum Storage Structure (1 Year Pad). Container tracking documents are kept in either paper or electronic format.

(3) FUGITIVE EMISSIONS CONTROL DURING DRUM FEED TO THE RKI

Fugitive emissions from waste drums are controlled while the drums are staged for incineration in the RKI by adherence to the following procedures:

a. Pallets of drums are staged in the RKI Feed Pad to prepare them for incineration. The drums arriving in the area have closed lids and are kept closed until the area operator selects the drum as waste feed. After selection, the drum is opened and visually inspected to verify the amount of material in the drum and its visible physical characteristics. If the operator determines the drum is not acceptable for incineration (e.g., it has been filled too full) he/she replaces the cover, marks the drum as rejected and places it aside to be returned to the generating area or the Drum Storage Structure (1 Year Pad).

b. Drums accepted for incineration are temporarily covered by a flexible plastic bag that fits snugly over the top of the drum. These drums are staged in the RKI feed pad area and on the conveyor. The prepared drums are placed on the feed conveyor, from which they are fed into the RKI depending on the appropriate waste feed rate.

If an unplanned shutdown occurs in which the RKI or drum feed system is shutdown for a period exceeding 24 hours, the drum lids will be replaced and secured.

F. INSPECTIONS (373-2.2(g), 373-2.9(e))

Momentive complies with 373-2.2 (g) and follows the inspection schedule and procedure outlined below. Momentive remedies any deterioration or malfunction discovered by an inspection as required by 6NYCRR 373-2.2(g)(3) and 373-2.9(e).

Records of inspections are kept as required by 6NYCRR 373-2.2(g)(4), and maintained in the operating record as required by 6NYCRR 373-2.5(c)(2)(v).

(1) GENERAL CONTAINER INSPECTIONS PROCEDURE

Container inspection documents may be kept in either paper or electronic format. The records will document the date and time of inspection, inspector, and if the inspection items are acceptable or unacceptable. The results of the inspections are retained for three years.

The general container inspection procedure for the permitted drum storage pads shall include, but is not limited to, the weekly visual inspection to verify the following:

- a. No hazardous waste drum present for greater than one year.
- b. Aisle space is 18-inches or more between container rows.
- c. The containers are identified with the words "Hazardous Waste" and the container contents.
- d. Containers are not rusted, dented, bulging, and/or leaking.
- e. Containers are closed and secure.
- f. The containment structure is free of cracks and deterioration.

The general weekly container inspection procedure for load/unload areas shall include, but is not limited to, the visual inspection to verify the following:

- a. No Leaking containers are present.
- b. Loading/unloading areas have no cracks and are not deteriorated.
- c. The containers are identified with the words "Hazardous Waste" and the container contents.
- d. The drain system is operable.

At the Drum Storage Structure (1 Year Pad), drum inspections will be facilitated using appropriate tools. Tools used may be either a mirror, flashlight, or ladder. These tools are helpful for properly inspecting drums stacked three-high in this area.

G. REQUIRED AISLE SPACE (373-2.3(f))

Aisle space in the container storage areas is maintained in accordance with Figures IV-B-2, IV-B-3, and IV-B-4.

H. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE (373-1.5(b)(3), 373-2.2(i)(1), 373-2.9(g))

Momentive does not store containers holding ignitable or reactive waste within 50 feet of the facility's property line. The site map in Volume II demonstrates compliance with this minimum distance.

Momentive has implemented various rules and procedures to prevent accidental ignition or reaction of ignitable or reactive wastes. Smoking is allowed only in plant areas where a smoking permit is posted. Smoking is strictly prohibited in all other plant areas. Employees are instructed to assume areas are non-smoking if a smoking permit is not visible. Spark free tools are used to open containers with potentially flammable contents, and trucks are properly grounded prior to loading or unloading potentially ignitable wastes. Additionally, good housekeeping, enforced by frequent inspections, and proper labeling facilitate proper handling of ignitable and reactive wastes.

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE

- (1) Momentive does not place incompatible wastes or incompatible wastes and materials in the same container per 373-2.9(h)(1).
- (2) Momentive does not place hazardous wastes in unwashed containers that previously held incompatible wastes or materials per 373-2.9(h)(2).
- (3) Momentive separates containers of incompatible wastes as per 373-2.9(h)(3), and as described below.

a. Storage in a Common Area (373-2.9(h)(3))

The 12-inch concrete curbing between bays in the Drum Storage Structure (1 Year Pad) help isolate wastes and prevent wastes from mixing if a release occurs. Incompatible wastes such as methyl hydrogen, HMDZ, and caustic materials are stored separately in the Drum Storage Structure (1 Year Pad) from other wastes in this area. This is done by means of portable berms and other portable containment devices.

Containers of incompatible hazardous waste are not stored simultaneously on the RKI Feed Pad through proper scheduling of the wastes being fed into the RKI.

- (4) Momentive has developed and implemented appropriate management practices for the hazardous materials handled in the transfer stations on site. Hazardous wastes are a subset of these hazardous materials.

Momentive minimizes the possibility of mixing incompatible materials in common sumps at material transfer stations through:

- Knowledge of the materials handled at each transfer station, and their compatibility with each other. Momentive's Management of Change (MOC) process is used to evaluate potential safety issues associated with changes to material handling at the plant.
- Safe work practices and procedures for transferring materials have been developed. This includes a robust spill prevention, handling, and management program.
- Managing only compatible materials in transfer stations whenever practicable. No incompatible materials are handled at the following transfer stations:
 - B30 Transfer Station,
 - B35 Transfer Station,
 - B71 Transfer Station,
 - B76 Transfer Station,
 - B78 Transfer Station,
 - Tank 538 Transfer Station, and
 - MCS/R² Tank Slurry Transfer Station.
- Minimizing handling incompatible materials at the same time during transfers. For example, the APS Transfer Station and Fixed Box Transfer Station have single transfer bays and cannot have incompatible materials transferred at the same time. However, Momentive recognizes that overflow from these specific transfer stations can commingle in the subterranean T-28B vault, the appropriate safety precautions have been taken, as outlined below.
- Minimizing the risk of equipment failures through a robust maintenance schedule. In the event of a release, incompatible materials are unlikely to be mixed since transfer operators can activate Safety Shut Downs available at each tank farm on site. The following areas may transfer incompatible materials simultaneously: B23 Transfer Station and RKI Transfer Station.

ATTACHMENT A PROTOCOL FOR SECONDARY CONTAINMENT ANNUAL ASSESSMENT

This procedure will be used by area production leaders to visually evaluate the condition of secondary containment structures at permitted hazardous waste container and tank storage units, as described in Table IV-B-3, Secondary Containment Areas Subject to Annual Assessment.

FREQUENCY: This procedure will be implemented annually.

AFFECTED PERSONNEL: Assessments will be conducted by an inspector certified by the National Association of Corrosion Engineers (NACE) or persons with equivalent training and experience.

EQUIPMENT: PPE required for work area, assessment procedure.

SCHEDULE: Affected areas will be consulted prior to assessments to ensure assessment will not interfere with work or maintenance in the vicinity. As required, assessments may be scheduled and completed in phases, and drum storage or tank wagon unloading area bays may be scheduled separately to accommodate material movement and maintenance activities.

PROTOCOL: Assessments will be completed as follows:

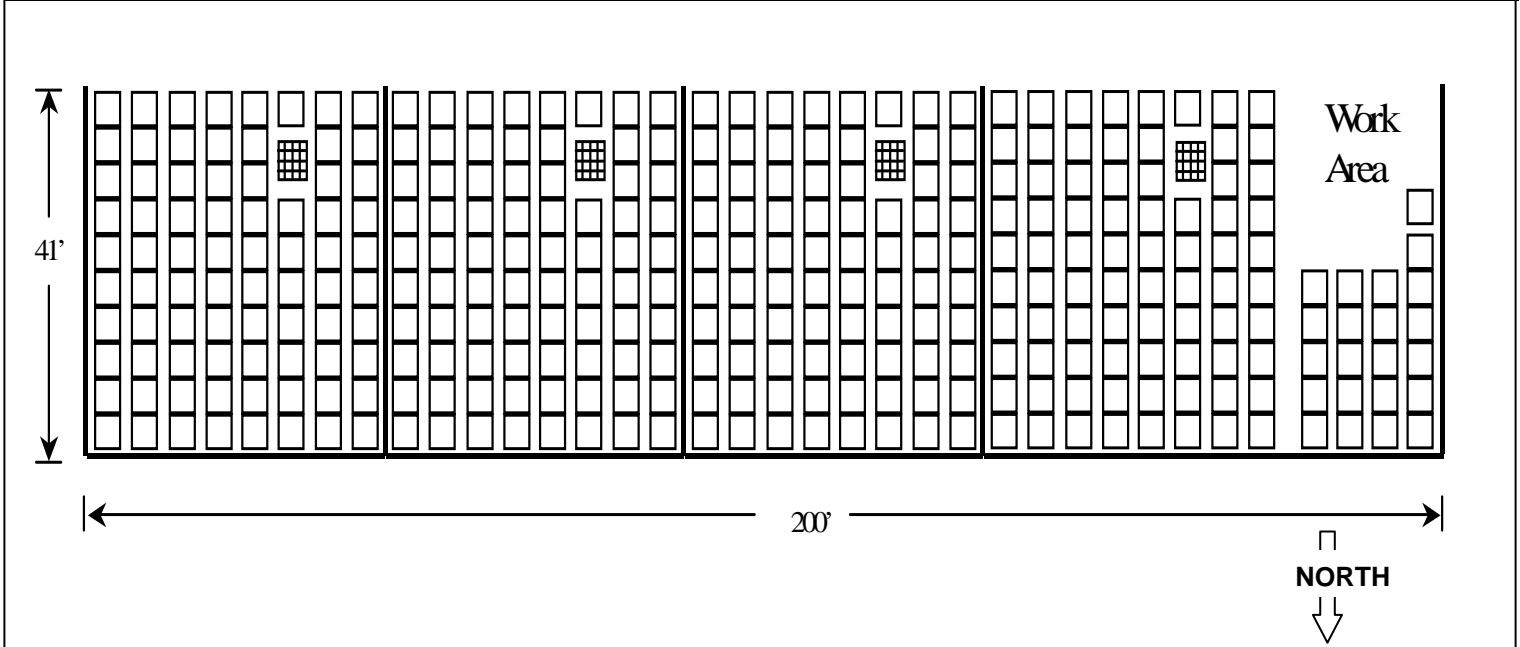
1. Verify containment area is clean. If a drum storage area, verify the area to be assessed is cleared of drums and pallets.
2. Walk area, inspecting the base, sidewalls and seams as designated on the checklist.
3. Complete checklist, review any deficiencies, and recommend repairs to Area Production Leader.
4. Process work order for necessary repairs.
5. File completed checklist and report on site.
6. Oversee that repairs were completed adequately and certify on work order closing notes.

REMEDY: Any deterioration or malfunction of structures will be repaired promptly, as weather and operations allow, to ensure that a problem does not lead to an environmental or human health hazard. All necessary repairs identified will be completed prior to December 1 of the calendar year in which the inspection occurred. Where a hazard is imminent or has already occurred, remedial action will be taken immediately.

TABLE IV-B-2 COMMON WASTES AT DRUM STORAGE STRUCTURE (1 Year Pad) & RKI FEED PAD		
Waste Stream	Treatment/ Disposal Method	Remarks
Acetoxy Catalyst	Incineration	
Acetyl Chloride	Incineration	
Acid-Polar Solvents (APS)	Biological Treatment or Incineration	
Aerosol Cans	Off-site disposal	
Caustic Liquid Low pH	Incineration	Containers of this waste are stored separately by use of portable berms
Caustic Solid High pH	Incineration	Containers of this waste are stored separately by use of portable berms
Caustic Liquid High pH	Incineration	Containers of this waste are stored separately by use of portable berms
Caustic Solid Low pH	Incineration	Containers of this waste are stored separately by use of portable berms
Halogenated Silanes	Incineration	
Incinerator Ash/Clinker	Incineration	
Methyl-Hydrogen Silicones - Liquids	Off site disposal	Containers of this waste are stored separately by use of portable berms
Methyl-Hydrogen Silicones - Solids	Incineration	Containers of this waste are stored separately by use of portable berms
Methyl Slurry	Incineration	
Miscellaneous Wastes - HMDZ	Incineration	
Miscellaneous Wastes - UV Light Ends	Incineration	
Non-Polar Solvents (NPS)	Incineration or off-site disposal	
Non Hazardous Wastes	Incineration	May be liquid or solid
Silicone Solids: - materials in absorbent, - filter cake, - API flotation cell solids, - MCS spent powder/ reactor cake, - gelled resins with solvents and acids, - lab wastes in absorbent, - impacted soils	Incineration	
Siloxanes	Incineration	
Spent PCB Ballasts	Off-site Incineration	

TABLE IV-B- 3 SECONDARY CONTAINMENT AREAS SUBJECT TO ANNUAL ASSESSMENT	
Container Storage Areas	Location
Drum Storage Area (1 Year Pad)	Waste Treatment Plant
RKI Feed Pad	Waste Treatment Plant
APS Transfer Station	Waste Treatment Plant
Fixed Box Incinerator (FBI) Transfer Station	Waste Treatment Plant
RKI Transfer Station	Waste Treatment Plant
Building 23 Transfer Station	North of Building 23
Cadigan's Tomb	North of Building 23
Building 30 Transfer Station	Southwest Corner of Building 30
Building 35 Transfer Station	North of Building 35
Building 71 Transfer Station	North of Building 71
Building 76 Transfer Station	South of Building 76
Building 78 Transfer Station	North of Building 78
Tank 538 Transfer Station	South of Building 30
MCS/R ² Tank Slurry Transfer Station	Southeast of Building 62A

FIGURE IV-B-1
MAXIMUM DRUM STORAGE PLAN



Notes:

Up to 3,480 55-gallon drums can be stored within the drum storage area.

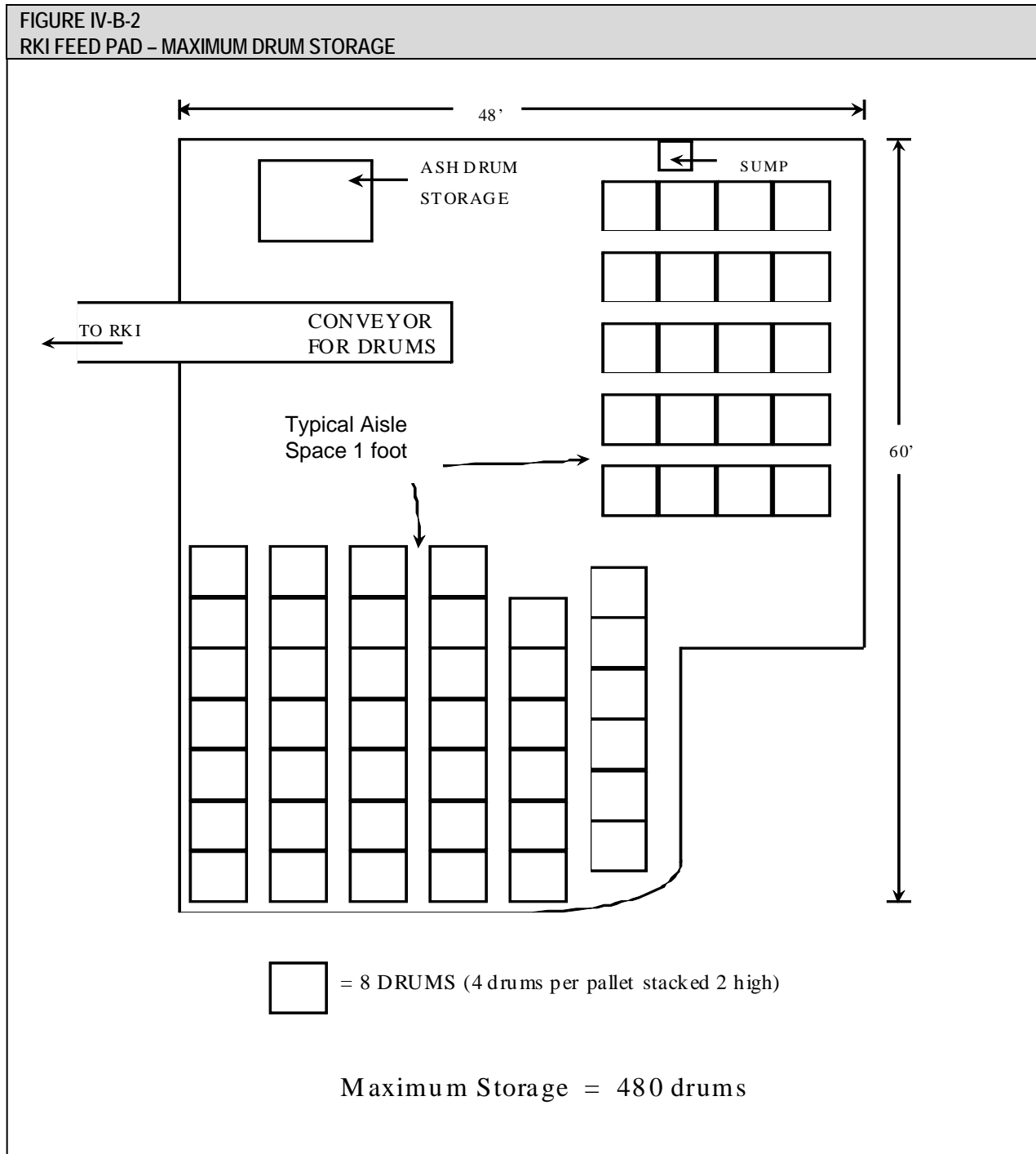
Drums are set back at least 1-foot from the back berm. Each bay has a 4' x 4' x 4' blind sump with a 478-gallon capacity.

Each bay is separated by a concrete berm, and there is a 6-inch high asphalt berm along the south side.

Drums are set back at least 1-foot from the side berms.

The Drum Storage Plan in Volume II provides more specific information regarding the construction and dimensions of this area.

**FIGURE IV-B-2
RKI FEED PAD – MAXIMUM DRUM STORAGE**



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*Confidential Business Information Documents Available In Volume II

SECTION IV-C: PROCESS DESCRIPTION – STORAGE IN TANKS**A. AUTHORIZED TANKS AND WASTES (373-1.5(c)(2), 373-2.10(b)(ii))**

- (1) Momentive Performance Materials (Momotive) utilizes the tanks listed in Table IV-C-1 to store the hazardous wastes listed.
- (2) Momentive will not install additional hazardous waste tanks to store hazardous wastes that are not identified in this application without applying for a permit modification.

**B. DESIGN AND INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS
(373-2.10(c))**

- (1) For new hazardous waste tank systems not listed in Table IV-C-1 which Momentive proposes to construct in the future, Momentive will, prior to construction, submit to the Commissioner an application to modify the permit. The application will include design plans, specifications and a written assessment of the tank systems' structural integrity, as required by 6 NYCRR 373-2.10(c), and obtain a permit modification.
- (2) For tank systems used to store or treat materials that are defined as hazardous waste in the future, Momentive will obtain a written assessment of the existing tank system integrity within 12 months from the date the waste is defined as hazardous (6 NYCRR 373-2.10 (b)(3)). The assessment will be certified by an independent, qualified, professional engineer registered in the State of New York (6 NYCRR 373-2.10 (b)).

**C. EXISTING TANK SYSTEM'S INTEGRITY ASSESSMENT (373-1.5(c)(1, 2, 4 & 5),
373-2.10(b))**

Existing tank systems have secondary containment and meet the requirements of 6 NYCRR Part 373-2.10(d). Momentive has previously conducted an assessment of each tank system's integrity meeting the requirements of 6 NYCRR Part 373-2.10(b).

Assessments of the integrity of the hazardous waste tank systems, which have been reviewed and certified by an independent, qualified, professional engineer registered in New York State, were previously submitted and approved by the NYSDEC. The specifications of the tanks, including design standards, materials of construction, date of installation, and physical characteristics, are presented in Table IV-C-2. Volume II of this permit application contains drawings of the tanks and containment areas. Volume II also contains the tank Process & Instrumentation Diagrams (P&IDs). These appendices are annotated as confidential information.

All of the tanks are carbon steel and are operated so that wastes or other materials are not placed in these tanks unless they are compatible with the tank material. Tanks 28A, 28B, 538, 539A, and 539B also have an interior Halar lining. Manufacturer's specifications for the Halar lining are included in Attachment A.

D. SECONDARY CONTAINMENT AND LEAK DETECTION

- (1) Tanks with Secondary Containment System
Momentive maintains the secondary containment and leak detection systems in accordance with the requirements of 6 NYCRR 373-2.10(d) and as specified below:

Design, Capacity, and Materials of Construction (373-2.10(d)(3)(i-iii), 373-2.10(d)(4), 373-2.10(d)(5)(i)(c-f), (373-2.10(d)(b))

Each hazardous waste tank at the Momentive Waterford facility has a secondary containment system consisting of an external concrete liner or vault with an impermeable, chemical resistant coating. Table IV-C-3 presents the details of each containment area. Drawings of each tank system containment are included in Volume II of this permit application. All of the concrete containments are lined with coatings that are compatible with the hazardous wastes stored in the tanks. The containments are free of cracks and gaps and have chemical-resistant water stops in place at all joints. The secondary containment systems were designed and are operated to prevent the migration of wastes in or out of the systems to the soil, groundwater, or surface water. The tanks have controls in place to avoid overfilling and to provide safety measures. The tank systems are inspected daily for leaks or evidence of deterioration. Inspection procedures for tank systems are discussed in paragraph F of this permit application.

Containment System Drainage (373-2.10(d)(3)(iv))

Each tank containment system is inspected daily. Liquid materials observed in diked areas are removed either by a mobile vacuum truck or a manually controlled pump to a process sewer. Stormwater that accumulates in containment systems is removed within 24 hours. In the event that the released waste or accumulated precipitation cannot be removed within 24 hours, it will be removed in as timely a manner as possible to prevent harm to human health and the environment. Snow and ice are allowed to melt within the containment areas. Released materials in containment areas are removed for proper disposal as soon as is practicable.

Containment System Capacity (373-2.10(d)(5)(i)(a & b))

Each of the secondary containment systems for the hazardous waste tanks has sufficient capacity to hold 100 percent of the working capacity of the largest tank in the containment area plus the volume of precipitation from a

25-year, 24-hour rainfall event. A 25-year, 24-hour rainfall event results in 4.8 inches of rain. Table IV-C-4 lists the tank volume, the volume of precipitation from a 25-year, 24-hour storm that would accumulate in each containment system, and the capacity of containment system.

The interconnected tank systems listed below are equipped with pneumatic remote operated valves, which isolate the tanks and fail to the closed position. There are either one or two discharge nozzles on the bottom or side of each tank. The discharge from both tanks flows to a common set of discharge or recycle pumps. Since the tanks operate independently due to the valve arrangements that isolate them from the common piping or pumps, they are not considered interconnected for the purposes of containment system capacity. The drawings for these tanks are included in Volume II of this permit application.

- Tank 15
- Tank 26A
- Tank 26B
- Tank 26C
- Tank 39
- Tank 40
- Tank 61
- Tank 62
- Tank 250
- Tank 251
- Tank 252
- Tank 506D
- Tank 509
- Tank 539A
- Tank 539B

Run-on and Run-off Control (373-2.10(d)(5)(i)(b))

The tank system containment areas have concrete walls to prevent run-on and run-off. Additionally, containment areas have sufficient capacity to contain precipitation from a 25-year 24-hour rainfall event.

Tanks 28A and B are vault systems. The slabs on the south and east sides of these vaults are elevated, preventing run-on into these vaults. Additionally, run-on is dispersed by gravel on the north and west sides of these vaults before it can enter the secondary containment system.

Ancillary Equipment (373-2.10(d)(6))

All ancillary equipment, including piping, pumps, valves, flanges, and joints, to the hazardous waste tank systems is inspected on a daily basis. Inspection procedures for tanks are discussed in paragraph J of this permit application.

- (2) For tank systems that store or treat materials that are defined as hazardous waste in the future, Momentive will design and construct the secondary containment system within the time specified in 6 NYCRR 373-2.10(d)(1)(vi).

E. RESPONSES TO LEAKS OR SPILLS AND DISPOSITION OF LEAKING OR UNFIT-FOR-USE TANK SYSTEMS (373-2.10(g))

Momentive will immediately remove from service any tank system, secondary containment system, or part thereof, from which there has been a leak or spill or which is found to be leaking or unfit for use as a result of the leak test or assessment. Momentive will satisfy the requirements of 6 NYCRR 373-2.10 (g) including the 24-hour notification and 30-day report to the Commissioner, containment of releases, repair of the system, and certification of major repairs by an independent, qualified, professional engineer registered in New York State. Examples of major repairs are: installation of an internal liner, repair of a ruptured primary containment or secondary containment vessel.

Momentive's Integrated Contingency Plan is incorporated by reference in this permit application. The sections of the ICP relative to hazardous wastes are discussed in Section VI. The ICP is designed to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water. The ICP is intended to satisfy the contingency planning requirements of 40 CFR Part 264, Subpart D and 6 NYCRR 373-2.4.

F. GENERAL OPERATING REQUIREMENTS (373-1.5(c)(3&9), 373-2.10(e))

- (1) Momentive operates the tank systems listed in Table IV-C-1 as specified below.
- (2) Momentive does not place hazardous wastes or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode or otherwise fail, as per 6 NYCRR 373-2.10 (e)(1).
- (3) Momentive prevents spills and overflows from the tank or containment systems, as required by 6 NYCRR 373-2.10 (e)(2), and through practices and controls used to prevent overfilling on existing tanks summarized in Table IV-C-5. The specific sensing elements can, at any time, be replaced with equivalent or better units, as operations require. All tanks containing hazardous waste are marked with the tank contents, the words "Hazardous Waste", and signs stating "No Smoking". Momentive has written procedures in place for the loading and unloading of bulk liquids.

G. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES (373-2.2(i), 373-2.10(i))

- (1) Momentive does not place ignitable or reactive waste in a tank unless the procedures described below and in 6 NYCRR 373-2.10 (i) (1) are followed.

General requirements for ignitable, reactive, or incompatible wastes are discussed in Section II.

Placement of Ignitable/Reactive Wastes in Tanks

Ignitable and reactive wastes are handled in a manner designed to minimize possible sources of ignition and any material or condition which may cause the waste to react or ignite. Specific sources of ignition that are guarded against include open flame, smoking, and electrical and mechanical sparks.

Momentive has a Safe Work Permit procedure in place to minimize and control fire hazards. Tanks which hold wastes which are reactive with water such as halogenated silanes, chlorosilanes, and acetyl chlorides have inert gas blanketing systems to ensure these wastes do not react with water or atmospheric moisture. Other provisions for fire control specific to hazardous waste tanks are presented in Table IV-C-5.

Description of Buffer Zones (373-2.10(i)(2))

Ignitable or reactive wastes stored in tanks comply with the buffer zone requirements contained in the "Flammable and Combustible Liquids Code" of the National Fire Protection Association (NFPA). These requirements are incorporated by reference in the 6 NYCRR and 40 CFR regulations in 373-2.10(i) and 265.198(h), respectively. All hazardous wastes stored in tanks at Momentive are considered "stable" by the NFPA definition.

Based on the above criteria, the following guidelines apply to all hazardous waste storage tanks:

- A twenty-five (25) foot minimum buffer zone is required from all property lines which is or can be built upon, including the opposite side of a public way (a thirty (30) foot buffer zone is required for Tanks 250, 251, 538, 539A, and 539B because of their large capacity).
- A twenty-five (25) foot minimum buffer zone is required from the nearest building on the Momentive Waterford property and from the nearest side of any public way to a hazardous waste tank.
- Minimum tank spacing (shell to shell) is three feet.

The facility diagrams in Section I of this permit application show that all tanks meet or exceed these NFPA buffer zone requirements.

- (2) Momentive documents this compliance as required by 6 NYCRR 373-2.2(i) and places this documentation in the operating record.

H. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES (373-2.2(i), 373-2.10(j))

Momentive does not place incompatible wastes in the same tank or place hazardous waste in a tank that previously held an incompatible waste or material unless proper decontamination procedures are followed and 6 NYCRR 373-2.2 (i) is met.

I. SPECIAL REQUIREMENTS FOR TREATMENT IN TANKS (373-2.10)

Momentive conducts phase separation of the APS waste stream in tank T-15. The water-soluble portion that is derived from this treatment is used in the biological reactors at the wastewater treatment system as a nutritional supplement for the biomass, in lieu of a commercially available product. The non water-soluble phase is transferred to hazardous waste storage tanks for treatment prior to incineration. Occasionally, entire batches that cannot be adequately separated are transferred to hazardous waste storage tanks prior to on-site incineration.

Momentive monitors the volume of material treated in the APS phase separation tank and transferred to the hazardous waste storage tanks for incineration and records the volumes in the operating record.

J. INSPECTION SCHEDULES (373-2.5 (c)(2)(v), 373-2.10(f))

Momentive performs inspections of the tank systems including the secondary containment systems and tank detection systems, used to manage hazardous waste as described in 6 NYCRR 373-2.10 (f) and as specified below. Documentation of all inspections is placed in the operating record of the facility.

The hazardous waste tanks, vaults, and associated piping at the Momentive Waterford facility are inspected daily by operations personnel. The general inspection procedure shall include, but is not limited to, the visual inspection of the following;

1. Inspect the tank system such as tank; overflow controls, and ancillary equipment for leakage, deterioration, and/or corrosion.
2. Verify the tank level indicator or pressure gauge is operating and not leaking. Level monitoring is also used to identify potential leaks.
3. Verify the tanks are identified with the words "Hazardous Waste", "No Smoking", and the tank contents.
4. Inspect secondary containment for erosion or signs of releases.

5. Inspect hazardous waste transfer station areas for signs of releases or deterioration.

Tank inspection documents may be kept in either paper or electronic format. The records will document the date and time of inspection, inspector, and if the inspection items are acceptable or unacceptable. The results of the inspections are retained for a period of three years.

The secondary containment systems for the hazardous waste tanks at the Momentive Waterford facility are inspected annually by an inspector certified by the National Association of Corrosion Engineers (NACE) or persons with equivalent training and experience, and a representative of the affected operating unit. The secondary containment annual assessment procedure is included in Section IV-B Attachment A.

The permitted hazardous waste tank systems at the Momentive Waterford facility are also subject to comprehensive tank assessments. The purpose of these assessments is a precautionary measure to identify and remediate any problems before releases occur. These assessments are performed using procedures that meet the requirements of the OSHA Process Safety Management rules (40 CFR 119.120). This is Momentive's M-IN-08 Inspection of Unfired Pressure Vessels. As per the procedure, a written report of the findings is developed and kept as a controlled record. At a minimum, internal inspections are conducted on a 10-year cycle, and external inspections are conducted on a 5-year cycle.

ATTACHMENT A

HALAR LINING FOR TANKS 28A, 28B, 538, 539A, AND 539B

To be used as specified “or equal”



EC Duro-Bond E-CTFE Lining

Description

Duro-Bond E-CTFE is a laminated sheet lining consisting of a layer of Ethylene Chlorotetrafluoroethylene (E-CTFE) resin laminated to a fabric or vulcanized soft rubber backing that is readily bonded to steel, concrete, or FRP substrates. ECTFE is a partially fluorinated thermoplastic resin that is melt flow processible. Duro-Bond E-CTFE sheet lining is available in thicknesses of 60 mils (1.5 mm) and 90 mils (2.3 mm).

Uses

Duro-Bond E-CTFE is used as a vessel lining material to provide chemical resistance to acids, bases, oxidizing agents, organic solvents and other corrosive media. **Duro-Bond E-CTFE** can be applied to tanks, scrubbing towers, reactors, valves, columns, agitators and other process equipment for handling corrosive materials.

When a combination of chemical, temperature, abrasion and permeation resistance is required **Duro-Bond E-CTFE** is often a cost-effective solution to severe corrosion problems.

Advantages

Duro-Bond E-CTFE fluoropolymer sheet lining exhibits outstanding chemical resistance, being virtually unaffected by many of the corrosive chemicals commonly encountered in the chemical process industry. **Duro-Bond E-CTFE** is resistant to strong mineral and oxidizing acids, alkalis, metal etchants, liquid oxygen and essentially all organic solvents. Typical of the fluoropolymers, E-CTFE is attacked by metallic sodium and potassium. Rate of attack is a function of exposure time and temperature.

Duro-Bond E-CTFE sheet lining provides substrate protection by virtue of its excellent permeation resistance. The E-CTFE fluoropolymer has extremely low permeability to water vapor and various other gases. The E-CTFE fluoropolymer also exhibits low permeability to liquid chemicals. It also has excellent resistance to abrasion.

Service Temperature

E-CTFE fluorocarbon resins withstand continuous service temperatures as high as 150 ° C (300 ° F). When bonded to a substrate, the maximum recommended service temperature for **Duro-Bond FEP** sheet lining is 110 ° C (230 ° F) on a continuous basis, 120 ° C (250 ° F) on an intermittent basis.

Chemical Resistance

The information listed may be considered as a basis for recommendation, but not as a guarantee, unless sold and installed by **ELECTRO CHEMICAL ENGINEERING & MFG. CO.** For resistance of **Duro-Bond E-CTFE** to chemicals not listed, contact our Engineering Department at:

Electro Chemical Duro-Bond E-CTFE Lining

inquiry@electrochemical.net or 1-800-235-1885.

Key to Rating:
R = Recommend
NR = Not Recommended
- = No Available Data

Chemical	70°F	150°F	225°F
Acetic Acid, 50%	R	R	R
Acetic Acid, 80%	R	R	-
Acetic Acid, Glacial	R	NR	-
Acetic Anhydride	R	-	-
Acetone	R	R	NR
Acetyl Chloride	R	R	-
Acetylene	R	R	-
Acetyl Nitrite	R	R	-
Acrylonitrile	R	-	-
Adipic Acid	R	R	-
Alcohol, Amyl	R	R	R
Alcohol, Benzyl	R	R	R
Alcohol, Butyl	R	R	R
Alcohol, Diacetone	R	R	NR
Alcohol, Ethyl	R	R	R
Alcohol, Hexyl	R	-	-
Alcohol, Isopropyl	R	R	R
Alcohol, Methyl	R	R	R
Alcohol, Propyl	R	R	R
Allyl Chloride	R	R	R
Alum	R	R	R
Alum, Ammonium	R	R	R
Alum, Chrome	R	R	-
Alum, Potassium	R	R	R
Aluminum Chloride	R	R	R
Aluminum Fluoride	R	R	R
Aluminum Hydroxide	R	R	R
Aluminum Nitrate	R	R	R
Aluminum Oxychloride	R	R	-
Aluminum Sulfate	R	R	R
Ammonia, Gas	R	R	R
Ammonia, Aqua, 10%	R	R	R
Ammonium Acetate	R	R	-
Ammonium Bifluoride	R	R	R
Ammonium Bisulfide	R	R	R
Ammonium Carbonate	R	R	R
Ammonium Chloride	R	R	R
Ammonium Dichromate	R	-	-
Ammonium Fluoride, 25%	R	R	R
Ammonium Hydroxide	R	R	R
Ammonium Metaphosphate	R	R	R
Ammonium Nitrate	R	R	R
Ammonium Persulfate	R	R	-
Ammonium Phosphate	R	R	R
Ammonium Sulfate	R	R	R

Chemical	70°F	150°F	225°F
Ammonium Sulfide	R	R	R
Amyl Acetate	R	R	NR
Amyl Chloride	R	R	R
Aniline	R	NR	NR
Chemical	70°F	150°F	225°F
Anthraquinone	R	R	-
Anthraquinone Sulfonic Acid	R	R	-
Antimony Trichloride	R	-	-
Aqua Regia	R	R	R
Arsenic Acid	R	R	R
Barium Carbonate	R	R	R
Barium Chloride	R	R	R
Barium Hydroxide	R	R	R
Barium Nitrate	R	-	-
Barium Sulfate	R	R	R
Barium Sulfide	R	R	R
Benzaldehyde, 10%	R	R	NR
Benzaldehyde, Above 10%	R	NR	NR
Benzene, Benzol - R up to 176 oF	R	R	NR
Benzene Sulfonic Acid, 10%	R	R	NR
Benzoic Acid	R	R	R
Bismuth Carbonate	R	-	-
Black Liquor	R	R	R
Bleach	R	R	R
Boric Acid	R	R	R
Bromic Acid	R	R	R
Bromine, Liquid	R	R	-
Bromine, Vapor 25%	R	R	NR
Bromine, Water	R	R	R
Bromobenzene	R	NR	NR
Bromotoluene	R	R	NR
Butadiene	R	R	R
Butane	R	R	R
Butyl Acetate	R	R	NR
Butyl Cellosolve	R	-	-
Butylene	R	R	R
Butyl Phenol	R	R	R
Butyl Stearate	R	-	-
Butyric Acid	R	R	-
Cadmium Cyanide	R	R	R
Calcium Bisulfide	R	R	R
Calcium Bisulfite	R	R	R
Calcium Carbonate	R	R	R
Calcium Chlorate	R	R	R
Calcium Chloride	R	R	R
Calcium Hydroxide	R	R	R
Calcium Hypochlorite	R	R	R
Calcium Nitrate	R	R	R
Calcium Oxide	R	R	R
Calcium Sulfate	R	R	R
Caprylic Acid	R	R	R
Carbon Dioxide, Wet or Dry	R	R	R
Carbon Disulfide	R	-	-

Electro Chemical Duro-Bond E-CTFE Lining

	R	R	-
<u>Chemical</u>	<u>70°F</u>	<u>150°F</u>	<u>225°F</u>
Carbon Monoxide	R	R	-
Carbon Tetrachloride	R	R	R
Carbonic Acid	R	R	R
Castor Oil	R	R	R
Cellosolve	R	R	R
Cellosolve Acetate	R	-	-
Chloracetic Acid	R	R	R
Chloral Hydrate	R	R	-
Chloramine	R	-	-
Chlorine Gas, Dry	R	R	NR
Chlorine Gas, Wet	R	R	R
Chlorine, Liquid	R	R	R
Chlorine Water, Saturated	R	R	R
Chloracetic Acid	R	R	R
Chlorobenzene - R up to 100°F	R	NR	NR
Chlorobenzyl Chloride	R	NR	NR
Chloroform	R	R	R
Chlorosulfonic Acid	R	-	-
Chromic Acid, 501/o	R	R	R
Citric Acid	R	R	R
Coconut Oil	R	R	R
Copper Carbonate	R	R	-
Copper Chloride	R	R	R
Copper Cyanide	R	R	R
Copper Fluoride	R	R	R
Copper Nitrate	R	R	R
Copper Sulfate	R	R	R
Cottonseed Oil	R	R	R
Cresol	R	R	NR
Cresylic Acid, 50%	R	R	NR
Croton Aldehyde	R	NR	NR
Cupric Fluoride	R	R	R
Cupric Sulfate	R	R	R
Cuprous Chloride	R	R	R
Cyclohexane	R	R	R
Cyclohexanol - R up to 175°F.	R	R	NR
Cyclohexanone	R	NR	NR
Detergents	R	R	R
Dextrin	R	R	R
Dextrose	R	R	R
Dichlorobenzene	R	NR	NR
Dichoroethylene	R	NR	NR
Diesel Fuel	R	R	R
Diethylamine	R	NR	NR
Diethyl Cellosolve	R	R	R
Diethyl Ether	R	-	-
Diglycolic Acid	R	-	-
Dimethylamine	R	NR	NR
Dimethyl Hydrazine	R	NR	NR
Diocetyl Phthalate	R	NR	NR
Dioxane	R	R	NR
Disodium Phosphate	R	R	R
Divinylbenzene	R	NR	-
Ethyl Acetate	R	R	-
Ethyl Acetoacetate	R	-	-

	R	R	NR
<u>Chemical</u>	<u>70°F</u>	<u>150°F</u>	<u>225°F</u>
Ethyl Acrylate	R	R	NR
Ethyl Chloride	R	R	R
Ethyl Chloroacetate	R	-	-
Ethyl Ether	R	R	-
Ethylene Bromide	R	R	R
Ethylene Chloride	R	R	R
Ethylene Chlorohydrin	R	NR	NR
Ethylene Diamine	R	NR	NR
Ethylene Dichloride	R	NR	NR
Ethylene Glycol	R	R	R
Ethylene Oxide	R	R	R
Fatty Acids	R	R	R
Ferric Chloride	R	R	R
Ferric Nitrate	R	R	R
Ferric Sulfate	R	R	R
Ferrous Chloride	R	R	R
Ferrous Nitrate	R	R	R
Ferrous Sulfate	R	R	R
Fluorine Gas, Wet	R	-	-
Fluoboric Acid	R	-	-
Fluosilicic Acid	R	R	R
Formaldehyde, 37%			
Containing up to 15% Methanol	R	R	-
Formaldehyde, 50%	R	-	-
Formic Acid, 90%	R	R	NR
Freon	R	R	-
Gallic Acid	R	R	-
Gasoline	R	R	R
Glucose	R	R	R
Glycerine	R	R	R
Glycolic Acid	R	R	-
Glycols	R	R	R
Heptane	R	R	R
Hexane	R	R	R
Hydrobromic Acid, 50%	R	R	R
Hydrochloric Acid, 38%	R	R	R
Hydrocyanic Acid, 1 0%	R	R	R
Hydrofluoric Acid, 50%	R	R	R
Hydrofluosilicic Acid	R	R	R
Hydrogen	R	R	R
Hydrogen Cyanide	R	R	R
Hydrogen Peroxide, 90%	R	R	-
Hydrogen Phosphide	R	R	-
Hydrogen Sulfide, Dry	R	R	R
Hydrogen Sulfide, Aqueous Sol.	R	R	-
Hydroquinone	R	R	R
Hypochlorous Acid	R	R	R
Iodine	R	R	R
Isopropyl Ether	R	-	-
Isooctane	R	-	-
Jet Fuel	R	R	R
Kerosene	R	R	R
Lactic Acid, 25%	R	R	-
Lactic Acid, 80%	R	-	-
Lard Oil	R	R	R

Electro Chemical Duro-Bond E-CTFE Lining

<u>Chemical</u>	<u>70°F</u>	<u>150°F</u>	<u>225°F</u>
Lauric Acid	R	R	R
Lauryl Chloride	R	R	R
Lead Acetate	R	R	R
Lead Chloride	R	R	R
Lead Nitrate	R	R	R
Lead Sulfate	R	R	R
Lemon Oil	R	R	R
<u>Chemical</u>	<u>70°F</u>	<u>150°F</u>	<u>225°F</u>
Linoleic Acid	R	R	R
Linoleic Oil	R	R	R
Linseed Oil	R	R	R
Lithium Bromide	R	R	-
Lubricating Oil	R	R	R
Magnesium Carbonate	R	R	R
Magnesium Chloride	R	R	R
Magnesium Hydroxide	R	R	R
Magnesium Nitrate	R	R	R
Magnesium Sulfate	R	R	R
Maleic Acid	R	R	R
Malic Acid	R	R	R
Mercuric Chloride	R	R	R
Mercuric Cyanide	R	R	R
Mercuric Sulfate	R	R	R
Mercurous Nitrate	R	R	R
Mercury	R	R	R
Methane	R	R	R
Methoxyethyl Oleate	R	-	-
Methylamine	R	NR	NR
Methyl Bromide	R	R	R
Methyl Cellosolve	R	R	R
Methyl Chloride	R	R	R
Methyl Chloroform	R	R	NR
Methyl Ethyl Ketone	R	R	NR
Methyl Isobutyl Ketone	R	R	NR
Methyl Methacrylate	R	-	-
1-Methyl-2-Pyrrolidinone	R	R	NR
Methyl Sulfate	R	R	R
Methyl Sulfuric Acid	R	R	-
Methylene Bromide	R	NR	NR
Methylene Chloride	R	NR	NR
Methylene Iodine	R	NR	NR
Mineral Oil	R	R	R
Naphtha	R	R	R
Naphthalene	R	R	-
Natural Gas	R	R	-
Nickel Acetate	R	-	-
Nickel Chloride	R	R	R
Nickel Nitrate	R	R	R
Nickel Sulfate	R	R	R
Nicotine	R	R	-
Nicotinic Acid	R	R	R
Nitric Acid, 40%	R	R	R
Nitric Acid, 50%	R	R	NR
Nitric Acid, 100%	R	R	NR
Nitrobenzene - R up to 100OF	R	NR	NR
Nitrous Acid, 10%	R	R	R

<u>Chemical</u>	<u>70°F</u>	<u>150°F</u>	<u>225°F</u>
Nitrous Oxide	R	-	-
Oils, Vegetable	R	R	R
Oleic Acid	R	R	R
Oleum	R	NR	NR
Oxalic Acid	R	R	NR
Oxygen, Gas	R	R	R
Ozone	R	R	R
<u>Chemical</u>	<u>70°F</u>	<u>150°F</u>	<u>225°F</u>
Palmitic Acid	R	R	R
Paraffin	R	R	-
Perchloric Acid, 70%	R	R	-
Perphosphate	R	-	-
Petroleum Oils	R	R	-
Phenol, 10%	R	R	NR
Phenylhydrazine	R	-	-
Phosphoric Acid, 85%	R	R	R
Phosphorus Yellow	R	-	-
Phosphorus Pentoxide	R	R	R
Phosphorus Trichloride	R	R	R
Photographic Solutions	R	R	-
Picric Acid	R	-	-
Plating Solutions	R	-	-
Potassium Aluminum Sulfate	R	R	R
Potassium Bichromate	R	R	R
Potassium Bisulfate	R	R	R
Potassium Borate	R	R	-
Potassium Bromide	R	R	R
Potassium Carbonate	R	R	R
Potassium Chlorate	R	R	R
Potassium Chloride	R	R	R
Potassium Chromate	R	R	R
Potassium Cyanide	R	R	R
Potassium Dichromate	R	R	R
Potassium Ferricyanide	R	R	R
Potassium Ferrocyanide	R	R	R
Potassium Hydroxide	R	R	-
Potassium Iodide	R	R	R
Potassium Nitrate	R	R	R
Potassium Perchlorate	R	-	-
Potassium Permanganate, 25%	R	R	R
Potassium Persulfate	R	R	-
Potassium Sulfate	R	R	R
Propane	R	R	R
Propyl Acetate - R up to 122OF	R	NR	NR
Propylene Oxide	NR	NR	NR
Pyridine	NR	NR	NR
Pyrogallia Acid	R	R	-
Salicylic Acid	R	R	-
Salicylaldehyde	R	NR	NR
Silicic Acid	R	-	-
Silicone Oil	R	-	-
Silver Cyanide	R	R	R
Silver Nitrate	R	R	R
Silver Sulfate	R	R	R
Sodium Acetate	R	R	R
Sodium Benzoate	R	R	R

Electro Chemical Duro-Bond E-CTFE Lining

Sodium Bicarbonate	R	R	R	Sulfur Dioxide, Dry	R	R	R
Sodium Bichromate	R	R	-	Sulfur Dioxide, Wet	R	R	-
Sodium Bisulfate	R	R	R	Sulfuric Acid, 80%	R	R	R
Sodium Bisulfite	R	R	R	Chemical	70°F	150°F	225°F
Sodium Bromide	R	R	R	Sulfuric Acid, 90%	R	R	-
Sodium Carbonate	R	R	R	Sulfuric Acid, 98%	R	R	-
Sodium Chlorate	R	R	R	Sulfuric Acid, 100%	R	-	-
Chemical	70°F	150°F	225°F	Sulfurous Acid	R	R	R
Sodium Chloride	R	R	R	Tall Oil	R	R	R
Sodium Cyanide	R	R	R	Tannic Acid	R	R	R
Sodium Dichromate	R	R	-	Tanning Liquor	R	R	R
Sodium Fluoride	R	R	R	Tartaric Acid	R	R	R
Sodium Hydroxide, 50%	R	R	R	Tetraethyl Lead	R	R	R
Sodium Hydroxide, 70%	R	R	-	Tetrahydrofurane	NR	NR	NR
Sodium Hypochlorite	R	R	R	Tetrahydrofuran	NR	NR	NR
Sodium Iodide	R	R	-	Thionyl Chloride	R	R	-
Sodium Metaphosphate	R	R	R	Toluene	R	R	NR
Sodium Nitrate	R	R	R	Tributyl Phosphate	R	NR	NR
Sodium Nitrite	R	R	R	Trichloroacetic Acid	R	R	NR
Sodium Perchlorate	R	-	-	Trichloroethylene	R	R	R
Sodium Peroxide	R	R	R	Triethanolamine	R	NR	NR
Sodium Phosphate	R	R	R	Triethylamine	R	R	NR
Sodium Silicate	R	R	R	Triosodium Phosphate	R	R	R
Sodium Sulfate	R	R	R	Turpentine	R	R	R
Sodium Sulfide	R	R	R	Urea	R	R	R
Sodium Sulfite	R	R	R	Urine	R	R	-
Sodium Thiosulfate	R	R	R	Vaseline	R	R	-
Stannic Chloride	R	R	R	Vinagar	R	R	R
Stannous Chloride	R	R	R	Vinyl Acetate	R	R	R
Starch	R	R	-	Water	R	R	R
Stearic Acid	R	R	-	Xylene	R	R	-
Succinic Acid	R	R	R	Zinc Chloride	R	R	R
Sulfate Liquor	R	-	-	Zinc Nitrate	R	R	R
Sulfite Liquor	R	-	-	Zinc Sulfate	R	R	R
Sulfur Chloride	R	-	-				

Physical Properties

The normal physical properties of the E-CTFE sheeting are shown in the following table.

Chemical characterization	Thermoplastic fluorocarbon polymer
Color	Clear to translucent, depending on thickness
Odor	None
Melting point	240°C
Upper Service Temperature	160°C
Density (23°C)	1.69 g/cm ³
Tensile Strength (N/mm ²)	42 -48
Elongation at Break	200%
Solubility in water	Insoluble
Explosion limits	None
Hardness Durometer	D 75
Water absorption	< 0.03
Oxygen Index (%)	> 30
Flammability	V-0
Thermal Expansion Coefficient	5 - 8 x 10 ⁻⁵

Electro Chemical Duro-Bond E-CTFE Lining

23 -150°C (mm/mm/°C)

Application

The method of application is as follows:

1. The surface to be lined is properly cleaned and grit blasted to a white metal finish to provide a suitable surface for bonding. (See Electro Chemical Technical Bulletin #1, "Specification for Welded Steel Tanks, Stacks, Ducts or Other Fabricated Equipment for Protective Linings and/or Coatings".)
2. The Duro-Bond E-CTFE laminate is cut into panels to cover the entire area to be lined with a minimum amount of joints to be welded.
3. The panels are then cemented into position and the seams welded with Duro-Bond ECTFE rod and E-CTFE cap strip using a thermoplastic welding gun with nitrogen gas as the inert atmosphere.

Method of Testing

All lined surfaces are visually inspected for surface defects. Any special dimensional tolerances required after lining are also checked.

All lined areas are then spark tested for pinhole leaks using a dielectric spark tester adjusted to 10,000 volts. The tester is moved constantly and quickly over the lining surface to prevent a burn through.

Repair Procedures

Duro-Bond E-CTFE sheet lining can be shop or field repaired. The repairs to defective or damaged areas in the sheet lining are accomplished by cutting out the faulty area, grinding or grit blasting the substrate surface, preparing a piece of sheet of the same dimension, cementing it into position and subsequently welding the joints as described under Application. The repaired area is then inspected and spark tested to insure lining integrity.

Additional Information

For additional technical or safety information, contact us at 1-800-235-1885, www.electrochemical.net, or inquiry@electrochemical.net.

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The data provided herein falls within the normal range of product properties, but they should not be used to establish specification limits nor used alone as the basis of design. Electro Chemical Engineering & Manufacturing Co. assumes no obligation or liability for any advice furnished by it or for results obtained with respect to these products. All such data and advice is provided gratis and Buyer assumes sole responsibility for results obtained in reliance thereon.

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SECTION IV-D: PROCESS DESCRIPTION - INCINERATION**A. COMPREHENSIVE PERFORMANCE TESTS**

Momentive operates rotary kiln and fixed box #2 incinerators for the purpose of treating hazardous wastes generated on site. Momentive Performance Materials submitted a plan and received approval for an April 2010 Comprehensive Performance Test (CPT) of the Rotary Kiln Incinerator (RKI) in accordance with 373-1.5(f)(2) and 373-1.9(a)(2)(iii). The NYSDEC approved this plan on April 9, 2010. Momentive conducted the CPT from June 9 through 18, 2010. Due to issues with metals spiking during the June testing, metals were retested December 2 and 3, 2010.

Momentive submitted a plan for CPT of the fixed box #2 incinerator in July 2010. NYSDEC approved this plan on August 10, 2010. Momentive conducted the CPT on October 13, 14, and 15 and on December 7, 8 and 9, 2010. Due to issues with metals testing protocols and resulting lead emission results, Momentive retested the fixed box #2 incinerator in accordance with an addendum to the CPT issued in August 2011. The NYSDEC approved this plan and the retest was conducted on September 28 and 29, 2011.

The CPT test plans, reports, and associated Notice of Compliance for each, are stand-alone documents provided under separate cover from this RCRA Permit Application.

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FIGURE V-1 GENERAL FACILITY ANNUAL INSPECTION FORM

SECTION V: SECURITY AND INSPECTION**A. SECURITY (373-1.5(a) (2) (iv), 373-2.2(f))**

Momentive complies with the security provisions of 6NYCRR 373-2.2 (f) (2) (ii) and 6 NYCRR 373-2.2 (f)(3) as outlined below.

(1) Security (373-1.5(a) (2) (iv), 373-2.2 (f))

The security system for the Momentive facility is designed to prevent unknowing or unauthorized entry of persons or livestock onto the active portions of the hazardous waste management areas. The following paragraphs describe applicable aspects of the plant security system.

Physical Barriers (373-2.2 (f) (2) (ii) (a))

The manufacturing and waste treatment plant perimeters are fenced with an eight (8) foot chain-link fence in good repair with barbed-wire strands along the top. Active portions of hazardous waste management units, such as the incinerator areas, are within the fenced perimeter. Closed regulated units are permanently capped, which prevents unknowing or unauthorized access. All structures and equipment associated with closed regulated units are secured from unknowing or unauthorized entrance with locks and signage.

Surveillance System (373-2.2 (f) (2) (i))

Guard service is provided on a 24-hour per day, seven-day per week basis for the plant facilities. A guardhouse is located at the plant main gate. The main gate is provided with 24-hour controlled access. In addition to gate control, roving security is provided by patrol car. Each security officer on patrol is equipped with radio communications to contact the shift security supervisor on duty at the main gate. A Central Alarm Station is at the Security Post at the main entrance. The plant perimeter and gates are monitored with a television monitoring system. A Picture Perfect Access system is also monitored from this location. The Access system allows for the remote control of all perimeter electric gates.

Personnel Control System (373-2.2 (f)(2)(ii)(b))

Momentive employees are provided with photo identification badges for entry to the plant at the gates and turnstiles. Employees are to display their badge while within the plant. All gates and turnstiles are closed 24-hours a day.

Visitors to the plant are required to sign the Visitors' Log at the reception desk or at the main entrance. Visitors must state the nature of their visit, the Momentive employee they are visiting, and the areas of the property they will go. Each visitor is then given a temporary visitor's badge to be displayed at all times. An escort is provided for the visitor while they are at the facility. At the end of each visit, visitors are required to turn in the badge and sign out, then repeat the sign in process for each subsequent day of the visit, if applicable.

Warning Signs (373-2.2 (f)(3))

Warning signs are located on the perimeter fences facing out and spaced every 200 feet. All warning signs are legible from a distance of at least 25 feet and are written in English. The warning on the signs reads as follows:

Private Property
NO TRESPASSING

Momentive Performance Materials`
Waterford, New York

Warning signs are also placed at the entrance to hazardous waste management units. These warning signs read as follows:

DANGER
UNAUTHORIZED PERSONNEL
KEEP OUT

These signs are placed at the entrance to the Drum Storage Structure, the entrance to the landfill area, and the entrance to the tank storage/incineration area of the wastewater treatment plant. These warning signs are legible from a distance of at least 25 feet and are written in English.

B. GENERAL INSPECTION REQUIREMENTS (373-1.5(a) (2) (v), 373-2.2 (g))

Momentive complies with 373-2.2 (g) and follows the general inspections outlined below. Momentive will remedy any deterioration or malfunction discovered by an inspection as required by 6NYCRR 373-2.2 (g) (3). Records of inspections are kept as required by 6NYCRR 373-2.2 (g) (4). Specific inspection schedules for the landfill, container storage areas, tanks, and incinerators are presented in each unit's specific section.

The inspection schedules for the Momentive facility and its hazardous waste management units are utilized to detect and correct malfunctions and deteriorations, operator errors, and discharges which may cause or may lead to the following:

- Release of hazardous waste constituents to the environment or,
 - A threat to human health.
- (1) Procedures (373-2.2 (g)(2))

Written inspection procedures have been prepared and implemented for each of the following types of hazardous waste management units:

- Landfills (closed)
- Surface Impoundments (closed)
- Containers
- Tanks
- Incinerators

A general description of the parameters to be inspected in each area is shown in Table V-1. The specific inspection procedures including the inspection parameters and frequencies are described in the unit-specific sections of this application as listed below:

<u>UNIT</u>	<u>LOCATION</u>
Landfills and Surface Impoundments	IV-A
Containers	IV-B
Tanks	IV-C
Rotary Kiln Incinerator	IV-D
Fixed Box Incinerator	IV-D

In addition, a general inspection form for the Momentive facility is included as Figure V-1. Specific safety and emergency equipment located in the vicinity of a hazardous waste management unit (HWMU) is included in the above sections. For safety and emergency equipment not specifically located at a HWMU, the Integrated Contingency Plan contains inspection parameters and frequencies. The Momentive Performance Industrial Emergency Brigade inspects this equipment. Emergency medical personnel supply first aid materials.

(2) Records Retention (373-2.2(g) (4), 373-2.5(c) (2) (v))

Inspection records for the HWMUs are maintained in the operating record. The inspection books contain a list of inspection parameters as well as an inspection frequency. On successive pages of the logbook, the inspector notes the following information:

- Inspection Date
- Inspection Time

- Inspector
- Deficiencies
- Corrective Actions Taken and Date

Several inspection logbooks are maintained at the Momentive facility. A separate logbook for containers is maintained at the Drum Storage Structure for the drums stored in that area. An additional logbook is kept in the Rotary Kiln Incinerator (RKI) control room and is used for tanks and drums at the RKI Feed Pad. Inspection documents for the RKI and Fixed Box Incinerator (FBI) are maintained in the respective control rooms. The logbook for landfills is maintained in the Environmental Health & Safety (EHS) department. For the tanks not located in the Waste Treatment Plant (WTP) area, the current inspection logs are kept in the control rooms serving the respective areas. The inspection records are retained on site for a period of three years from their last entry.

TABLE V-1 GENERAL INSPECTION PARAMETERS						
	Mechanical/ Operating Equipment	Structural Equipment	Monitoring Equipment	Safety and Emergency Equipment	Security Devices/ Facilities	
Closed Landfills and Surface Impoundments	X	X	X	NA	X	X
Containers	X	X	NA	X	X	X
Tanks	X	X	X	X	X	X
Incinerators	X	X	X	X	X	X
X =	Inspected Items					
NA=	Not Applicable					

FIGURE V-1

GENERAL FACILITY ANNUAL INSPECTION FORM

Year: _____

EQUIPMENT	TYPICAL PROBLEMS	CONDITION
Manufacturing Facility Fence The fence should be intact, surround the entire manufacturing facility, and should not be damaged	Corrosion, damage to chain-link fence or barbed wire, trees fallen on fence.	
Waste Treatment Plant Fence The fence should be intact, surround the entire waste treatment facility, and should not be damaged	Corrosion, damage to chain-link fence or barbed wire, trees fallen on fence.	
Closed Regulated Units – Security Landfill 6 pump house doors closed and locked. Monitoring well covers closed and locked.	Locks missing. Doors or well covers open.	
Gates and Locks All gates should be in good condition and must have locks that are also in good condition	Corrosion, damage to gate, sticking or corroded lock.	
Two-Way Radios This equipment should be functioning properly	Transmitter or receiver.	
Video Equipment for Monitoring Gate Access This equipment should be functioning properly	Transmitter or receiver.	
Warning Signs (General) The warning signs must be on fences and gates and must state “Danger Unauthorized Personnel Keep Out”	Missing or illegible.	

To be completed by Momentive staff or authorized representative.



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SECTION VI: CONTINGENCY PLAN**A. CONTINGENCY PLANNING****(1) Integrated Contingency Plan (ICP)**

Momentive's Integrated Contingency Plan (ICP) has been prepared to fulfill the spill prevention and emergency response requirements of the various federal and state regulations to which Momentive is subject. For example, the ICP is currently designed to comply with the requirements of 40 CFR 112: Spill Prevention Control and Counter Measures Plan, 6 NYCRR 610: Spill Prevention and Containment Plan, 6 NYCRR 598: Spill Prevention Report, and 40 CFR Part 68: Risk Management Plan, to name a few.

(2) Hazardous Waste Contingency Plan

As cited by the treatment, storage, and disposal facility standards under 40 CFR Part 264, Subpart D, each owner or operator of a permitted hazardous waste facility must prepare a contingency plan. These regulations are in 6 NYCRR 373-2.4. The ICP is designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. The ICP is intended to satisfy the contingency planning requirements of 40 CFR Part 264, Subpart D and 6 NYCRR 373-2.4.

The Hazardous Waste Contingency Plan is provided in Annex 8 of the ICP. However, there is information outside of Annex 8 that satisfies elements of the Hazardous Waste Contingency Plan requirements. These sections are catalogued in the cross-reference table from Section 1 of the ICP on the following page:

Hazardous Waste Contingency Plan (40 CFR Part 264, Subpart D & 6 NYCRR 373-2.4)

The following ICP sections are cross-referenced in Annex 8.

Citation	Description	Plan Location
40 CFR 264.51(a) 6 NYCRR 373-2.4(b)(1)	Purpose and Scope of Plan Coverage	Section 1.1
40 CFR 264.52(a) 6 NYCRR 373-2.4(c)(1)	Emergency Response Procedures	Section 2
40 CFR 264.52(c) 6 NYCRR 373-2.4(c)(3)	Coordination of Local Emergency Services	Annex 3.D.3
40 CFR 264.52(d) 6 NYCRR 373-2.4(c)(4)	Qualified Emergency Coordinator Listing	Annex 3.B.1
40 CFR 264.52(e) 6 NYCRR 373-2.4(c)(5)	Emergency Equipment Listing, Including Locations and Usage	Annex 3.F.3
40 CFR 264.52(f) 6 NYCRR 373-2.4(c)(6)	Evacuation Plan	Annex 12.7
40 CFR 264.53 6 NYCRR 373-2.4(d)	Maintenance and Revisions of Contingency Plan	Annex 6.C
40 CFR 264.54 6 NYCRR 373-2.4(e)	Amendment of Contingency Plan	Annex 6.C
40 CFR 264.55 6 NYCRR 373-2.4(f)	Emergency Coordinator	Annex 3.B.1
40 CFR 264.56 6 NYCRR 373-2.4(g)	Emergency Procedures Listing	Annex 3.C

The ICP is a stand-alone document and is provided in Volume III of this RCRA Permit Application.

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SECTION VII: PERSONNEL TRAINING

A. PERSONNEL TRAINING

Momentive conducts personnel training as required by 6 NYCRR 373-2.2(h)(1), (2), and (3). This training program follows the outline described below. Momentive maintains training documents and records as required by 6 NYCRR 373-2.2(h)(4) and (5).

B. JOB TITLE/JOB DESCRIPTION

The job titles, duties, and descriptions for those personnel associated with the hazardous waste operations are maintained at the facility. Detailed job descriptions, including qualifications, for members of the emergency brigade are provided in the Integrated Contingency Plan.

C. TRAINING CONTENT, FREQUENCY AND TECHNIQUES

General

Required employee training at Momentive is provided through several different programs. These programs include RCRA training, safety training, OSHA training, on-the-job training, and outside training resources. Each of these training programs addresses specific aspects of required training.

The type and amount of training provided to individuals depends upon the duties and responsibilities of their position with Momentive. Each new employee is required to complete Hazard Communication training regarding plant wide safety and emergencies.

Brief Description of the Safety Program

Momentive has developed an extensive safety program to ensure a safe working environment. Momentive provides training, safety devices, personal protective equipment, safety audits, and operating procedures to maintain a safe working environment. Each employee is expected to know and follow the plant safety rules.

Momentive's Safety Manual is a computer accessed document that is continuously updated. It is used for training and as a reference for safety matters. The core content of the site safety manual includes:

- Safety Program
- Personnel Protective Equipment
- Operations and Maintenance
- Fire Prevention and Protection

- Material Handling
- Industrial Hygiene
- Contractor Safety
- Safety Programs and Procedures
- Process Safety Management
- Motor Vehicle Safety

Safety training involves all employees and contractors on site. The objective of safety training is to maintain a safe working environment and a high level of safety awareness in the plant. This is accomplished through regular safety and information meetings. Lesson plans for these meetings are issued through the EHS Department. These meetings are also used to discuss safety problems noted by plant personnel and the results of environmental incident reports from recent spill occurrences. Safety and information meetings are conducted by trained employees using handouts, topic discussions, video tapes and other material.

Another safety related training program includes a program designed to meet OSHA Hazard Communication requirements. All employees at Momentive have been trained in the computer assisted access and understanding of Material Safety Data Sheets (MSDS). This training also addresses labeling materials, toxicology, and an overview of silicone manufacturing. Employee training includes all aspects of the MSDS sheets, including information on environmental hazards and appropriate response to spills. This training has helped to emphasize the importance of safely handling materials on-site.

RCRA and OSHA Training

RCRA and OSHA training (including HAZWOPER training as specified in 29 CFR 1910.120) is required for those employees whose jobs involve managing hazardous wastes. Each employee receives initial classroom training. Those employees assigned to areas where hazardous wastes are stored, treated and/or disposed are also required to complete a period of on-the-job training. Qualified task experts provide on-the-job training directly to inexperienced workers.

The core content of the initial 24-hour HAZWOPER training includes:

- Regulatory Overview
- Hazard Communication
- Hazard Assessments
 - Site Hazards
 - Environmental Considerations
- Personal Protective Equipment
- Fire and Explosions
- Medical monitoring
- Respiratory Protection

- Drums and Containers
 - Waste labeling and accumulation
 - Waste storage and inspections
 - Miscellaneous waste disposal
 - Universal wastes
 - Non Hazardous wastes
- Emergency Response
 - Brigade
 - Contingency Plan
- Resources
 - MSDSs
 - Emergency Response Guide Book (ERGB)

Each employee must then complete annual refresher training, to review operating and emergency procedures. Regular Safety and Information (S&I) meetings are also used to supplement annual refresher training.

On-the-Job Training

Area supervisors, such as a foreman, will supervise job training for workers. Special training sessions are scheduled for operating new equipment or processes. During the on-the-job training phase, inexperienced employees are not allowed to work unsupervised in areas where errors could result in personal injury, general hazardous conditions, damage to equipment, environmental harm, or non-compliance with State or Federal regulatory requirements. A new operator assigned to one of the hazardous waste management units must complete the above on-the-job training within six (6) months of their assignment. The on-the-job training includes, at a minimum, the requirements in 6 NYCRR 373-2.2(h) and 40 CFR 264.16(a). The two (2) major documents used to address these requirements are the Contingency Plan and the Site Safety Manual. In addition to the other types of training (e.g. safety and RCRA), an employee will receive training with the following core content:

- Job Duties and Responsibilities
- Controls and Operations
- Operating Procedures
- Inspection and Maintenance Duties
- Record Keeping and Reporting Duties
- Safety Procedures
- Locations and Use of Emergency Equipment and Communications Systems
- Procedures to Follow During Emergency Situations

Emergency Brigade Training

Since the Emergency Brigade is the primary response team in the case of an explosion, fire or release, members of the brigade receive a significant amount of

training in spill and fire response. This training includes the New York State Firefighting Essentials course and the NY HAZMAT technical response course upon joining the brigade. Further, Emergency Medical Response training is required and our EMS personnel are New York State Certified as emergency Medical Technicians or intermediate.

Additional training includes regular brigade meetings where spill drills, response techniques or other items of interest are discussed or demonstrated. A major incident drill is enacted on a quarterly basis as an additional training measure for brigade members. Over the course of each year, the training topics related to hazardous waste that are covered during brigade meetings are as follows:

- SOP and OSHA Review
- CPR Recertification
- First Aid
- Fire - SCBA
- Fire – Pump and Relay Operations
- EMS – Blood-borne Pathogens/TB shots
- Hazmat – Highway Incidents
- Hazmat – Radiation Emergencies
- Hazmat - Test and Make-up Drills
- Hazmat – Atmospheric Metering Overview
- Hazmat - Transferring Liquids
- Hazmat – Transferring Liquid Practical
- Hazmat - Advanced Suite Emergencies and Testing
- Hazmat – Over-pack Techniques and Skills

MACT Training

Hazardous Waste MACT regulations include requirements for training hazardous waste incinerator operators. Per the regulation, there are special training requirements for “Control Room” Operators. All certified operators are trained to these standards. Operators for the incinerator are trained and tested under a site-specific program. This program includes training on the following subjects:

- Environmental Concerns, including types of emissions,
- Basic Combustion Principles, including products of combustion,
- Operation of the specific type of combustor used by the operator, including proper startup, waste firing, and shutdown procedures,
- Combustion controls and continuous monitoring systems,
- Operation of air pollution control equipment and factors affecting performance
- Inspection and maintenance of the combustor, continuous monitoring systems, and air pollution control devices,
- Actions to correct malfunctions or conditions that may lead to malfunction,

- Residue characteristics and handling procedures, and
- Applicable Federal, State and Local regulations, including Occupational Safety and Health administration workplace standards.

In addition, operators complete an annual review or refresher course covering, at a minimum, the following topics:

- Update of Regulations,
- Combustor operation, including startup and shutdown procedures and residue handling,
- Inspection and Maintenance,
- Responses to malfunctions or conditions that may lead to malfunction,
- Operating problems encountered by the operator, and
- Waste Feed Cut Off (WFCO) system (RCRA Requirements).

Annual Training

After the on-the-job training is completed, periodic safety and information meetings are conducted on each of the training areas. An annual refresher course in hazardous waste training, including those items initially covered in the on-the-job training program, is part of this program.

Contractor Training

Momentive requires contractors that have the potential to perform work involving hazardous waste to provide proof of employee's Environmental Health and Safety training. This proof is required for Momentive to approve a contractor to work at the site.

Approved contractors are required to complete Contractor Safety Orientation training before beginning work at the site and annually thereafter. The intent of this training is to inform contractors of known potential fire, explosion and toxic release hazards related to the contractor's work, as well as the applicable portions of the emergency response plan. The core content of this training includes:

- Objectives
- Expectations
- Definitions
- Emergency Response Plan
- Emergency Alarm System
- Duty EMT Pager
- Safety Items
- Hazard Communication
- Process Safety Management
- Personal Protective Equipment
- Vehicles

- Work Permits
- LOTO
- Restricted Access to Work Areas
- Elevated work
- Pipe Racks
- Roof Work
- Ladder Safety
- Asbestos/Lead/Radiation Sources
- Housekeeping and Waste Removal
- Electronic Equipment
- Phone #s
- Security

In addition to this general Site Safety Training, contractors are required to become familiar with the specific hazards, precautions, emergency response plans, and actions needed to prevent injury in each specific area of the plant where they work. Safety information is communicated via subject specific training booklets, applicable Safe Work Permitting process, and other reference materials.

D. TRAINING DIRECTOR

The Environmental Health and Safety Training leader works with the Waste Regulatory Leader and on-site task experts to develop the Hazardous Waste Training Program in accordance with 6 NYCRR 373-2.2(h) and 40 CFR 264. The Waste Regulatory Leader is responsible for the technical content of the training materials. The Waste Regulatory Leader is, in turn, required to successfully complete independent waste training on an annual basis in accordance with 6 NYCRR 373-2.2(h)(1)(ii).

E. RELEVANCE OF TRAINING TO JOB POSITION

The level of training provided to various Hazardous Waste Management personnel is dependent on the level of understanding that each person requires to perform his or her job safely and effectively. The training for each position and specific management unit is tailored to be relevant to waste handling and emergency situations for that position or management unit.

F. TRAINING FOR EMERGENCY RESPONSE

To ensure proper procedures are followed in an emergency situation, Momentive requires all new employees complete an introductory training session on plant wide safety and emergencies. To keep all employees abreast of modifications in the emergency procedures, an annual review of these procedures is required.

Additional information concerning the type and amount of training each employee receives is contained in Paragraph C of this section.

G. IMPLEMENTATION OF TRAINING PROGRAM

To prevent accidental releases of hazardous wastes, it is important to ensure that the new employee's safety and emergency training is completed in a timely manner. Training personnel, in conjunction with supervising personnel, monitor the training of each new employee. A new employee assigned to a Hazardous Waste Management Unit must complete their training within six (6) months of their assignment.

In addition, employees are not allowed to work unsupervised in areas where errors could result in personal injury, general hazardous conditions, damage to equipment, environmental harm, or non-compliance with State or Federal regulatory requirements.

Momentive usually uses a computerized record system to monitor and retain each employees training record; however, paper log books may be used to supplement the computerized system. Training records are used to maintain the name of each employee assigned to an area with his job title and the amount of training received by each employee. Completion of a training record form is required for each employee. Retention of these records will be maintained until the facility is closed.

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SECTION VIII: CLOSURE AND FINANCIAL ASSURANCE

A. CLOSURE

(1) Performance Standard (373-2.7(b))

Momentive will conduct partial or final closure of the facility as required by 40 CFR 264.111, 6NYCRR 373-2.7 (b) and 373-2.9 (i). The closure plan incorporates performance criteria in a manner that:

- a) Minimizes the need for further maintenance, and
- b) Controls, minimizes or eliminates, to the extent necessary to protect human health and environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or decomposition products to the ground or surface water or to the atmosphere.

(2) Amendment to Closure Plan (373-2.7(c)(3))

Momentive will amend the Closure Plan in the event of the following:

- a) changes in operating plans or facility design affect the closure plan,
- b) there is a change in the expected year of closure,
- c) unexpected events in conducting partial or final closure activities require a modification of the approved closure plan, or
- d) Momentive requests alternative requirements to a regulated unit under 373-2.6(a)(6), 373-2.7(a)(3) and/or 373-2.8(a)(4).

(3) Notification of Closure and Partial Closure (373-2.7(c)(4))

Momentive shall notify the Commissioner at least 60 days prior to the expected date of the initiation of closure or partial closure of any hazardous waste management unit or the facility.

(4) Time Allowed for Closure (373-2.7(d))

Momentive's schedule for closing the hazardous waste storage and treatment facilities on site will depend upon sampling results and the number of concurrent activities that can be accomplished. Some activities, such as site restoration and decontamination, will be on-going during the course of closure.



However, Momentive does anticipate that final closure activities will take longer than 180 days. Momentive will request the necessary extensions in accordance with 6 NYCRR 373-2.7(d) at the time of closure.

A schedule for the closure of each of the hazardous waste storage and treatment facilities is as follows:

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**TABLE VIII-1
Hazardous Waste Storage and Treatment Facilities Closure Schedule**

Concrete Areas to be Closed	Dimension (ft)		Area (sf)	Thickness (ft)	Volume Concrete (cf)	Volume Concrete (cy)	Volume Underlying 2-ft Soil (cy)	Concrete Demo ¹ (hrs)	Concrete Removal & Loading ² (hrs)	Man Hours Required (hours)		Assumed Equipment Rental (Days)			
										Total Concrete Demo and Removal (hrs)	Soil Removal ³ (hrs)	Crew Size - Concrete Demo and Removal (# men)	Crew Size - Soil Removal (# men)	Concrete Demo & Removal (days)	Soil Removal (days)
Container Transfer Areas															
Area B30	23	48	1104	0.5	552	20	82	33	5	39	2				
Area B35	17	55	935	0.67	626.45	23	69	28	6	34	2				
Area B71	63	59.5	3749	0.67	2511	93	278	112	25	137	8				
Area B76	39	45	1755	0.67	1176	44	130	53	12	64	4				
Area B78	60.5	60	3630	0.67	2432	90	269	109	24	133	8				
Area R2/MCS	66	57.5	3795	0.67	2543	94	281	114	25	139	8				
Area FB	50	37.5	1875	0.67	1256	47	139	56	12	69	4				
Area APS	58	12	696	0.67	466	17	52	21	5	25	2				
Area B24	26	52	1352	0.67	906	34	100	41	9	50	3				
Area T538	51.5	14.5	747	0.67	500	19	55	22	5	27	2				
Total Container Transfer Areas	454	441	19637	7	12969	480	1455	589	128	717	44	3	1	29	5
RKI Feed Pad			2497	0.7	1748	65	185	75	17	92	6	1	1	10	1
Drum Storage Structure															
Storage Bays	201.25	41.67	8386	0.67	5619	208	621	252	56	307	19				
Berm (or Apron)	201.25	32	6440	0.67	4315	160	477	193	43	236	14				
Total Drum Storage Structure								445	98	543	33	4	1	16	4
Miscellaneous Units															
Landfill #6 Truck Wash	28	75	2100	0.67	1407	52	156	63	14	77	5				
API Pad	58	12	696	0.67	466.32	17	52	21	5	25	2				
Total Miscellaneous Units												1	1	1	1
FBI#2 Foundation	62.1	62.1	3856	0.7		100	286	116	27	142	9	1	1	15	1
RKI Foundation	100.1	100.1	10020	0.7		260	742	301	69	370	22	2	1	20	3
Tank Containment Areas															
Tanks 26A, 26B	45	60	2700	0.5	1350	50	200	81	13	94	6				
Tanks 15, 26C	22	11	242	0.5	121	4	18	7	1	8	1				
Tanks 28A, 28B	45	60	2700	0.5	1350	50	200	81	13	94	6				
Tanks 39, 40	52	50	2600	0.5	1300	48	193	78	13	91	6				
Tanks 61, 62	41	58	2378	0.5	1189	44	176	71	12	83	5				
Tanks 250, 251, 252	24	45	1080	0.5	540	20	80	32	5	38	2				
Tanks 506D	40	20	800	0.5	400	15	59	24	4	28	2				
Tank 538	15	40	600	0.5	300	11	44	18	3	21	1				
Tank 509	20	35	700	0.5	350	13	52	21	3	24	2				
Tanks 539A, 539B	60	95	5700	0.5	2850	106	422	171	28	199	13				
Cadigan's Tomb	20	20	400	0.5	200	7	30	12	2	14	1				
Tank 599A	16	36	576	0.5	288	11	43	17	3	20	1				
Total Tank Containment Areas								614	101	716	46	3	1	32	6

Notes:

- 0.03 work hours required to demolish 1 square foot of concrete pad/containment system
- 0.267 work hours to remove and load 1 cubic yard of demolished concrete pad/containment system
- 0.03 work hours to remove 1 cubic yard of soil

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(5) Closure Activities

Momentive has developed the following closure procedures for container storage areas, tanks, trailers, and bulk storage containers and the on-site incinerators. However, plant operations are dynamic and hazardous waste management units will be used for different wastes over the lifetime of the plant. If necessary, the closure plan will be revised and resubmitted to the Commissioner at least 60 days before closure is initiated.

a. Container Storage Areas Closure Plan Procedures (373-2.7(c)(2), 373-2.9(i))

Container storage areas, including transfer areas, the RKI Feed Pad, and the Drum Storage Structure (1 Year Pad), are identified in Section IV-B of the RCRA Permit Application. The maximum inventory level for each structure is also identified in Section IV-B.

To close the container storage areas, the stored wastes will be disposed of by following the management protocols used during operation of the facility. These wastes will either be incinerated onsite or disposed of properly off site. For the purpose of the closure plan estimate, Momentive has assumed that wastes will be disposed of by incineration.

Once the wastes are disposed, each of the container storage areas, including curbing and sumps, will be inspected. If residues are observed, the residue will be removed and disposed of properly. During closure, run-on and run-off from the container storage areas will be controlled as described in Section IV-B of the RCRA Permit Application.

The curbing and sumps for each containment storage area will be swept and the base and walls will be washed with a material that is compatible with the former contents of the containment area. In most cases, the containment area will be pressure washed with water. The wash water will be disposed of at the on-site Wastewater Treatment Plant (WWTP) or disposed of properly off site.

If the structure is to remain intact, samples of the rinse water will be collected after the final rinse is completed. These samples will be analyzed for the contaminants characteristic of the waste stream previously stored in the area per the EPA methods specified in Table IX-3. If a constituent in the wash water exceeds the level specified in 6NYCRR Part 703, the area will be re-washed and re-analyzed as appropriate.

Costs for removing affected concrete and/or soil are not included in the financial assurance estimate because there are no known areas of contaminated concrete and underlying soils. Stringent procedures

regulated and overseen by NYSDEC are in place to prevent contamination of concrete pads, foundations, and underlying soils. For example, both the DSS and RKI Feed Pad have chemical resistant coatings on the foundation, berms, and concrete diking and have compatible water stops at joints in the pads.

b. Tank Closure Plan Procedures (373-2.7(c)(2), 373-2.10(h))

Hazardous waste tanks are identified in Section IV-C of the RCRA Permit Application. The working capacities for these tanks are also identified in Section IV-B.

To close the tanks, auxiliary equipment, trailers, and bulk storage containers, their contents will be disposed of by following the management protocols used during operation of the facility. These wastes will either be incinerated on-site or disposed of properly off site. For the purpose of the closure plan estimate, Momentive has assumed that wastes will be disposed of by incineration.

Once these structures are emptied, they will be triple rinsed using a quantity of suitable solvent. Auxiliary discharge control equipment or piping will also be rinsed by circulating the solvent through the system. The used solvent will either be incinerated on-site or disposed of properly off site. For the purpose of the closure plan estimate, Momentive has assumed that wastes will be disposed of by incineration. The tanks, trailers, and bulk storage containers will then be rinsed with a sufficient amount of water to remove residual solvents. The rinse water will be treated in the Wastewater Treatment Plant, incinerated on-site, or disposed of properly off site, depending on its solvent content. Following these decontamination procedures, the tanks and auxiliary equipment may either be dismantled or salvaged for reuse.

Liquids in the hazardous waste tank secondary containment areas will also be removed. Each containment area will be swept and the base and walls will be washed with a material that is compatible with the former contents of the hazardous waste tank. In most cases, the containment area will be pressure washed with water. A sample of the final rinse water will be collected and analyzed for the contaminants characteristic of the waste stream previously stored in the tank. Test methods are listed in Table IX-3 in the Corrective Action Plan in Section IX. If a constituent in the wash water exceeds the level specified in 6NYCRR Part 703, the washed area will be re-washed and re-analyzed as appropriate. The wash water removed from the secondary containment will be treated on site.

The secondary containment may be removed or left in place for reuse. If the containment is to be removed, the structure will be dismantled and disposed of properly in an on-site or off-site landfill.

Costs for removing affected concrete and/or soil are not included in the financial assurance estimate because there are no known areas of contamination of concrete and underlying soils. Stringent procedures regulated and overseen by NYSDEC are in place to prevent contamination of concrete pads, foundations, and underlying soils.

c. Incinerators Closure Procedure (373-2.7(c))

The on-site incinerators will be used to dispose of the hazardous and non-hazardous waste generated during closure activities. Following incineration of these wastes, piping and pumps that have been contaminated by hazardous waste will either be triple rinsed with a suitable solvent or disposed of properly off site. The solvent used during rinsing operations will be disposed of in accordance with applicable regulations. Following the solvent rinsing, the piping will be purged and allowed to dry to remove remaining solvent.

Once the hazardous wastes that are to be incinerated on-site have been disposed of properly, the slag and ash will be removed from the combustion chamber. Then the incinerators will be run for a minimum of two hours using fuel oil or natural gas to burn away traces of organic residue.

After the incinerators have been shutdown, the scrubber systems will be flushed with water, and the water will be treated in the on-site Wastewater Treatment Plant.

The incinerators will then be dismantled. The refractory, piping and pumps that have been contaminated by hazardous waste, including (but not limited to) scrubber sludges, will be disposed of properly.

Decontaminated equipment, clean metal, piping and equipment used for service water, primary air, etc. will be sent off-site as scrap or salvaged for reuse.

d. Decontamination Area

Momentive will choose a decontamination area for cleaning dismantled equipment and equipment used for closure activities. The decontamination area will minimize potential escape of hazardous constituents to surrounding areas. Contaminated equipment to be decontaminated will be cleaned with a high pressure, low volume wash

water. Detergent may be used, if necessary, to get equipment clean. Decontaminated materials may be disposed as non-hazardous waste or salvaged for reuse.

When the use of the decontamination area is completed, wash water in the decontamination area will either be pumped to, or transported to, the facility's Wastewater Treatment Plant. The components of the pump assembly including pumps and hoses will be rinsed by pumping wash water through the pump system components. The rinse water will be transported to the plant's WWTP for disposal. A sample of the final rinse water will be collected and analyzed in accordance with the appropriate analyte list available in the Corrective Action Plan in Section IX. If a constituent in the wash water exceeds the level specified in 6NYCRR Part 703, the washed area will be re-washed and re-analyzed as appropriate.

e. Rinsate (Rinse Water) Management

Rinse water will be treated in the Wastewater Treatment Plant, incinerated on site, or disposed properly off-site. The financial assurance estimate assumes rinse water will be treated in the Wastewater Treatment Plant. The Wastewater Treatment Plant will be continually operating over the 30-year Post-Closure period and is the most practical disposal option for rinse water. The financial assurance estimate includes disposal of 81,000 gallons of rinse water in the Wastewater Treatment Plant and use of a vector truck to deliver collected rinse water at the inflow to the Wastewater Treatment Plant. These costs are included in the Equipment Decontamination costs.

f. Health and Safety Costs

Health and Safety (H&S) costs associated with closure of tank areas, container storage areas, incinerators and decontamination of equipment during closure activities are included in the financial assurance estimate. This includes costs to provide appropriate monitoring equipment and personal protection equipment (PPE) to provide a safe working environment during closure. H&S costs are based on man-days required to conduct the closure activities and current unit costs described below, assuming eight-hour days. Fieldwork associated with closure is likely to be performed wearing different levels of PPE according to risks and potential exposure pathways associated with specific tasks. Based on knowledge of the site and anticipated closure tasks, the financial assurance estimate assumes that 75 percent of fieldwork associated with closure of container storage areas will be performed in Level D PPE, and 25 percent performed in Level C PPE. The estimate assumes 50 percent of fieldwork associated with closure of the tanks systems and incinerators and 50 percent of fieldwork for decontamination of equipment during

closure activities will be performed wearing Level D PPE and 50 percent performed wearing Level C PPE. Level C and Level D PPE cost estimates include expendable PPE based on typical usage per man-day with unit prices obtained from Ben Meadows'® Third Edition 2011 catalog. Estimated costs for H&S equipment do not include costs for some standard Level D PPE including long pants, hard hats, and steel-toed boots. Third party contract workers should be equipped with these items.

Air monitoring will be conducted during closure activities. The financial assurance estimate assumes air quality in the work zone will be monitored for organic and inorganic vapors using a Thermo Environmental TVA1000B Toxic Vapor Analyzer (TVA) that incorporates both a photoionization detector and flame-ionization detector to detect fugitive gases.

(6) Partial Closure Activities

Partial closure may also be undertaken if a container storage area identified in Section IV-B, a hazardous waste tank, or an incinerator is taken out of service before the facility, itself, is closed. Partial closure, should this occur, will follow final closure procedures. Partial closure of an incinerator system component, before the closure of the entire incinerator, will generally follow the final closure procedures for the portion of the incinerator being closed.

(7) Disposal or Decontamination of Equipment (373-2.7(e))

Hazardous waste management equipment and structures will be decontaminated by removing hazardous waste and residues from them, as described above. Wipe samples will be collected for laboratory analysis to facilitate proper management of the equipment and structures. Cleaned equipment may be either salvaged for reuse, or disposed of properly, depending upon the condition and value of the equipment.

(8) Certification of Closure and Partial Closure (373-2.7(f)(1))

Within 60 days of completion of final closure of the facility, or within 60 days of partial closure of hazardous waste management units, Momentive will submit to the Commissioner certifications by Momentive and by an independent New York State registered professional engineer that the facility or hazardous waste management unit has been closed in accordance with the specifications in the approved Closure Plan as required by 6 NYCRR 373-2.7(f).

(9) Survey Plat (373-2.7 (f)(2))

Within 60 days after certification of closure of each landfill cell, Momentive will submit to the local zoning authority or the authority with jurisdiction over land



use, and to the County Clerk in the County in which the facility is located and to the Commissioner, a survey plat indicating the locations and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks, as required by 6 NYCRR 373-2.7(f).

B. GENERAL POST CLOSURE REQUIREMENTS

(1) Post-Closure Care Period (373-2.7(g))

All landfills are closed and in various stages of Post-Closure. It is anticipated that the remaining Momentive facility HWMUs will remain in operation in their current form throughout the life of the production facilities.

Post-closure care will be in accordance with 6NYCRR 373-2.7(g) for the Hazardous Waste Management Units (HWMU) or Solid Waste Management Units (SWMU). Post-closure care will begin after closure of the unit and continue for 30 years after that date. The table below describes the post-closure care periods for each of the applicable areas on site.

**TABLE VIII-2
POST CLOSURE PERIODS**

FACILITY	BEGIN POST CLOSURE PERIOD	END POST CLOSURE PERIOD
Container Storage Area(s)	NA	NA
Storage Tanks	NA	NA
Incinerators	NA	NA
Miscellaneous Unit(s)	NA	NA
Shot Pond	1988	2018
East Tailing Pond	1988	2018
West Tailing Pond	1987	2017
Landfill No. 3	1991	2021
Landfill No. 1 - Southeast Ravine Section	1991	2021
Landfill No. 6 - North Plateau	2003	2033

NA - Not Applicable

(2) Post-Closure Activities (373-2.7(g)(2), 373-2.7(h)(2)(ii))

a. Section IX, Corrective Action, of this application describes the post closure groundwater monitoring plan. Momentive has instituted a remedial program in accordance with Civil Action No. 83-CV-77 and the resulting Consent Decree between New York State and GE Silicones (now Momentive). Momentive is currently managing this remedial program in accordance with a July 8, 2005 letter to the New York State Department of Environmental Conservation (NYSDEC) regarding “proposed modification to groundwater remedial systems, General Electric Advanced Materials – Silicones, Waterford, New York.” NYSDEC provided formal approval of this remedial program in a letter dated

January 6, 2006. The approved remedial program provides the necessary protection of human health and the environment required under 6 NYCRR 373-2.6(a)(6).

b. Maintenance Activities

- 1) The applicable security measures described in Section V of this application will be continued for the closed regulated units as part of the post closure activities.
- 2) The applicable inspection procedures described in Section V of this application will be continued as part of post closure activities.
- 3) The closed regulated units will continue to be managed as described in Section IV-A of this permit application. The closed regulated units discussed in Section IV-A are as follows:
 - Landfill No. 1,
 - Landfill No. 3,
 - Landfill No. 6,
 - East Tailings Pond,
 - West Tailings Pond,
 - Lagoons No. 2,
 - Lagoon No. 3, and
 - Shot Pond.

c. Optimized Groundwater and Leachate Treatment Process during Post-Closure Period

During the post-closure period, the existing WWTP would be modified since only a fraction of the plant would be needed. In Post Closure, the SPDES permit and the effluent standards would be modified because process wastewater will no longer be generated. The exact effluent standards would be established by the NYSDEC at the time of closure. The initial capital costs for converting the WWTP is included in the financial assurance estimates.

(3) Post-Closure Plan Amendment (373-2.7(h))

The EHS Manager or designee is responsible for updating the Post-Closure Plan during plant operation. Momentive will modify the plan in the event that there are changes in operating plans or facility design that affect the Post-Closure Plan, or events occur during the active life of the facility that affect the post-closure plan. The EHS Manager will ensure that the Post-Closure Plan is revised in a timely manner.



The EHS Manager or designee will be responsible for updating the Post-Closure Plan after final plant closure. If major amendments to the Post-Closure Plan are required, the provisions of 6 NYCRR 373 and 40 CFR 264 will be addressed.

- (4) Post-Closure Notices (373-2.7(i))
 - a. No later than 60 days after certification of closure of each hazardous waste disposal unit, Momentive will submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the County Clerk in the County in which the facility is located, and to the Commissioner a record of type, location, and quantity of hazardous waste disposed within each cell or disposal unit, in accordance with 6 NYCRR 373-2.7(i)(1).
 - b. Within 60 days of certification of closure of the first hazardous waste disposal unit and the last hazardous waste disposal unit, Momentive will do the following:
 - 1) Record a notification on the deed to the facility property in accordance with 6 NYCRR 373-2.7(i)(2)(i).
 - 2) Submit a certification to the Commissioner that a notification, in accordance with 6 NYCRR 373-2.7(i)(2)(ii), has been recorded.
 - c. If necessary, Momentive will request and obtain a permit modification of the Post-Closure Plan prior to removal of hazardous waste, hazardous waste residues, liners, or contaminated soils, in accordance with 6 NYCRR 373-2.7(i)(3).
- (4) Post-Closure Document Management 373-2.7(h)(2)(iii), 373-2.7(h)(1) & (3)
 - a. During plant operation, post closure contacts should be made with the EHS Manager. After final plant closure, the following position can be contacted concerning the post closure activities of all other facilities at the Momentive Waterford Plant:

Manager - Environmental Programs
Global Environmental, Health and Safety
Momentive Performance Materials
260 Hudson River Road
Waterford, NY 12188
 - b. A copy of the Post Closure Plan is maintained in the Waterford Plant EHS offices. Momentive will continue to furnish the Commissioner with a copy of the approved Post-Closure Plan, as specified in (373-2.7(h)(3)).



(5) Certification of Completion of Post-Closure Care (373-2.7(j))

Momentive will certify that the post closure care period was performed in accordance with the specifications in the Post Closure Plan.

C. COST ESTIMATE FOR FACILITY CLOSURE AND POST CLOSURE

The most recent closure and post-closure cost estimates for the Momentive facility were prepared in accordance with 6 NYCRR 373-2.8(c)(1) and (e)(1) and are provided in Attachment A.

- (1) Momentive will adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the trust fund for financial assurance, as specified in 6 NYCRR 373-2.8(c)(2).
- (2) Momentive will revise the closure and post-closure cost estimate whenever there is a change in the facility's closure and Post Closure Plan as required in 6 NYCRR 373-2.8(c)(3) and 373-2.8(e)(3).
- (3) Momentive maintains the latest closure and post-closure cost estimate at the facility, as required by 6 NYCRR 373-2.8(c)(4) and 373-2.8(e)(4).

D. FINANCIAL ASSURANCE FOR FACILITY CLOSURE

Momentive demonstrates continuous compliance with 6 NYCRR 373-2.8(d) or, when applicable, with 6 NYCRR 373-2.8(f), (g) and (h), by providing documentation of financial assurance, as required by 6 NYCRR 373-2.8(j), in at least the amount of the cost estimates described in Section VIII-B. Changes in financial assurance mechanisms must be approved by the Commissioner pursuant to 6 NYCRR 373-2.8(d) and 373-2.8(e). Attachment B presents information concerning financial assurance.

E. LIABILITY REQUIREMENTS

Momentive demonstrates continuous compliance with the requirements of 6 NYCRR 373-2.8(h) and the documentation requirements of 6 NYCRR 373-2.8(j), including requirements to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least \$1 million, exclusive of legal defense costs.

F. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS OF FINANCIAL INSTITUTIONS

Momentive will comply with 6 NYCRR 373-2.8(i), if it becomes necessary.

G. FINANCIAL ASSURANCE MECHANISMS**(1) Financial Assurance for Closure and Post-Closure (373-2.8(d)(f) & (g))**

Momentive has satisfied the requirements of 6 NYCRR 373-2.8(d)(5) and 40 CFR 264.143 by securing an irrevocable standby letter of credit and standby trust fund. Attachment B to this section includes the letter of credit and associated trust agreement.

(2) Liability Requirements (373-2.8(h))

Momentive Waterford has satisfied the requirements of 6 NYCRR 373-2.8(h)(6) and 40 CFR 264.147 by the liability insurance option. Attachment B to this section includes liability insurance coverage information.

**TABLE VIII-3
ESTIMATED MAXIMUM INVENTORY OF HAZARDOUS WASTES¹**

ITEM	UNITS	VOLUME TOTAL
Containers (55-gal drums)	3,960	217,800 gal
Tankers (1,000 to 6,500-gal each)	11	84,000 gal
Tanks (4,950 to 20,153 gal working capacity each)	19	197,325 gal
	TOTAL	499,125 gal

Notes:

- (1) The basis for these volume estimates are available in Sections IV-B and IV-C. These volume totals are the basis of the closure costs.

ATTACHMENT A**COST ESTIMATES FOR CLOSURE AND
POST CLOSURE CARE OF REGULATED UNITS**

The tables on subsequent pages of this attachment show the basis for each estimate and summarize costs for closing regulated hazardous waste management units at Momentive according to the unit closure plans.

The estimates are presented in 2012 dollars. They have been developed assuming no salvage value for materials. Final closure of the Momentive facility is expected to take 14 months.

Burning the wastes in the Rotary Kiln Incinerator (RKI) is expected to take up to three months. Therefore, the cost for operating the on-site RKI is included for three months. During this time, the WWTP will also be operational; after the hazardous waste is incinerated, the WWTP will be modified for long term operation. The costs for operating the incinerator and the waste treatment facility include staff labor and equipment costs such as maintenance, routine parts replacement, personal protective equipment, fuel, expendables, and wastewater treatment aids. Operating costs also include health and safety-related expenses.

The following contingency items are included in the following tables:

- Although soils underlying container storage areas (including transfer areas, the RKI Feed Pad, and the Drum Storage Structure (1 Year Pad), tanks, miscellaneous units, and the incinerators are not currently suspected of being impacted, Momentive has included costs for remediating these areas as contingency.
- The table for additional site restoration provides contingency for excavations and backfill that may be necessary during closure activities.
- A line-item for 20% contingency has been included for each cost summary.

Additionally, 15% is included for engineering services such as design, project management, supervision, insurance, and other costs that may accrue during the closure period.

KEY TO ABBREVIATIONS IN CLOSURE AND POST-CLOSURE COST ESTIMATE TABLES

Abbreviation	Meaning
AC	Acre
AN	Analysis of a Sample
EA	Each
CY	Cubic Yards
GAL	Gallons
HR	Hours
LF	Linear Feet
LS	Lump Sum
MO	Month
SF	Square Feet
SY	Square Yards
Ton	US Short Ton



A summary of estimated closure costs is provided below.

**TABLE VIII-A-1
SUMMARY OF ESTIMATED CLOSURE ACTIVITY COSTS^{1,2}**

Summary of Closure Costs Closure Activity Financial Assurance Estimate	
Waste Disposal	\$3,410,000
Container Storage Areas	\$104,000
Tank Systems	\$838,000
FBI #2	\$293,000
RKI	\$418,000
Miscellaneous Units	\$14,495
Site Restoration	\$205,000
Equipment Decontamination	\$41,000
Site Preparation and Characterization	\$15,000
Capital Costs for WWTP Optimization	\$746,000
Engineering and Administration: Administrative and Miscellaneous Costs ³	\$911,000
Final Survey Plat Map	\$6,500
CLOSURE TOTAL	\$7,004,495

The total estimated cost for closure activities is \$7.0 million.

Notes:

- (1) Hazardous wastes will be incinerated on-site at closure. Estimated costs include operation of incinerators, associated air emission control equipment, and wastewater treatment facilities until all wastes are treated. Cost estimates include labor, utilities, maintenance, and supplies, and are derived from current operating data.
- (2) Closure costs are presented in the following tables for both clean closure and in the event that impacted soils are identified under the tank containment areas. Momentive has used the contingency cost estimates for the purpose of this summary table.
- (3) Based upon 15% of total.

**TABLE VIII-A-2
COST ESTIMATE: WASTE DISPOSAL**

Item Description	Quantity¹	Units	Unit Cost	Subtotal
Wastewater Treatment Plant Operations ²	3	MO	\$135,782	\$407,347
Incineration Operations ²	3	MO	\$658,333	\$1,974,999
Operators and Engineers to run WTP ³	3	MO	\$89,790	\$269,370
Operators and Engineers to run WWTP	3	MO	\$29,631	\$88,892
Utilities Engineer to Generate Steam	3	MO	\$5,601	\$16,803
Natural Gas (makes steam)	3	MO	\$17,583	\$52,750
Electrical	3	MO	\$7,930	\$23,790
Misc Utilities (water, sewer, nitrogen, etc.)	3	MO	\$2,975	\$8,925
Subtotal				\$2,842,876
Contingency (20%)				\$568,575
TOTAL				\$3,411,452

Notes:

- (1) Basis: (1) burning 2 drums an hour of solid waste for 3 months (conservative estimate since permitted to burn 3 drums an hour), (2) burning 3 gallons a minute of slurry, silanes, APS, and NPS of liquid waste (conservative estimate since able to burn well in excess of 9 gallons a minute), and (3) since no process vents are being burned during closure, the RKI has an increased capacity.
- (2) Includes operators for wastewater treatment plant and incinerators and technicians for wastewater laboratory.
- (3) Includes Health and Safety related items.

**TABLE VIII-A-3
CLOSURE COSTS: CONTAINER STORAGE AREAS^{1,2}**

Item Description	Quantity	Units	Unit Cost	Subtotal	Notes
Container Storage Areas: Closure without Corrective Actions					
includes Transfer Areas, RKI Feed Pad, Drum Storage Structure (1 Year Pad)					
Cost to burn inventory and waste materials generated during closure is included in WTP operations table.					
Inspect container storage areas and remove residues					
Labor, Technician	84	HR	\$58	\$4,872	
Tools	1	LS	\$500	\$500	To be reused between areas
Pressure Wash 3X					
Pressure wash contractors	84	HR	\$82	\$6,880	1 hour each event x 3 events x 3 staff
Pump Truck	42	HR	\$55	\$2,310	1 hour each event x 3 events
High pressure blaster & scarifyer	42	HR	\$115	\$4,830	1 hour each event x 3 events
Test Rinsate					
Labor, Technician	28	HR	\$85	\$2,380	8260, 8270 & metals per Site-Specific List ^{3,4}
Sampling and analysis	30	LS	\$410	\$12,300	
10% QA Sample Analysis	3	LS	\$410	\$1,230	2 samples per area + 2 extra for drum storage structure
Health and Safety	1	LS	\$1,577	\$1,577	
P.E. Certification					
Labor, P.E.	80	HR	\$113	\$12,240	
Travel and Expenses	1	LS	\$1,000	\$1,000	
Subtotal				\$50,118	
Contingency (20%)				\$10,024	
Task Total				\$60,142	
Transfer Areas: Closure with Evaluation of Concrete and Soils					
Documentation samples					
Labor, Technician	24	HR	\$85	\$2,040	8260, 8270 & metals per Site-Specific List
Sampling and analysis	24	EA	\$410	\$9,840	
10% QA Sample Analysis	5	EA	\$410	\$2,050	49 total samples
Health and Safety	1	EA	\$422	\$422	
P.E. Certification					
Labor, P.E.	48	HR	\$153	\$7,344	
Travel and Expenses	1	LS	\$500	\$500	
Subtotal				\$22,196	
Contingency (20%)				\$4,439	
Task Total				\$26,636	

TABLE VIII-A-3 Continued

Item Description	Quantity	Units	Unit Cost	Subtotal	Notes
RKI Feed Pad: Closure with Evaluation of Concrete and Soils					
Documentation samples					8260, 8270 & metals per Site-Specific List
Labor, Technician	8	HR	\$85	\$6806	
Sampling and analysis	4	LS	\$410	\$1,640	4 samples @ RKI Feed Pad
10% QA Sample Analysis	2	LS	\$410	\$820	
Health and Safety	1	EA	\$144	\$144	
P.E. Certification					
Labor, P.E.	16	HR	\$153	\$2,448	
Travel and Expenses	1	LS	\$500	\$500	
Subtotal				\$6,232	
Contingency (20%)				\$1,246	
Task Total				\$7,479	
Drum Storage Structure (1 Year Pad): Closure with Evaluation of Concrete and Soils					
Documentation samples					8260, 8270 & metals per Site-Specific List
Labor, Technician	8	HR	\$85	\$680	
Sampling and analysis	6	LS	\$410	\$2,460	
10% QA Sample Analysis	4	LS	\$410	\$1,640	
Health and Safety	1	LS	\$168	\$168	
P.E. Certification					
Labor, P.E.	16	HR	\$153	\$2,448	
Travel and Expenses	1	LS	\$500	\$500	
Subtotal				\$7,896	
Contingency (20%)				\$1,579	
Task Total				\$9,475	
Container Area Closure Total				\$103,732	

Notes:

- (1) 11 transfer areas, RKI, and Drum Storage Structure = 13 Container Storage Areas
- (2) All costs are estimated
- (3) Site Specific list may be found in Section IX of the RCRA Permit Application.
- (4) Unit cost for sampling and analysis includes shipping fees.

**TABLE VIII-A-4
CLOSURE COSTS: TANK SYSTEMS
19 Tanks, 10 Trailers, 12 Containment Areas**

Tank Systems: Closure with Evaluation of Concrete & Soils

Item Description	Quantity	Units	Unit Cost	Subtotal	Notes
Cost to burn inventory and waste materials generated during closure is included in WTP operations table.					
Remove waste from tanks/trailers					
Labor, Technician	928	HR	\$85	\$78,880	
Triple Rinse w/ solvent					eg toluene
Labor, Technician	464	HR	\$58	\$26,912	
Solvent	21,200	GAL	\$3.00	\$63,600	10% tank/Trailer volume
Triple Rinse w/ water					
Labor, Technician	464	HR	\$58	\$26,912	
Dismantle Tank and ancillaries ⁴					8260 or 8270 as per Site-Specific List ⁵
Labor, Technician	1216	HR	\$58	\$70,528	
Heavy Equipment	1	LS	\$37,000	\$37,000	
Roll Off w Tarp & Bows	3	MO	\$600	\$1,800	1.5 months for 2 roll offs
Wipe samples	155	EA	\$155	\$24,025	3 samples per tank/trailer, 2 samples of ancillary per tank
Recycle metals (no salvage credit taken)					
Pressure wash containment					
Pressure wash contractors	96	HR	\$82	\$7,862	8 hr/tank containment
Pump Truck	96	HR	\$55	\$5,280	
High pressure blaster and scarifyer	96	HR	\$115	\$11,040	
Test containment rinsate					
					8260, 8270 & metals per Site-Specific List
Labor, Technician	48	HR	\$85	\$4,080	
Sampling and analysis	12	EA	\$410	\$4,920	1 per tank containment
Documentation samples					8260, 8270 & metals per Site-Specific List
Labor, Technician	48	HR	\$85	\$4,080	
Sampling and analysis	24	EA	\$410	\$9,840	2 samples/area
Analytical QA/QC (10%)	4	EA	\$410	\$1,640	36 samples
Health and Safety	1	EA	\$15,268	\$15,268	
P.E. Certification					
Labor, P.E.	348	HR	\$153	\$53,244	
Travel and Expenses	15%	EA	\$53,244	\$7,987	
Subtotal				\$454,898	
Contingency (20%)				\$90,980	
TOTAL				\$545,877	

All costs are estimated



TABLE VIII-A-4 Continued

Tank Systems: Closure with Evaluation of Concrete & Soils

Item Description	Quantity	Units	Unit Cost	Subtotal	Notes
Triple Rinse w/solvent					
Labor, Technician	464	HR	\$58	\$26,912	
Solvent	21,200	GAL	\$3.00	\$63,600	10% tank/Trailer volume
Triple Rinse w/ water					
Labor, Technician	464	HR	\$58	\$26,912	
Treat Rinsate in WWTP	81,000	GAL	\$0.00268	\$217	
Vactor Trucks to Transport Rinse Waters to WWTP	1	EA	\$4,783	\$4,783	
Pressure wash containment					
Pressure wash contractors	152	HR	\$82	\$12,449	
Pump Truck	152	HR	\$55	\$8,360	
High pressure blaster and scarifyer	152	HR	\$115	\$17,480	
Test containment rinsate					8260, 8270 & metals per Site Specific List
Labor, Technician	76	HR	\$85	\$6,460	
Sampling and analysis	19	EA	\$410	\$7,790	1 per tank
Documentation Samples					8260, 8270 & metals per Site-Specific List
Labor, Technician	48	HR	\$85	\$4,080	
Sampling and analysis	36	EA	\$410	\$14,760	3 samples/area
Analytical QA/QC (10%)	9	EA	\$410	\$3,690	72 samples
Health and Safety	1	LS	\$1,000	\$1,000	
P.E. Certification					
Labor, P.E.	228	HR	\$153	\$34,884	
Travel and Expenses	1	LS	\$1,000	\$1,000	
Subtotal				\$2,43,204	
Contingency (20%)				\$48,641	
TOTAL Contingency Activities				\$291,844	
TOTAL				\$837,722	

Notes:

- (1) 19 Tanks, 10 Trailers, 12 Containment Areas
- (2) Working tank volume used in volume calculations
- (3) All costs are estimated
- (4) Trailers to be salvaged, not scrapped; no credit taken for salvage
- (5) Site Specific list may be found in Section IX of the RCRA Permit Application

**TABLE VIII-A-5
CLOSURE COSTS: FIXED BOX INCINERATOR #2**

Item Description	Quantity	Units	Unit Cost	Subtotal	Notes
Triple Rinse Equipment					e.g., IWS recirculator pumps and some piping
Solvent for rinsing	500	GAL	\$3.00	\$1,500	e.g., toluene
Labor, Technician	96	HR	\$58	\$5,568	
Used solvent disposal	0	GAL		\$0	to be burned in RKI
Purge and Dry					
Labor, Technician	64	HR	\$58	\$3,712	
Tools	1	LS	\$500	\$500	
Dispose of residual materials					
Soot and ash	26	Ton	\$150	\$3,900	est. 1 load @ 26 tons each at least 2 hours
Burnout with clean fuel					
Fuel oil	720	GAL	\$2.50	\$1,800	4 hours to heat up FBI @ 2 gal/min + 2 hours to burn operator time included in WWTP operational costs
Labor, Technician	0	HR	\$69	\$0	
Flush scrubbers & duct work with water					
Labor, Technician	160	HR	\$58	\$9,280	
Dismantle					
Packing: Pressure wash contractors	32	HR	\$56	\$1,781	
Packing: Pump Truck	16	HR	\$55	\$880	
Packing: Sampling and analysis	5	EA	\$410	\$2,050	
Disposal of packing as solid waste	90	EA	\$65	\$5,850	est. 9 loads @ 10 tons each
Labor, Technician	960	HR	\$58	\$55,680	
Crane & operator	30	DAY	\$1,320	\$39,600	crane available on site
Tools	1	EA	\$1,000	\$1,000	
Direct disposal of 50% at HWLF	60	CY	\$470	\$28,200	e.g., fiberglass, firebox, pumps, small piping
Brick	78	LS	\$150	\$11,700	3 loads of brick @ 26 tons each
Decontaminate remaining 50% equipment					
Labor, Technician	400	HR	\$58	\$23,200	
Equipment costs are included in Table VIII-A-8 Decontaminate Equipment					
Sample wash water	4	LS	\$410	\$1,640	8260, 8270, & metals as per Site-Specific List ²
Wipe samples for equipment	100	EA	\$155	\$15,500	8260, 8270 & metals per Site-Specific List
Documentation samples					
Labor, Technician	4	HR	\$85	\$340	
Sampling and analysis	6	EA	\$410	\$2,460	8260, 8270 & metals per Site - Specific List
Analytical QA/QC (10%)	12	EA	\$410	\$4,920	115 samples



TABLE VIII-A-5, Continued

Health and Safety	1	LS	\$9,501	\$9,501
P.E. Certification				
Labor, P.E.	80	HR	\$153	\$12,240
Travel and Expenses	1	LS	\$1,000	\$1,000
<hr/>				
Subtotal				\$243,802
Contingency (20%)				\$48,760
TOTAL				\$292,562

Notes:

- (1) All costs are estimated
- (2) Site Specific list may be found in Section IX of the RCRA Permit Application

**TABLE VIII-A-6
CLOSURE COSTS: RKI**

Item Description	Quantity	Units	Unit Cost	Subtotal	Notes
Triple rinse piping and pumps					
Solvent for rinsing	1000	GAL	\$3.00	\$3,000	e.g., toluene
Labor, Technician	160	HR	\$58	\$9,280	
Used solvent disposal	1000	GAL	\$1.50	\$1,500	
Purge and dry					
Labor, Technician	96	HR	\$58	\$5,568	
Tools	1	EA	\$500	\$500	
Dispose of residual materials					
Clinker, soot and ash	78	Ton	\$150	\$11,700	est. 3 loads @ 26 tons each at least 2 hours
Burnout with clean fuel					
Fuel oil	1,080	GAL	\$2.50	\$2,700	4 hours to heat up FBI @ 3 gal/min + 2 hours to burn
Labor, Technician	0	HR	\$69	\$0	operator time included in WWTP operational costs
Flush scrubbers & duct work with water					
Labor, Technician	160	HR	\$58	\$9,280	
Dismantle					
Packing: Pressure wash contractors	16	HR	\$56	\$890	
Packing: Pump Truck	16	HR	\$55	\$880	
Packing: Sampling and analysis	5	LS	\$410	\$2,050	
Disposal of packing as solid waste	234	LS	\$65	\$15,210	est. 9 loads @ 10 tons each
Labor, Technician	1,280	HR	\$58	\$74,240	
Crane & operator	40	DAY	\$1,320	\$52,800	crane available on site
Tools	1	LS	\$1,000	\$1,000	
Roll Off w Tarp & Bows	2	MO	\$600	\$1,200	
Brick	312	LS	\$150	\$46,800	est. 12 loads @ 26 tons each
Direct disposal of 50% at HWLF	78	CY	\$470	\$36,660	e.g., fiberglass, firebox, pumps, small piping
Decontaminate remaining 50% of equipment					
Labor, Technician	400	HR	\$58	\$23,200	
Equipment costs are included in Table VIII-A-8 Decontaminate Equipment					
Sample wash water	4	EA	\$410	\$1,640	8260, 8270, & metals as per Site-Specific List ²
Wipe samples for equipment	100	LS	\$155	\$15,500	8260 or 8270 as per Site-Specific List



TABLE VIII-A-6, Continued¹

Documentation samples						
Labor, Technician	8	HR	\$85	\$680		
Sampling and analysis	8	EA	\$410	\$3,280	8260, 8270, & metals as per Site-Specific List ²	
Analytical QA/QC (10%)	12	EA	\$410	\$4,920	115 samples	
Health and Safety	1	LS	\$10,726	\$10,726		
P.E. Certification						
Labor, P.E.	80	HR	\$153	\$12,240		
Travel and Expenses	1	LS	\$1,000	\$1,000		
Subtotal				\$348,445		
Contingency (20%)				\$69,689		
TOTAL				\$418,134		

Notes:

(1) All costs are estimated

(2) Site Specific list may be found in Section IX of the RCRA Permit Application

**TABLE VIII-A-7
CLOSURE COSTS: MISCELLANEOUS UNITS¹**

Item Description	Quantity	Units	Unit Cost	Subtotal	Notes
Landfill #6 Truck Wash					
Inspect area and remove residues					
Labor, Technician	77	HR	\$58	\$4,466	
Tools	0	LS	\$500	\$0	Tools from container storage areas
Pressure Wash 3X				\$0	
Pressure wash contractors	9	HR	\$82	\$738	1 hour each event x 3 events x 3 staff
Pump Truck	3	HR	\$55	\$165	1 hour each event x 3 events
High pressure blaster & scarifier	3	HR	\$115	\$345	1 hour each event x 3 events
Test Rinsate					8260, 8270 & metals per Site Specific List ²
Labor, Technician	2	HR	\$85	\$170	
Sampling and analysis	2	LS	\$410	\$820	2 samples per area
10% QA Sample Analysis	1	LS	\$410	\$410	
Health and Safety	1	LS	\$250	\$250	
P.E. Certification				\$0	
Labor, P.E.	2	HR	\$113	\$226	
Travel and Expenses	0	LS	\$1,000	0	Travel during container storage closure activities
Subtotal				\$7,590	
Contingency (20%)				\$1,518	
Task Total				\$9,108	
API Pad					
Inspect area and remove residues					
Labor, Technician	25	HR	\$58	\$1,450	
Tools	0	LS	\$500	\$0	Tools from container storage areas
Pressure Wash 3X				\$0	
Pressure wash contractors	9	HR	\$82	\$738	1 hour each event x 3 events x 3 staff
Pump Truck	3	HR	\$55	\$165	1 hour each event x 3 events
High pressure blaster & scarifier	3	HR	\$115	\$345	1 hour each event x 3 events
Test Rinsate					8260, 8270 & metals per Site-Specific List ^{3,4}
Labor, Technician	1	HR	\$85	\$85	
Sampling and analysis	2	LS	\$410	\$820	2 samples per area
10% QA Sample Analysis	1	LS	\$410	\$410	
Health and Safety	1	LS	\$250	\$250	
P.E. Certification				\$0	
Labor, P.E.	2	HR	\$113	\$226	
Travel and Expenses	0	LS	\$1,000	0	Travel during container storage closure activities
Subtotal				\$4,489	
Contingency (20%)				\$898	
Task Total				\$5,387	
Total Miscellaneous Units				\$14,495	

Notes:

- (1) All costs are estimated
- (2) Site-Specific List may be found in Section IX of the RCRA Permit Application

**TABLE VIII-A-8
ADDITIONAL SITE RESTORATION¹**

Item Description	Quantity²	Units	Unit Cost³	Subtotal
Cap with 2' Clay (incl. labor)	5,213	CY	\$17.00	\$89,000
Topsoil, 6" deep, furnish and place	7,820	SY	\$9.65	\$75,000
Seeding, utility mix with mulch and fertilizer, hydro or air	70	thousand SF	\$100	\$7,000
TOTAL				\$205,200

Notes:

¹All costs are estimated

²Volumes are for 7 acres; sufficient for container storage areas (estimated at 1,400 CY of fill) and other storage areas

³Costs are as installed

**TABLE VIII-A-9
COST ESTIMATE: DECONTAMINATE EQUIPMENT**

Item Description	Quantity	Units	Unit Cost	Subtotal
Clean residue off equipment				
Labor, Technician	200	HR	\$58	\$11,600
High Pressure Washer	1	LS	\$5,000	\$5,000
Test Final Rinsate				
Labor, Technician	16	HR	\$85	\$1,360
Sampling and analysis	12	EA	\$410	\$4,920
Treat Rinsate in WWTP	81,000	GAL	\$0.00268	\$216.79
Vactor Trucks to Transport	1	EA	\$9,500	\$9,500
Rinse Water to WWTP				
Health and Safety	1	EA	\$1,222	\$1,222
Subtotal				\$33,819
Contingency (20%)				\$40,583
TOTAL				\$40,583

Notes:

Decontamination of heavy equipment, tools, and other equipment to be reused during closure activities

All costs and quantities are estimated

**TABLE VIII-A-10
COST ESTIMATE: POST CLOSURE PERPETUAL CARE**

Post-Closure Care	Years Remaining
Landfill #1	30
Landfill #3	30
Shot Pond	30
Landfill No. 6 N. Plateau	30
East Tailings Pond	30
West Tailings Pond	30

**TABLE VIII-A-11
COST ESTIMATE: POST CLOSURE LANDFILL 1 SOUTHEAST RAVINE**

Item	Units	Quantity		Unit Cost	Subtotal
		Per Quarter	Per Year		
Quarterly Inspections					
Labor, Technician	HR	8	32	\$69.00	\$2,208
Labor, Engineer	HR	4	16	\$85.00	\$1,360
Misc. Expenses	LS	\$150	\$600	\$1.00	\$600
Contingency Inspection (based upon 1x/5 years)	HR	\$0	1	\$69	\$69
Maintenance					
Mowing, 4x/year	AC		8	\$500	\$4,000
Seed and Fertilize	SF		7,000	\$0.05	\$350
Erosion Repair	CY		300	\$15.00	\$4,500
Labor, Technician	HR		80	\$69.00	
Fence Replacement	LF		52.8	\$38.00	\$2,006
Leachate Treatment	GAL		52,560	\$0.0044	\$233
Groundwater Monitoring					
Well Replacement (1 every 4 years)	LS*		1	\$1,000.00	\$1,000
CURRENT ANNUAL COST (2012 DOLLARS)					\$21,846
CONTINGENCY (20%)					\$4,369
TOTAL ANNUAL COST					\$26,216

* Total well replacement cost: \$4,000

The perpetual care post-closure cost for this unit is provided in Table VIII-A-17

**TABLE VIII-A-12
COST ESTIMATE: POST CLOSURE LANDFILL 6 NORTH PLATEAU**

Item	Units	Quantity		Unit Cost	Subtotal
		Per Quarter	Per Year		
Quarterly Inspections					
Labor, Technician	HR	8	32	\$69.00	\$2,208
Labor, Engineer	HR	2	8	\$85.00	\$680
Misc. Expenses	LS	\$150	1	\$600.00	\$600
Contingency Inspection (based on 1x/5 years)	HR**	\$0	1	\$69.00	\$69
Quarterly LTS Manhole Inspections					
Labor, Technician	HR	16	64	\$69.00	\$4,416
Vacuum truck services	LS	1	4	\$2,000.00	\$8,000
Misc LTS repairs	LS		1	\$2,500.00	\$2,500
Treatment of collected water	Gallons	7,000	28000	\$0.0489	\$1,368
Annual Benchmark Survey	LS		1	\$1,500.00	\$1,500
Maintenance					
Mowing, 4x/year	AC		6	\$500.00	\$3,000
Seed and Fertilize	SF		5,000	\$0.05	\$250
Erosion Repair	CY		200	\$15.00	\$3,000
Labor, Technician	HR		80	\$69.00	\$5,520
Annual Maintenance					
Labor, Technician	HR		24	\$69.00	\$1,656
Labor, Fitter	HR		24	\$69.00	\$1,656
Labor, Engineer	HR		6	\$85.00	\$510
Heavy Equipment to pull pumps (inc operator)	LS		1	\$1,500.00	\$1,500
Jet Rod Truck	LS		1	\$2,500.00	\$2,500
Pump replacement	LS		1	\$2,500.00	\$2,500
Probe replacement	LS		1	\$1,800.00	\$1,800
PLC & misc repairs	LS		1	\$1,000.00	\$1,000
LTS - Bi-annual Pressure Testing					
Labor, Technician	HR		16	\$69.00	\$1,104
Labor, Engineer	HR		16	\$79.00	\$1,264
Labor, Fitter	HR		16	\$69.00	\$1,104
Certifying Engineer, including report	LS		0.5	\$3,500.00	\$1,750
Vacuum truck services	LS		0.5	\$2,000.00	\$1,000
Misc. Parts & Equipment (CSE, etc.)	LS		0.5	\$700.00	\$350
Electrical usage	LS		1	\$717.00	\$717
Supplemental Pump System (cleanouts)					
Labor, Technician	HR		60	\$69.00	\$4,140
Generator rental, misc. parts	LS		1	\$500.00	\$500
Leachate					
Leachate treatment	Gallons		419,460	\$0.0044	\$1,860



TABLE VIII-A-12, Continued

CURRENT ANNUAL COST (2012 DOLLARS)	\$62,029
CONTINGENCY (20%)	\$12,406
TOTAL ANNUAL COST	\$74,435

**TABLE VIII-A-13
COST ESTIMATE: POST CLOSURE SHOT POND**

Item	Units	Quantity		Unit Cost	Subtotal
		Per Quarter	Per Year		
Quarterly Inspections					
Labor, Technician	HR	4	16	\$69.00	\$1,104
Labor, Engineer	HR	2	8	\$85.00	\$680
Misc. Expenses	LS	\$50	\$200	\$1.00	\$200
Contingency Inspection (based on 1x/5 years)	HR	\$0	1	\$69	\$69
Maintenance					
Mowing, 4x/year	AC		1.2	\$500	\$600
Seed and Fertilize	SF		1,000	\$0.05	\$50
Erosion Repair	CY		40	\$15.00	\$600
Labor, Technician	HR		80	\$69	\$5,520
Fence Replacement	LF		22.8	\$38.00	\$866
Groundwater Monitoring					
Well Replacement (1 every 4 years)	LS*		1	\$1,000.00	\$1,000
Sampling and analysis	LS	4	16	\$1,000.00	\$16,000
CURRENT ANNUAL COST (2012 DOLLARS)					\$26,689
CONTINGENCY (20%)					\$5,338
TOTAL ANNUAL COST					\$32,027

* Total well replacement cost: \$4,000

The post-closure care cost for this unit is provided in Table VIII-A-17

Leachate treatment is part of the Landfill #4 system

**TABLE VIII-A-14
COST ESTIMATE: POST CLOSURE EAST TAILINGS POND**

Item	Units	Quantity		Unit Cost	Subtotal
		Per Quarter	Per Year		
Quarterly Inspections					
Labor, Technician	HR	4	16	\$69.00	\$1,104
Labor, Engineer	HR	2	8	\$85.00	\$680
Misc. Expenses	LS	\$50	\$200	\$1.00	\$200
Contingency Inspection (based on 1x/5 years)	HR		1	\$69	\$69
Maintenance					
Mowing, 4x/year	AC		1	\$263.10	\$263
Seed and Fertilize	SF		900	\$0.05	\$45
Erosion Repair	CY		30	\$15.00	\$450
Labor, Technician	HR		80	\$69	\$5,520
Fence Replacement	LF		22.8	\$38.00	\$866
CURRENT ANNUAL COST (2012 DOLLARS)					\$9,434
CONTINGENCY (20%)					\$1,887
TOTAL ANNUAL COST					\$11,321

Costs of groundwater monitoring are included in the site-wide groundwater program
The post-closure care cost for this unit is provided in Table VIII-A-16
Leachate treatment is part of the Landfill #4 system

**TABLE VIII-A-15
COST ESTIMATE: POST CLOSURE WEST TAILINGS POND**

Item	Units	Quantity		Unit Cost	Subtotal
		Per Quarter	Per Year		
Quarterly Inspections					
Labor, Technician	HR	4	16	\$69.00	\$1,104
Labor, Engineer	HR	2	8	\$85.00	\$680
Misc. Expenses	LS	\$50	\$200	\$1.00	\$200
Contingency Inspection (based on 1x/5 years)	HR		1	\$69	\$69
Maintenance					
Mowing, 4x/year	AC		1	\$263.10	\$263
Seed and Fertilize	SF		900	\$0.05	\$45
Erosion Repair	CY		30	\$15.00	\$450
Labor, Technician	HR		80	\$69	\$5,520
Fence Replacement	LF		22.8	\$38.00	\$866
CURRENT ANNUAL COST (2012 DOLLARS)					\$9,434
CONTINGENCY (20%)					\$1,877
TOTAL ANNUAL COST					\$11,321

Costs of groundwater monitoring are included in the site-wide groundwater program
The post-closure care cost for this unit is provided in Table VIII-A-17
Leachate treatment is part of the Landfill #4 system

**TABLE VIII-A-16
COST ESTIMATE: POST CLOSURE LANDFILL 3**

Item	Units	Quantity		Unit Cost	Subtotal
		Per Quarter	Per Year		
Quarterly Inspections					
Labor, Technician	HR	16	64	\$69.00	\$4,416
Labor, Engineer	HR	4	16	\$85.00	\$1,360
Misc. Expenses	LS	\$150	\$600	\$1.00	\$600
Contingency Inspection (based on 1x/5 years)	HR		\$69	\$69	\$69
Maintenance					
Mowing, 4x/year	AC		17	\$263.10	\$4,473
Seed and Fertilize	SF		15,000	\$0.05	\$750
Erosion Repair	CY		600	\$15.00	\$9,000
Labor, Technician	HR		80	\$69.00	\$5,520
Fence Replacement	LF		105	\$38	\$3,990
Leachate Treatment	GAL		1,153,515	\$0.00443	\$5,114
CURRENT ANNUAL COST (2012 DOLLARS)					\$39,319
CONTINGENCY (20%)					\$7,864
TOTAL ANNUAL COST					\$47,183

* Total well replacement cost: \$4,000

The post-closure care cost for this unit is provided in Table VIII-A-17

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TABLE VIII-A-17
COST ESTIMATE: POST CLOSURE CARE

Inflation Rate 2.00%
Discount Rate 6.17%

Fiscal year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	Total Costs	
FACILITY CLOSURE																																
Waste Disposal	\$ 3,411,452		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,411,452	
Container Storage Areas	\$ 103,732																														\$ 103,732	
Tank Systems	\$ 837,722																														\$ 837,722	
FBI #2	\$ 292,562																														\$ 292,562	
Miscellaneous Units	\$ 14,495																														\$ 14,495	
RKI	\$ 418,134																														\$ 418,134	
Site Restoration	\$ 205,200																														\$ 205,200	
Equipment Decontamination	\$ 40,583																														\$ 40,583	
Site Preparation and Characterization	\$ 15,000																														\$ 15,000	
WWTP Optimization	\$ 746,012																														\$ 746,012	
Engineering and Administration:																																
Administrative and Miscellaneous Costs	\$ 912,734																														\$ 912,734	
Final Survey Plat Map	\$ 6,500																														\$ 6,500	
CLOSURE TOTAL	\$ 7,004,124	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,989,629	
<i>Facility Post Closure</i>																																
Landfill 6 North Plateau	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 1,637,576
Landfill 1 Southeast Ravine	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 26,216	\$ 262,157
Shot Pond	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 32,027	\$ 324,191
East Tailing Pond	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 79,249
West Tailing Pond	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 11,321	\$ 67,928
Landfill 3	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 47,183	\$ 424,650
POST CLOSURE TOTAL	\$ 202,504	\$ 202,504	\$ 202,504	\$ 202,504	\$ 202,504	\$ 202,504	\$ 191,183	\$ 147,834	\$ 147,834	\$ 100,651	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 74,435	\$ 2,695,750	
Inflated value	\$ 204,519	\$ 208,610	\$ 212,782	\$ 217,037	\$ 221,378	\$ 225,806	\$ 217,445	\$ 171,505	\$ 174,935	\$ 121,484	\$ 91,639	\$ 93,472	\$ 95,341	\$ 97,248	\$ 99,193	\$ 101,177	\$ 103,200	\$ 105,264	\$ 107,370	\$ 109,517	\$ 111,707	\$ 113,942	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,204,572
Discounted value	\$ 198,487	\$ 190,692	\$ 183,202	\$ 176,006	\$ 169,093	\$ 162,452	\$ 147,346	\$ 109,462	\$ 105,163	\$ 68,786	\$ 48,872	\$ 46,953	\$ 45,108	\$ 43,337	\$ 41,635	\$ 39,999	\$ 38,428	\$ 36,919	\$ 35,469	\$ 34,076	\$ 32,737	\$ 31,452	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,985,674
<i>Corrective Action</i>																																
Landfill 2	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 128,674	\$ 3,860,213
Landfill 4	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 147,424	\$ 4,422,728
Landfill 1 North Ravine and South Ravine	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 30,106	\$ 903,166
Groundwater pump, treat & monitor	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 623,168	\$ 18,695,045
Field Work and Corrective Measures Study	\$ 510,118																														\$ 510,118	
CORRECTIVE ACTION TOTAL	\$ 1,439,490	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 929,372	\$ 28,391,270	
Inflated Value	\$ 1,453,813	\$ 957,392	\$ 976,540	\$ 996,070	\$ 1,015,992	\$ 1,036,312	\$ 1,057,038	\$ 1,078,179	\$ 1,099,742	\$ 1,121,737	\$ 1,144,172	\$ 1,167,055	\$ 1,190,396	\$ 1,214,204	\$ 1,238,488	\$ 1,263,258	\$ 1,288,523	\$ 1,314,294	\$ 1,340,580	\$ 1,367,391	\$ 1,394,739	\$ 1,422,634	\$ 1,451,087	\$ 1,480,108	\$ 1,509,710	\$ 1,539,905	\$ 1,570,703	\$ 1,602,117	\$ 1,634,159	\$ 1,666,842	\$ 38,593,182	
Discounted Value	\$ 1,410,937	\$ 875,159	\$ 840,786	\$ 807,763	\$ 776,036	\$ 745,556	\$ 716,273	\$ 688,140	\$ 661,113	\$ 635,146	\$ 610,200	\$ 586,233	\$ 563,208	\$ 541,087	\$ 519,835	\$ 499,418	\$ 479,802	\$ 460,957	\$ 442,852	\$ 425,459	\$ 408,748	\$ 392,694	\$ 377,270	\$ 362,452	\$ 348,216	\$ 334,540	\$ 321,400	\$ 308,776	\$ 296,649	\$ 284,997	\$ 16,721,705	
Net Present Value Financial Assurance Total																															\$ 25,697,009	

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ATTACHMENT B
FINANCIAL ASSURANCE MECHANISMS



Raymond D. Hiley
Counsel – Environmental, Health and Safety
One Plastics Avenue
Pittsfield, MA 01201

Tel: (413) 448-4826
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February 1, 2008

VIA FEDERAL EXPRESS

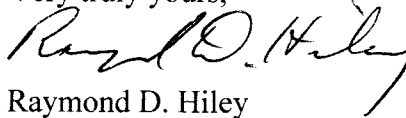
Bureau of Program Management
Division of Solid & Hazardous Materials
625 Broadway
Albany, NY 12233-7250
Attention: Aida M. Potter, P.E.

**Re: MPM Silicones, LLC
RCRA Facility ID No. NYD 002080034
Financial Assurance Pursuant to 6 NYCRR 373-2**

Dear Ms. Potter;

Attached please find a copy of the executed trust agreement and letter of credit for MPM Silicones, LLC's facility in Waterford, NY. These documents are being submitted pursuant to 6 NYCRR 373-2.8(h). Please do not hesitate to contact me if you have any questions. Thank you for your assistance in this matter.

Very truly yours,



Raymond D. Hiley

cc: Kirsten Pink

STANDBY TRUST AGREEMENT

Trust Agreement, the "Agreement," entered into as of December 20, 2007 by and between MPM Silicones, LLC, a New York limited liability company, the "Grantor," and JPMorgan Chase Bank, N.A., a national banking association, the "Trustee."

Whereas the New York State Department of Environmental Conservation, "NYSDEC," an agency of the New York State Government, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility or group of facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities.

Whereas, the Grantor has elected to establish a standby trust into which the proceeds from a letter of credit may be deposited to assure all or part of such financial responsibility for the facilities identified herein.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. *Definitions.* As used in this Agreement:

- (a) The term *Grantor* means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.
- (b) The term *Trustee* means the Trustee who enters into this Agreement and any successor Trustee.
- (c) The term *Commissioner* means the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's duly appointed designee.

Section 2. *Identification of Facilities.* This agreement pertains to the facilities identified on attached schedule A.

Section 3. *Establishment of Fund.* The Grantor and the Trustee hereby establish a standby trust fund, hereafter the "Fund," for the benefit of any and all third parties injured or damaged by sudden accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of \$1 million per occurrence and \$2 million annual aggregate for sudden accidental occurrences, exclusive of legal defense costs, except that the Fund is not established for the benefit of third parties for the following:

- (a) Bodily injury or property damage for which MPM Silicones, LLC is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This

exclusion does not apply to liability for damages that MPM Silicones, LLC would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of MPM Silicones, LLC under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.

(c) Bodily injury to:

(1) An employee of MPM Silicones, LLC arising from, and in the course of, employment by MPM Silicones, LLC; or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by MPM Silicones, LLC.

This exclusion applies:

(i) Whether MPM Silicones, LLC may be liable as an employer or in any other capacity; and

(ii) To any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by MPM Silicones, LLC;

(2) Premises that are sold, given away or abandoned by MPM Silicones, LLC if the property damage arises out of any part of those premises;

(3) Property loaned MPM Silicones, LLC;

(4) Personal property in the care, custody or control of MPM Silicones, LLC;

(5) That particular part of real property on which MPM Silicones, LLC or any contractors or subcontractors working directly or indirectly on behalf of MPM Silicones, LLC are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the fund shall be considered primary coverage.

The Fund is established initially as consisting of the proceeds of the letter of credit deposited into the Fund. Such proceeds and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon,

less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by NYSDEC.

Section 4. *Payment for Bodily Injury or Property Damage.* The Trustee shall satisfy a third party liability claim by drawing on the letter of credit described in Schedule B and by making payments from the Fund only upon receipt of one of the following documents:

(a) Certification from the Grantor and the third party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERTIFICATION OF VALID CLAIM

The undersigned, as parties MPM Silicones, LLC and [insert name and address of third party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a sudden accidental occurrence arising from operating MPM Silicones, LLC's hazardous waste treatment, storage, or disposal facility should be paid in the amount of \$[]

Signature _____ Grantor

Signature(s) _____ Claimant(s)

(b) A valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused by sudden accidental occurrences arising from the operation of the Grantor's facility or group of facilities.

Section 5. *Payments Comprising the Fund.* Payments made to the Trustee for the Fund shall consist of the proceeds from the letter of credit drawn upon by the Trustee in accordance with the requirements of 6 NYCRR 373-2.8(j)(10) and Section 4 of this Agreement.

Section 6. *Trustee Management.* The Trustee shall invest and reinvest the principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his or her duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or a State government; and

(c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or

instrumentality thereof, with a Federal Reserve Bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. *Taxes and Expenses.* All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements to the Trustee shall be paid from the Fund.

Section 10. *Advice of Counsel.* The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. *Trustee Compensation.* The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 12. *Successor Trustee.* The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Commissioner and the present Trustee by certified mail, return receipt requested, 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 13. *Instructions to the Trustee.* All orders, requests, certifications of valid claims, and instructions to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendments to Exhibit A. The Trustee shall be fully protected in acting

without inquiry in accordance with the Grantor's orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Commissioner hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or Commissioner, except as provided for herein.

Section 14. *Amendment of Agreement.* This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Commissioner, or by the Trustee and the Commissioner if the Grantor ceases to exist.

Section 15. *Irrevocability and Termination.* Subject to the right of the parties to amend this Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Commissioner, or by the Trustee and the Commissioner, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be paid to the Grantor.

The Commissioner will agree to termination of the Trust when the owner or operator substitutes alternative financial assurance as specified in section 373-2.8 or 373-3.8.

~~Section 16. *Immunity and indemnification.* The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor and the NYSDEC Commissioner issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonable incurred in its defense in the event the Grantor fails to provide such defense.~~

Section 17. *Choice of Law.* This Agreement shall be administered, construed, and enforced according to the laws of the State of New York.

Section 18. *Interpretation.* As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation of the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in 6 NYCRR 373-2.8(j)(13) as such regulations were constituted on the date first above written.

MPM SILICONES, LLC (Grantor)

Signature: [Handwritten Signature]

Name: Steven Delarge

Title: Chief Financial Officer

Attest: [Handwritten Signature]

JPMORGAN CHASE BANK, N.A. (Trustee)

Signature: [Handwritten Signature]

Attest: _____

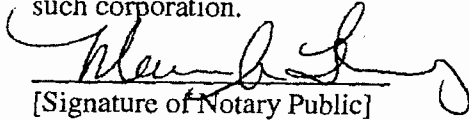
Name: _____

Title: _____

Larissa R. Urcia
Vice President

State of New York
County of Saratoga

On this 14th day of December, 2007 before me personally came Steven Delange, to me known who, by me duly sworn, did depose and say that (s)he resides in Clifton Park NY, that (s)he is the CEO of Momentive Performance MHS, the corporation described in and which executed the within Trust Agreement; and that he signed his name thereto by authority of such corporation.


[Signature of Notary Public]

MAUREEN A. FLEMING
Notary Public, State of New York
No. 01FL6135993
Qualified in Saratoga County
Commission Expires Oct. 31, 2009

State of _____
County of _____

On this ___ day of _____, 2007 before me personally came _____, to me known who, by me duly sworn, did depose and say that (s)he resides in _____, that (s)he is the _____ of _____, the corporation described in and which executed the within Trust Agreement; and that he signed his name thereto by authority of such corporation.

[Signature of Notary Public]

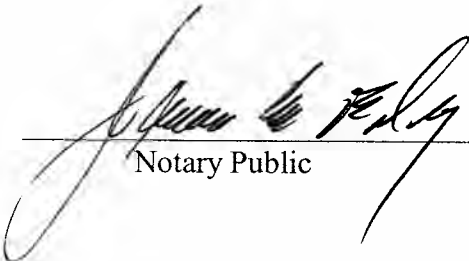
State of New York)

ss:

County of New York)

On the 10th of January, 2008, before me, James M. Foley, a Notary Public, personally appeared Larissa R. Urcia, an Vice President of JPMorgan Chase Bank, N.A., personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Witness my hand and official seal,



Notary Public

James M. Foley
Notary Public, State of New York
No. 01FO6348400
Qualified in New York County
Commission Expires August 31, 2010

**SCHEDULE A
TO TRUST AGREEMENT**

EPA ID Number:

#NYD002080034

Name and Address of Facility:

MPM Silicones, LLC
260 Hudson River Road
Waterford, NY

Amount of Liability Coverage

For sudden accidental occurrences - \$1 million per occurrence, \$2 million annual aggregate.

**SCHEDULE B
TO TRUST AGREEMENT**

LETTER OF CREDIT

COPY

JPMorgan Chase Bank, N.A.
c/o JPMorgan Treasury Services
Global Trade Services
10420 Highland Manor Drive
Tampa, FL 33610

DEC 18, 2007
OUR L/C NO.: TPTS-273658

IRREVOCABLE STANDBY LETTER OF CREDIT

JPMORGAN CHASE BANK, N.A., AS TRUSTEE
ATTENTION: LARISSA URCIA, VICE PRESIDENT
ESCROW SERVICES

JPMORGAN CHASE BANK, N.A.
4 NEW YORK PLAZA, 21ST FLOOR
NEW YORK, NY 10004

COMMISSIONER OF NYSDEC
ATTN: DIVISION OF SOLID & HAZARDOUS MATERIALS
625 BROADWAY
ALBANY, NY 12233-7250

RE APPLICANT: MPM SILICONES, LLC
187 DANBURY ROAD
WILTON, CT 06897

DEAR SIR OR MADAM:

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. TPTS-273658 IN THE FAVOR OF JPMORGAN CHASE BANK, N.A. AS TRUSTEE, AT THE REQUEST AND FOR THE ACCOUNT OF MPM SILICONES, LLC, 187 DANBURY ROAD WILTON, CT 06897, FOR THIRD-PARTY LIABILITY AWARDS OR SETTLEMENTS UP TO ONE MILLION U.S. DOLLARS (\$1,000,000) PER OCCURRENCE AND THE ANNUAL AGGREGATE AMOUNT OF TWO MILLION U.S. DOLLARS (\$2,000,000), FOR SUDDEN ACCIDENTAL OCCURRENCES, EXCLUSIVE OF LEGAL DEFENSE COSTS, AVAILABLE UPON PRESENTATION OF A SIGHT DRAFT BEARING REFERENCE TO THIS LETTER OF CREDIT NO. TPTS-273658.

THIS LETTER OF CREDIT IS EFFECTIVE AS OF DECEMBER 18, 2007 AND SHALL EXPIRE ON DECEMBER 18, 2008, BUT SUCH EXPIRATION DATE SHALL BE AUTOMATICALLY EXTENDED FOR A PERIOD OF AT LEAST ONE YEAR ON DECEMBER 18, 2008 AND ON EACH SUCCESSIVE EXPIRATION DATE, UNLESS, AT LEAST 120 DAYS BEFORE THE CURRENT EXPIRATION DATE, WE NOTIFY YOU, THE COMMISSIONER OF THE NYSDEC, ATTENTION DIVISION OF SOLID & HAZARDOUS WASTE MATERIALS, 625 BROADWAY, ALBANY, NY 12233-7250, AND MPM SILICONES, LLC BY CERTIFIED MAIL,

JPMorgan Chase Bank, N.A.
c/o JPMorgan Treasury Services
Global Trade Services
10420 Highland Manor Drive
Tampa, FL 33610

COPY

DEC 18, 2007
OUR L/C NO.: TPTS-273658

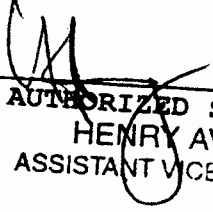
RETURN RECEIPT REQUESTED, THAT WE HAVE DECIDED NOT TO EXTEND THIS LETTER OF CREDIT BEYOND THE CURRENT EXPIRATION DATE.

WHENEVER THIS LETTER OF CREDIT IS DRAWN ON UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS CREDIT, WE SHALL DULY HONOR SUCH DRAFT UPON PRESENTATION TO US.

WE CERTIFY THAT THE WORDING OF THIS LETTER OF CREDIT IS IDENTICAL TO THE WORDING SPECIFIED IN 6 NYCRR 373-2.8(J)(10) AS SUCH REGULATIONS WERE CONSTITUTED ON THE DATE SHOWN IMMEDIATELY BELOW.

THIS CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS 2007 REVISION, INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 600.

ALL CORRESPONDENCE AND ANY DRAWINGS PRESENTED IN CONNECTION WITH THIS LETTER OF CREDIT MUST ONLY BE PRESENTED TO US AT JPMORGAN CHASE BANK, N.A., C/O JPMORGAN TREASURY SERVICES, 10420 HIGHLAND MANOR DRIVE, 4TH FLOOR, TAMPA, FLORIDA 33610, ATTENTION: STANDBY LETTER OF CREDIT DEPARTMENT. CUSTOMER INQUIRY NUMBER IS 800-634-1969 CHOOSE OPTION 1. CUSTOMER INQUIRY E-MAIL ADDRESS IS: GTS.CLIENT.SERVICES@JPMCHASE.COM



AUTHORIZED SIGNATURE
HENRY AVELINO
ASSISTANT VICE PRESIDENT

EXHIBIT A TO TRUST AGREEMENT

Persons Authorized to Provide Orders, Requests, and Instructions to Trustee

Jonathan Rich

Steven DeLarge

Gregory P. Rustowicz

Such other persons as MPM Silicones, LLC may designate in writing

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TABLE IX-2 SITE SPECIFIC COMPOUNDS

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES

ATTACHMENTS

A. SWMU LOCATIONS*

*Confidential Business Information Documents Available In Volume II

SECTION IX: CORRECTIVE ACTION REQUIREMENTS**A. APPLICABILITY**

The conditions of this section apply to:

- (1) All Solid Waste Management Units (SWMUs) described in this section;
- (2) Any additional suspected SWMUs requiring evaluation upon discovery.

The identified SWMUs at the facility are described in Table IX-1. SWMU locations are shown in the drawing in Attachment A.

B. CORRECTIVE ACTION PROGRAM**(1) Current Remedial Program**

Momentive has instituted a remedial program in accordance with Civil Action No. 83-CV-77 and the resulting Consent Decree between New York State and GE Silicones (now Momentive). Momentive is currently managing this remedial program in accordance with a July 8, 2005 letter to the New York State Department of Environmental Conservation (NYSDEC) regarding “proposed modification to groundwater remedial systems, General Electric Advanced Materials – Silicones, Waterford, New York.” NYSDEC provided formal approval of this remedial program in a letter dated January 6, 2006. The approved remedial program, including groundwater monitoring and the corrective action program requirements in this section, provides the necessary protection of human health and the environment required under 6 NYCRR Part 373-2.6(a)(6).

(2) Landfill 1 Corrective Measures

Two recovery wells were installed in the Landfill 1 area in December 1991. The performance of the two-recovery well system was evaluated from July 1992 to June 1993 through two pump tests, redevelopment of one of the recovery wells, and analytical modeling. On June 25, 1993 Momentive submitted a recommendation to NYSDEC/NYSDOL to install an additional recovery well in the Landfill 1 area. Based on approval of this recommendation, the three-recovery well system was permanently installed.

Momentive complies with the requirements of the Landfill 1 Remedial Plan, dated September 14, 1995. Momentive shall request written authorization from the department prior to modification of hydraulic control criteria for Wells 592, 593, and 595.

(3) Landfill 3 Monitoring Program

Momentive manages groundwater contamination at Landfill 3 in accordance with the current remedial program to enable protection of human health and the environment. Groundwater samples are currently collected from the following Landfill 3 monitoring wells semi-annually.

Primary Aquifer (PA) Wells: 269, 389, 395*, 406, 576

*Well 394 has been replaced by well 395.

Shallow Transient Zone (STZ) Wells: 265, 390, 396, 408, 575

These samples are analyzed for the site specific compounds listed in Table IX-2. Results of the semi-annual sampling and analysis are incorporated into the appropriate quarterly monitoring reports generated under the Remedial Program.

(4) Mudderkill Creek Monitoring Program

Momentive monitors the water quality of Mudderkill Creek because groundwater contamination originating at Landfill 3 could potentially discharge into the creek. Therefore, surface water samples are collected from the Mudderkill Creek on a quarterly basis. The two sample collection sites on the Mudderkill Creek are on the west side of Route 4, and west of the Canadian Pacific Railroad tracks (at the outlet of the southern culvert). These samples are analyzed for volatile organic compounds (VOCs). Flow monitoring of the creek may be necessary in the event that there are significant changes in constituent concentrations that do not appear to be related to creek flow variability. Flow monitoring is not currently conducted.

These sample results are submitted to the NYSDEC on a quarterly basis. They are included in the appropriate quarterly monitoring reports generated under the Remedial Program.

(5) Surface Impoundments Corrective Measures

The NYSDEC approved Momentive's Closure Certification for the following Surface Impoundments on February 12, 1990:

- Shot Pond
- East Tailings Pond
- West Tailings Pond
- Lagoon No. 2
- Lagoon No. 3

Wastes were removed from Lagoon 2 and Lagoon 3 as part of closure activities. However, residual waste materials and soil contamination may remain in the vicinity of each of the former impoundments listed above. Any release that may emanate from these impoundments would be captured by existing recovery wells associated with Momentive's remedial program. Therefore, enhancements to the remedial program to address releases from the former impoundments are not required at this time.

(6) Process Sewers Upgrade Program

Momentive has implemented the April 29, 1992 Process Sewers Evaluation/Corrective Measures Enhancement Program. This includes a program developed to identify significant sewer releases. Visual inspections of the process sewer manholes are conducted annually to ensure their integrity. Camera inspections of the process sewer are performed every five years. Results of these assessments are maintained in an operating log and included in appropriate summary reports. The NYSDEC's On-Site Coordinator will be informed of activities associated with the process sewer evaluation and corrective action measures.

Any releases that may emanate from process sewers would be captured by existing recovery wells associated with Momentive's remedial program.

(7) Immediate Threats

If at any time the Commissioner determines that a release or other event causes an immediate threat to human health or the environment, or that a condition at Momentive' jeopardizes their ability to comply with any governmental permit, a draft interim corrective measures study addressing immediate corrective measures will be submitted to the Commissioner. The draft study will be submitted for approval within 90 days of notice of such a determination. This study shall consider, among other relevant factors, the character, magnitude, rate of release, the proximity to population, the exposure pathways, the effects of delayed action, and evaluations of appropriate interim corrective measures. Upon approval of the study, Momentive will carry out the required interim corrective measures as specified in the study. Nothing herein will preclude Momentive from taking immediate action to address the conditions described herein and promptly notifying the Commissioner.

C. ASSESSMENT OF NEWLY IDENTIFIED SWMUS

To ensure consistency with the NYSDEC regulations regarding Remedial Program Soil Cleanup Objectives, promulgated under 6 NYCRR Subpart 375-6 (effective December 14, 2006), corrective action requirements for identified SWMUs and other contaminated soils discovered at the site will be carried out in accordance with these program elements and cleanup objectives.

SWMU EVALUATION PLAN**(1) Notification**

Reasonable efforts will be made to notify the NYSDEC On-Site Coordinator at least 24 hours prior to any excavation within a previously identified SWMU. In the unlikely event that Momentive is unable to notify the NYSDEC's on-site representative due to circumstances beyond Momentive's control, this does not constitute a violation. Any suspected release of hazardous materials will be reported in accordance with the Integrated Contingency Plan referenced in Section VI of this application.

(2) SWMU Areas

Tank areas or farms will be considered a single SWMU, provided the area is contiguous and not separated by physical barriers such as buildings or other tanks. The Waste Regulatory Leader or the Project Engineer will update the master list of SWMUs and provide the results of subsequent evaluations in the quarterly SMWU report.

(3) Inaccessible SWMU Areas

Many SWMU Areas or portions of SWMU Areas may be either inaccessible or not practical to excavate. Factors that may limit the extent of soil removal include availability of storage, incinerator capacity, soil handling hazards and the possibility of undermining adjacent structures. These soils will be properly assessed and managed appropriately as they become accessible in the future.

(4) Excavated Soils

The Project Engineer, with EHS staff oversight, will manage excavated soils from work areas appropriately. A work area includes such things as the dimensions of a building, containment pad, pipeline trench or roadway under construction. Areas that are immediately adjacent to the excavation area are considered to be part of the work area. The excavated soils will be managed as follows:

- (i) The goal is to identify soils with obvious odors and/or with obvious visual contamination. Visual contamination is identified by the presence of free-flowing Non-Aqueous Phase Liquid (NAPL), staining, or other discoloration. Soils with obvious impacts will be sampled for laboratory analysis and managed in accordance with these results.
 - (ii) Soils outside of an existing SWMU that do not exhibit obvious contamination, as described above in (i), but need to be removed from a work area to facilitate construction activities, do not need to be evaluated using analytical data and/or process knowledge.
 - (iii) Soils within an existing SWMU that do not exhibit obvious contamination, as described above in (i), and that remain within the limits of the work area, may be used for backfill at the existing project site.
 - (iv) Soils within an existing SWMU that do not exhibit obvious contamination, as described above in (i), but need to be removed from a work area to facilitate construction activities, will be evaluated using analytical data and/or process knowledge. In the event that the soil is non hazardous, it may be managed as solid waste construction debris subject to 6 NYCRR Part 360.
 - (v) For soils removed from an existing SWMU that carry a listed hazardous waste code, Momentive may apply to the NYSDEC for a contained-in determination. The contained-in designation would facilitate alternate management options for these soils, such as a Beneficial Use Designation (BUD) described in 6 NYCRR 360-1.15(d).
 - (vi) If soils are contaminated, they may be moved/consolidated within the limits of the work area until arrangements may be made for proper disposal. These soils may be staged for up to 60 days. Soils may be staged for a longer period of time with the NYSDEC's approval.
- (5) Container Management

Contaminated soil generated from a SWMU investigation, such as drill cuttings, will be managed in accordance with applicable regulations for managing Investigation Derived Waste (IDW).

Containers of contaminated soil removed from a SWMU will be managed as hazardous waste (unless sampling and analysis shows soil is not hazardous, or a BUD is obtained from the NYSDEC). Accordingly, contaminated soils may be placed/staged in the vicinity of the work area for up to 90 days and managed in accordance with <90 day storage areas procedures. Alternatively, if space is available for the containers, the contaminated soil

may be moved to a <90 day storage area.

(6) Backfilling

Soil samples will be taken to characterize residual soils prior to backfilling, in accordance with DER-10. Sampling will be conducted in accordance with standard SW846 methodology. The sample containers and preservation techniques are specified in Table IX-3.

This sampling requirement does not apply to excavated soils described in Section (4) (ii), where soils do not exhibit obvious contamination.

Momentive will use clean backfill materials. Typically, soil quality information is provided by the supplier. Alternatively, soil samples may be collected of backfill materials imported to the site; in this instance, sampling will be conducted in accordance with DER-10. Backfill materials will meet NYSDEC requirements for unrestricted use.

(7) Sample Collection and Analysis

Soil samples taken from areas where a large variety of wastes have been stored, such as container storage areas, will be analyzed for the site specific compounds in Table IX-2. Soil samples taken from areas where a limited number of materials have been stored will be analyzed only for those compounds that were stored there. This will include areas such as tank removal sites, or spills from an identified container, tank, tank wagon, or trailer where a history of tank usage is known. Operating records that support the tank or container storage history will be included with the results of the evaluation and submitted with the quarterly SWMU report, where they are available. Soil samples taken from the area of a process sewer release will be analyzed using a screening analysis of process sewer water contained in the manhole or pipe from which the release originated. If present, process sewer water will be collected immediately upon identification of a release and analyzed in the on-site laboratory to identify potential contaminants for soil analysis.

The number of samples collected will be in accordance with DER-10.

SW-846 methods of analysis and preparation for soil and media are listed in Table IX-3. Method detection limits for these analyses will be consistent with current SW-846 methodologies. When possible, Momentive's on-site laboratory will be utilized for analyses of wastewater and soils/media. Momentive's laboratory utilizes appropriate methods for preparation and analyses.

The amount of each sample taken shall be sufficient to perform a "total" analysis using the appropriate SW-846 method and the "Toxicity Characteristic Leaching Procedure" (TCLP) (SW-846 Method 1311). If the results of the "totals" analysis indicate that the concentration of all constituents analyzed, after dividing each concentration by a factor of 20, will be below the applicable standard, the TCLP test need not be performed on the sample.

(8) Evaluation of Results

Soil analytical results will be compared to appropriate soil clean-up objectives contained in 6-NYCRR 375-6. Practical clean-up objectives and associated remedial technologies will be evaluated on a case-by-case basis. Considerations will include the performance, reliability, implementation ease, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to residual contamination.

(9) SWMU Reports

SWMU reports will be submitted to NYSDEC within 30 days following the end of each quarter (30 days from: March 31, June 30, September 30, and December 31). This quarterly report will include the analytical results from soil sampling performed the previous quarter, as available. In the event that the analytical data is not available, it will be included in the following quarter's SWMU report.

The report will include a general dimension or capacity, function, dates of operation, and a description of the material placed in or released at each unit, as well as a complete description of any hazardous wastes generated as a result of remedial activities. Additionally, the SWMU map will be updated annually when new SWMUs are added.

TABLE IX-1 SOLID WASTE MANAGEMENT UNITS				
SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
1	Landfill No. 1 Southeast, South, & North Ravines	Disposal of hazardous and non-hazardous wastes.	<p>Southeast Ravine: Closed under RCRA Incinerator ash and residue, Wastewater treatment plant solids formerly also used for trash.</p> <p>South Ravine: Non-hazardous silicone by products scrap gums, rubber, pastes, RTV, fillers. Closure in Progress 4Q93 in accordance with DEC approved design.</p> <p>North Ravine: General plant trash paper, glass, scrap metal, wood, etc. Closure in Progress 4Q93 in accordance with DEC approved design.</p>	Landfill No. 1 Monitoring Program per 7/30/93 letter to NYSDEC and NYSDOL.
2	Landfill No. 2	Formerly used for the disposal of hazardous waste - unit is now closed	Non-polar solvents, halogenated silanes, blends-siloxanes, silicone solids.	Remedial Plan, NYSDOL Consent Agreement-Inward Gradient Requirement. Full Scale Remediation Plan 10/92.
3	Landfill No. 3	Disposal of hazardous wastes. Unit closed under RCRA.	Incinerator ash and residue. Wastewater treatment plant solids, Process wastes and spent slurries.	Semi-annual monitoring per 12/5/90 report to NYSDEC and NYSDOL.
4	Landfill No. 4	Formerly used for the disposal of hazardous waste-unit is now closed.	Non-polar solvents, halogenated silanes, blends-siloxanes, silicone solids.	Remedial Plan, NYSDOL Consent Agreement-Landfill No. 4 Area.
5	Landfill No. 5	Formerly used for disposal of hazardous wastes-now closed. wastes removed in 1980 and placed in Landfill No. 3.	Wastewater treatment plant solids.	Remedial Plan, NYSDOL Consent Agreement-APS Area.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
6	Shot Pond Surface impoundment	Formerly used for the emergency holding of wastewater if air stripper shut down-now closed.	Leachate from the land disposal of hazardous wastes.	Remedial Plan, NYSDOL Consent Agreement-River Boundary Near Landfill No. 4 and South of Landfill No. 4.
7	East Tailing Pond Surface impoundment	Formerly used for the emergency holding of sludge if dewatering equipment malfunctioned-now closed.	Solids from the incineration of hazardous wastes and leachate from the land disposal of hazardous wastes.	Remedial Plan, NYSDOL Consent Agreement-River Boundary Near Landfill No. 4.
8	West Tailings Pond Surface impoundment	Formerly used for the emergency holding of sludge if dewatering equipment malfunctioned-now closed.	Solids from the incineration of hazardous wastes and leachate from the land disposal of hazardous wastes.	Remedial Plan, NYSDOL Consent Agreement-River Boundary Near Landfill No. 4.
9	Lagoon No. 1 Surface impoundment	Provides emergency spill protection for non-contact cooling water/storm water system.	Storm water and surface run-off non-contact cooling water.	Remedial Plan, NYSDOL Consent Agreement-River Boundary near Landfill No. 4 and South of Landfill No. 4.
10	Lagoon No. 2 Surface impoundment	Provides emergency spill protection for non-contact cooling water/storm water system.	Storm water and surface run-off non-contact cooling water.	Remedial Plan, NYSDOL Consent Agreement-River Boundary South of Landfill No. 4 and APS area.
11	Lagoon No. 3 Surface impoundment	Formerly provided polishing of wastewater treatment plant effluent-now closed.	Solids from the incineration of hazardous wastes and leachate from the land disposal of hazardous wastes.	Remedial Plan, NYSDOL Consent Agreement-River Boundary South of Landfill South of Landfill No. 4.
12	Rotary Kiln Incinerator Incinerator No. 1 Incinerator No. 2	RKI used for incineration of drummed wastes. Incinerators No. 1 and No. 2 used for incineration of injected liquids.	Non-polar solvents Acid polar solvents Halogenated silanes Slurry Acetyl chloride Blends-siloxanes Silicone solids Acetoxy catalyst Methyl hydrogen silicones Caustic Acrylonitrile Dimethyl formamide Liquid PCB wastes Solid PCB wastes	Remedial Plan, NYSDOL Consent Agreement-Waste Area and River Boundary South of Landfill No. 4.water Treatment Plant.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
13	Former Drum Staging Area	Storage of palletized containers of hazardous and non-hazardous wastes.	Non-polar solvents Acid polar solvents Acetyl chloride Blends-siloxanes Silicone solids Acetoxy catalyst Pigments Methyl hydrogen silicones Vinylene concentrate Caustic Acrylonitrile Dimethyl formamide	Remedial Plan, NYSDOL Consent Agreement-Southern Boundary Solid Waste Management Area Sampled 4/4/90 Closure certification and sampling results submitted to DEC. Letter from DEC stating no further action required 12/20/91.
14	RKI Feed Pad	Short-term storage of drummed wastes prior to incineration.	Blends-siloxanes Silicone solids Methyl hydrogen silicones Vinylene concentrate Caustic Acrylonitrile Dimethyl formamide Halogenated silanes	RCRA Facility Assessment Sampling Plan. Sampled 4/4/90. Sampling results submitted to DEC. Letter from DEC stating no further action required 12/20/91.
15	Wastewater Treatment Plant	Treatment of aqueous process wastes prior to discharge to the river.	Aqueous process wastes-acidic.	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary South of Landfill No. 4.
16	Past Drum Staging Area Salvage Yard	Formerly used for storage of palletized containers of hazardous and non-hazardous wastes.	PCB transformers and capacitors.	RCRA Facility Assessment Sampling Plan. Sampling 4/4/90, results submitted to DEC. Received letter from DEC stating no further action required 12/20/91.
17	Building 24 Concrete pad	Waste drum pickup area.	Methyl hydrogen silicones Silicone solids Non-polar solvents Blends-siloxanes	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area.
18	Building 21 Asphalt surface	Waste drum pickup area.	Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
19	Building 30, Area 30R Asphalt pad	Waste drum pickup area.	Blends-siloxanes Silicone solids Non-polar solvents Methyl hydrogen silicones Acetoxy catalyst	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
20	Building 30, Area 30P Concrete pad	Waste drum pickup area.	Blends-siloxanes	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
21	Building 30, Area 30 CM Asphalt pad	Waste drum pickup area.	Silicone solids Caustic set up Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
22	Building 27 Concrete pad	Waste drum pickup area.	Halogenated silanes Non-polar solvent	Remedial Plan, NYSDOL Consent Agreement-Northeastern Manufacturing Area.
23	Building 30, Area 30 QC Concrete pad	Waste drum pickup area.	Blend-siloxanes Non-polar solvents Silicone solids	Remedial Plan, NYSDOL consent Agreement-Northeast Manufacturing Area.
24	Building 30, Area 30WP Concrete slab	Waste drum pickup area.	Acetoxy catalyst Pigments	Remedial Plan-NYSDOL consent Agreement-Northeast Manufacturing Area.
25	Building 42 Concrete pad	Waste drum pickup area.	Silicone solids Non-polar solvents Blends-siloxanes Caustic Pigments	Remedial Plan-NYSDOL Consent Agreement-Northeast Manufacturing Area.
26	Building 43	Waste drum pickup area.	Blends-siloxanes Methyl hydrogen silicones	Remedial Plan, NYSDOL Consent Decree-Northeast Manufacturing Area and River Boundary north of Landfill No. 4.
27	Building 37	Waste drum pickup area.	Methyl hydrogen silicones Caustic Silicone solids Blends-siloxanes Non-polar solvents	Remedial Plan, NYSDOL Consent Decree-Northeast Manufacturing Area.
28	Building 35 Asphalt pad	Waste drum pickup area.	Halogenated silanes Caustic Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
29	Building 16 Concrete Pad	Waste drum pickup area.	Methyl hydrogen silicones Caustic Silicone solids Acid polar solvents Blends-siloxanes Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-APS Area and Wastewater Treatment Plant Area.
30	Building 71 concrete pad	Waste drum pickup area.	Methyl hydrogen silicones Silicone solids Non-polar solvents Acetoxy catalyst Blends-siloxanes Caustic Dimethyl Formamide Halogenated silanes Acrylonitrile	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
31	MCS Concrete pad	Waste drum pickup area.	Halogenated silanes	Remedial Plan, NYSDOL consent Agreement-Southern Boundary Solid Waste Management Area
32	Building 66 Asphalt surface	Waste drum pickup area.	Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
33	Building 76 Asphalt pad	Waste drum pickup area.	Methyl hydrogen silicones Silicone solids Non-polar solvents Acetoxy catalyst Blends-siloxanes Caustic Dimethyl formamide Acrylonitrile	Remedial Plan, NYSDOL Consent Agreement- Northeast Manufacturing Area.
34	Building 78 Asphalt pad	Waste drum pickup area.	Silicone solids	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
35	Building 80 Asphalt pad	Waste drum pickup area.	Blends-siloxanes Methyl hydrogen silicones	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area and River Boundary north of Landfill No. 4

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
36	Building 85 Asphalt pad	Waste drum pickup area.	Silicone solids Acetoxy catalyst Blends-siloxanes Vinylene concentrate Polymers Pastes, RTV base Silicone carbide Pigments	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area and River Boundary north of Landfill No. 4.
37	Building 43	Waste drum pickup area.	Blends-siloxanes Methyl hydrogen silicones	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
38	Building 14	Former waste drum pickup area-no longer used.	Methyl hydrogen silicones Caustic Silicones solids Acid polar solvents Blends-siloxanes Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-APS Area and Wastewater Treatment Plant Area.
39	Building 12	Waste drum pickup area.	Silicone solids Scrap silicone oils Non-polar solvents Methyl hydrogen silicones Caustic Acetoxy catalyst	Remedial Plan, NYSDOL Consent Agreement-APS Area and Wastewater Treatment Plant Area.
40	Building 15	Former waste drum pickup area-no longer used.	Methyl hydrogen silicones Silicones solids Acid polar solvents Non-polar solvents Blends-siloxanes Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-APS Area and Wastewater Treatment Plant Area.
41	Building 15	Waste drum pickup.	Methyl hydrogen silicones Silicone solids Acid polar solvents Non-polar solvents Blends-siloxanes Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-APS Area and Wastewater Treatment Plant Area.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
42	MCS	Former waste drum pickup area-no longer used.	Reactor cake Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-Southern Boundary Solid Waste Management Area.
43	Building 76 Above ground tank #2650-509	Waste storage 2000 gallon capacity.	Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
44	Building 66 Above ground tank #114-599	Waste storage 12,000 gallon capacity.	Methyl-phenyl slurry	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
45	Underground tank #5470-538-05	Former waste storage tank removed 10,000 gallon capacity.	Scrap solvent	RCRA Facility Assessment Sampling Plan. Sampled 7/6/90, results submitted to DEC. Received letter 12/20/91 stating no further action required.
46	Underground tank #5470-538-02	Former waste storage tank removed 10,000 gallon capacity	Scrap solvent	RCRA Facility Assessment Sampling Plan. Sampled 7/6/90, results submitted to DEC. Received letter 12/20/91 stating no further action required.
47	Underground tank #5800-504	Former waste storage tank removed 2,500 gallon capacity.	Blends siloxanes	RCRA Facility Assessment Sampling Plan. Sampled 7/6/90, results submitted to DEC. Received letter 12/20/91 stating no further action required.
48	Building 21 Aboveground tank #1310-506	Former waste storage tank removed 7,000 gallon capacity	Methyl-phenyl slurry	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
49	Building 24 Aboveground tank #2610-538	Waste storage 12,000 gallon capacity.	Non-polar solvents	Remedial Plan-NYSDOI Consent Agreement River Boundary near Landfill No. 4.
50	Waste treatment area In-ground tank #28A	Waste storage 24,500 gallon capacity. Closed and became secondary containment for new 28A tank.	Acid polar solvents	RCRA Facility Assessment Sampling Plan. P.E. certified closed DEC letter stating no further action required 12/20/91.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
51	Waste treatment area In-ground tank #28B	Waste storage 24,500 gallon capacity. closed and became secondary containment for new 28B tank.	Acid polar solvents	RCRA Facility Assessment Sampling Plan. P.E. certified closed. DEC letter stating no further action required 12/20/91.
52	Waste treatment area Aboveground tank #250	Waste storage 20,000 gallon capacity.	Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant.
53	Waste treatment area Aboveground tank #251	Waste storage 20,000 gallon capacity.	Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary, South of Landfill No. 4.
54	Waste treatment area Aboveground tank #252	Waste storage 5,000 gallon capacity.	Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary, South of Landfill No. 4.
55	Waste treatment area	Above ground tank #26C Waste storage 5,274 gallon capacity.	Blends-siloxanes	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant area and River Boundary, South of Landfill No. 4.
56	Waste treatment area Aboveground tank #26B	Waste storage 5,274 gallon capacity.	Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary, South of Landfill No. 4.
57	Waste treatment area Aboveground tank #26A	Waste storage 5,274 gallon capacity.	Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary, South of Landfill No. 4.
58	Waste treatment area Aboveground tank #39	Waste storage 5,000 gallon capacity.	Methyl-phenyl slurry	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary, South of Landfill No. 4.
59	Waste treatment area On-ground tank #27C	Waste storage 8,900 gallon capacity. Tank closed removed.	Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary, South of Landfill No. 4.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
60	Waste treatment area On-ground tank #27B	Waste storage 8,900 gallon capacity. Tank closed removed.	Non-polar solvents	Remedial Plan, NYSDOL consent Agreement-Wastewater Treatment Plant Area and River Boundary South of Landfill No. 4.
61	Waste treatment area On-ground tank #27A	Waste storage 8,900 gallon capacity. Tank closed removed.	Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary South of Landfill No. 4.
62	Waste treatment area Aboveground tank #40.	Waste storage 10,000 gallon capacity.	Methyl-phenyl slurry	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary South of Landfill No. 4.
63	Waste treatment area Aboveground tank #61	Waste storage 9,000 gallon capacity.	Methyl-phenyl slurry	Remedial Plan, NYSDOL Consent Agreement-River Boundary South of Landfill No. 4.
64	Waste treatment area Aboveground tank #62	Waste storage 9,000 gallon capacity.	Methyl-phenyl slurry	Remedial Plan, NYSDOL Consent Agreement-River Boundary South of Landfill No. 4.
65	Waste treatment area Aboveground tank #T-4	Oil settling tank.	Blends siloxanes	Remedial Plan, NYSDOL Consent Agreement-Wastewater Treatment Plant Area and River Boundary South of Landfill No. 4.
66	Building 23 Aboveground tank #2610-505D	Waste storage 2,000 gallon capacity. Tank closed. Removed	Halogenated silanes	Remedial Plan, NYSDOL Consent Agreement-River Boundary near Landfill No. 4.
67	Building 78 #2650-536	Waste storage.	Non-polar solvents	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
68	Building 21 Staging Area	Container Storage area Closed	PCB solids	Remedial Plan, NYSDOL Consent Agreement-Northeast Manufacturing Area.
69	Former Incinerator	Incineration of scrap solvents Unit has been closed.	Scrap Solvents	Remedial Plan, NYSDOL Consent Agreement-Southern boundary Solid Waste Management Area.
70	Sewers	Underground system for transportation of wastes from main plant to WWTP.		On-going, upgrade program.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
71	WWTP Silane Pipe Leak	Below ground pipe for transportation of wastes to WWTP.	Silanes	Sampled 4/27/93. Report to DEC 7/30/93.
72	Building 37 Tank Farm	17 underground tanks for raw material, products and wastes storage.	Scrap solvents Siloxane	Sampled 4/27/93. Report to DEC 7/30/93.
73	Building 24 Tank Farm	15 aboveground tanks for raw material and product storage.	Chlorosilanes	Sampled 4/27/93. Report to DEC 7/30/93.
74	Building 616 Excavation	Disposal of waste material	Chlorobenzene containing waste	Sampled 4/27/93. Report to DEC 7/30/93.
75	Pipe Leak Beneath WWTP Thickener	Transport of solids from thickener to belt filter press.	Incinerator ash and chemical sewer solids.	Sampled 4/27/93. Report to DEC 7/30/93.
76				
77	Tank 27024 Spill DEC # 95-11064	Spill of Hydrochloric Acid from crack storage tank	Hydrochloric Acid in soil	Top 6-12" soil neutralized with soda ash and returned to excavation. Tank repaired and returned to service.
78	Passivated MCS Fines Burial Area	Disposal onto the ground of MCS fines in several discrete areas Under and west of the MCS IV building	MCS Fines, Fully Passivated, Containing Copper and Zinc	Contaminated soils excavated and disposed of in Landfill 6 North Plateau. Report to DEC on-site monitor 2/20/96.
79	Pipe Break in Leachate Transport Line	Leachate transport line from Landfill #3 south side to Chemical Sewer	Multi-source leachate from Landfill #3	Line plugged at the Landfill #3 collection sump. Reported to DEC on-site monitor 10/6/95.
80	Building 23 Excavation Locker Room	Discolored Soil with Odor found during excavation	Low ppm levels toluene, chlorobenzene, xylenes and ethylbenzene	Area in groundwater pump and treat containment area, no further action taken. Reported to on-site DEC monitor 12/7/95.
81	Building 24 APS Loading Station Excavation	Discolored Soil with Odor found during excavation	Low ppm levels cyclic silicones, xylenes, toluene, other VOCs	Area within groundwater pump and treat containment area, no further action taken. Reported to on-site DEC monitor 12/27/95.
82	Building 30 Poly Tank Oil Spill	Discolored Soil and Oily Water found during excavation	Low ppm levels toluene, phenols, xylenes	Soil samples taken, three wells installed, under slab collection system in place. Reported to DEC as spill on 10/15/96

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
83	Chemical Sewer Overflow at Manhole 23 near B71	Chemical Sewer overflowed into nearby storm sewer	Low ppm Toluene, acetone	Sewer cleared and capacity redistributed, reported to DEC 2/2/8 and 3/1/97 as spill.
84	Containment beneath tank 90-501 Building 15	Discolored Soil found during excavation	SUNVIS [®] heat transfer oil, no site specific organic detected during sampling	Reported to DEC 3/21/97 Stained soil excavated, water pumped from hole, no further action taken.
85	Diesel Fuel UST, west of Building 44	Small amount of discolored soil found during excavation	Diesel fuel, Sampling postponed until excavation complete	Reported to DEC 8/1/98. Stained soil less than ½ drum, excavated.
86	Fuel Oil UST, southeast of Building 24	Odors detected during planned UST excavation	Fuel Oil, no organic site specific parameters detected	Soil excavated, UST removed and area backfilled with clean soil.
87	Apparent Heat Transfer Oil leak, Building 85	Odor detected during planned fuel oil UST excavation, hot oil furnace located east of UST	Ethylbenzene, phenol	Reported to DEC 8/18/98, soil excavated, water pumped from hole, area backfilled.
88	Building 71 UST removal site	USTs for chemical storage, OVA readings indicated contaminated soil during planned excavations	Toluene, xylenes	Reported to DEC 9/3/98, soil excavated, water pumped from hole, area backfilled.
89	Building 24 Tank Farm	Storage of various siloxanes in aboveground tanks, uncoated concrete containment	Free product oil, benzene, chlorobenzene, 2-butanone, acetone, methylene chloride, toluene, xylene, ethylbenzene	Reported to DEC 9/4/98, liquid pumped from area and soil excavated for construction of new containment area coated.
90	MCS Vent Scrubber Pumphouse	Discovered during excavation beneath concrete containment pad for pumphouse	Mineral oil believed to be pump seal oil	Reported to DEC 11/12/98; work plan implemented and report sent 3/31/99.
91	Building 37 containment area	Siloxane storage area, concrete containment area	Hexamethylcyclotrisiloxane D3 and octamethylcyclotetrasiloxane D4	Reported to DEC 10/15/99, removed pipe from service and installed new drain system.
92	B35 MeCl Scrubber	Discovered while attempting to unplug a scrubber line drain to process sewer	Hexamethylcyclotrisiloxane D3 and octamethylcyclotetrasiloxane D4	Reported to DEC 7/22/99; collected soil samples near site and reported to DEC 9/22/99.
93	Building 27 Railcar Station MeCl R/R	Discovered while excavating a railcar unloading station	Petroleum based oil or solvent	Reported to DEC on 10/22/99 and 11/6/99; visibly contaminated soil was removed and disposed of; excavation surface characterized.
94	Building 76 South Side	Discovered during excavation beneath foundation of SS B76	Toluene or other solvents	Reported 10/27/99; visibly contaminated soil was removed and disposed of; excavation surface characterized

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
95	French Drain at WWTP Stormwater system	Discovered while working on plant sewer system	Wastewater	Reported 4/20/00; inlet to MH from French drain plugged.
96	Building 30 Pig Loading Station	Excavation for the installation of a new unloading station and steam condensate line	Soil found containing a small amount of treated filler; discolored soil containing fuel oil odor	DEC monitor inspected area; contaminated soil removed and disposed of properly.
97	Redistribution Reactor west of Building 62, across from Building 65	Geotechnical evaluation core sampling conducted for the installation of a new redistribution reactor	Soil found containing a small amount of trichloroethene and bis2-ethylhexylphthalate	DEC monitor inspected area; soil was disposed of properly.
98	Fuel Oil at WWTP near SWMU's #50 & #51	Spill of #2 fuel oil to stones at WWTP DEC Spill #01-05915 and #01-06353	Stones and soil with fuel oil	DEC monitor inspected area; contaminated stones and soil removed and disposed of
99	Building 27 Railcar Station north and east of Building 27	Excavation for the installation of a new chemical sewer sump line	Soil found with fuel oil odor and discoloration; analysis indicated chlorobenzene	DEC monitor inspected area; contaminated soil removed and disposed of
100	Buildings 30/21 City Water Excavation	Excavation of a leaking city water line between Buildings 21 and 30	Sheen discovered at base of excavation; soil analyzed and indicates silicone oil and small amount of trichloroethene	DEC inspected area; contaminated soil removed and disposed of properly.
101	Boilerhouse Storm Sewer Project	Excavation of a storm sewer line at manholes 115, 115A and 118	Sheen observed on water in excavation pit; river water intake line ruptured and sheens were observed in excavation pit and on lagoons	DEC monitor inspected area; excavation pit and excavated soil sampled; soil disposed of properly.
102	Degussa Return Line Spill DEC # 02-08962	Spill of 32% hydrochloric acid from Degussa HCL return line	Hydrochloric acid in soil	Excess acid pumped from site to WTP. Soil neutralized with soda ash, excavated, and disposed of. Cracked elbow replaced and line returned to service.
103	East Plant Cooling Tower Excavation Building 27	Excavation for the installation of a cooling tower for the East Plant	Discolored soil found during excavation; analysis indicated siloxane oil, trichlorobenzene and hexachlorobenzene; 4/29/03 non-reportable release of HCl from scrubber to the excavation	DEC inspected area; discolored soil removed and disposed of; spill was neutralized and cleaned up/soil was removed and disposed of properly.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
104	Rail Track Overhaul north of Building 21	Excavation for the repair of a railroad track north of Building 21	Discolored soil found during excavation; analysis indicated silica gel and siloxanes	Discolored soil removed and disposed of properly.
105 added Aug. 2003	West Cooling Tower Excavation	Excavation for West Cooling Tower Construction, north of B66	Chlorobenzene	Characterization samples collected. Discolored soil removed from the excavation and disposed of off-site. Reported to DEC 8/6/03.
106 added Oct. 2004	CS19 Line Replacement	Excavation for replacement of sewer line east of MCS2	Oil contaminated water and soil observed during excavation; analysis indicated siloxanes	Discolored materials surrounding catch basin removed and disposed of as non-hazardous waste. Soils adjacent to building foundation remain in place due to structural concerns.
107 added Oct. 2004	FBI Service Water Line Evaluation	Excavation for the evaluation of service water lines for cooling towers adjacent to FBI to the west.	Siloxane-contaminated water observed during excavation; analysis indicated siloxanes	Impacted soils removed and disposed of as non-hazardous waste.
108 added Oct. 2004	B616 Stormwater Catch Basin	Excavation for the installation of a stormwater catch basin west of B616	Discolored soil found during excavation; analysis indicated metals and siloxanes	Discolored soil removed and disposed of as non-hazardous waste, surrounding potentially contaminated soils left undisturbed.
109 added Oct. 2004	WTP P4 line demolition	Excavation for the construction of new WTP lab and demolition of sand filter and process line south of P4	Discolored soil found during excavation; analysis indicated organics and siloxanes	Discolored soil removed and disposed of as non-hazardous waste, surrounding potentially contaminated soils left undisturbed once historical designation made.
110 added Feb. 2005	MH131	Core sampling conducted for a storm water sewer investigation on February 1st, , 2005	Discolored soil discovered during sampling; analysis indicated siloxanes and low-level organics	No excavation planned due to complex location presence of underground utilities, railroad track, sewers, etc.
111 added . 2005	#6 Fuel Oil Tank Secondary containment	Core sampling conducted in #6 fuel oil tank secondary containment for groundwater investigation efforts as outlined in letter to Alicia Thorne, DEC March 4, 2005	Discolored soil discovered during sampling; analysis indicated siloxanes and low-level organics	No excavation is planned in order to preserve the secondary containment for the #6 Fuel Oil tank.
112 added. 2005	T014	Core sampling conducted for a engineering investigation on February 28th, 2005.	Discolored soil discovered during sampling; analysis indicated siloxanes and low-level organics	No excavation planned due to complex location presence of underground utilities, etc.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
113 added Jun. 2005	Tank 500	Excavation of piping associated with T-500 decommissioning activities.	Discolored soil and observed odor during excavation; analysis indicated chlorobenzene and one species of PCB below reporting levels	Discolored soil removed and disposed of as non-hazardous waste. No further excavation planned due to complex location.
114 added April 2006	70's Tank Farm Footing Excavation	Excavation of concrete pad in 70's Tank Farm.	Solid silicone mass was uncovered during excavation; analysis indicated silicone rubber that did not demonstrate hazardous properties.	Material in the proposed path of the footings was removed. All silicone was removed from soil and disposed of properly. Remaining soil used as fill material for excavation.
115 added Oct. 2006	Manhole 30 abandoned chemical sewer pipe	Abandoned chemical sewer connection.	Abandoned chemical sewer connection was uncovered during excavation. Pipe had material in it, material was removed. Pipe capped on both ends for disposal.	All impacted soil from pipe removal was disposed of as contaminated non-hazardous waste.
116 added Oct. 2006	Siloxane Dike Release	Discovered during routine inspection of dike surrounding two large siloxane product tanks on NE corner of 70's tank farm. Result in degradation in seals of the dike.	Material observed in the form of sheen on the pooling water along outside of dike walls. Water sample analyzed for constituents and was determined to be siloxane oil, a non-hazardous material.	On-site contractor hired to removal all visibly impacted soil from along the wall. Once soil was removed, it was evident where the material seeped out from dike wall. Dike was quickly patched and the release was remediated. The inside of the dike was cleaned and power washed.
117 added Oct. 2006	Building 19 Parking Lot Groundwater Impact	Historical spill was discovered under the building 19 parking lot of our plant.	Water sample analyzed for constituents found contamination was silicone oil based. Delineating the extent of impacts and installing monitoring and pumping wells upstream and downstream of the impacted zone.	This investigation was initiated in 2006. There is an active total fluids recovery system that is maintained in this area. Quarterly groundwater monitoring is conducted to monitor site conditions.
118 added Dec. 2006	WWTP Tank Farm	Historical spill discovered during excavation stage around a foundation in the WWTP tank farm.	The soil was removed until the project limits were reached. Analytical results showed elevated levels of petroleum related hydrocarbons and trace amounts of siloxanes.	Contaminated soil was put into rolloffs for disposal. The contaminated media will be sent to an approved landfill for disposal. The contamination was non-hazardous in nature.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
119 added June 2007	Building 78 Tank Farm	Historical spill discovered during a routine inspection by the onsite NYSDEC monitor in the earthen bottom dike along side the building 78 tank farm.	Material was analyzed and determined to be siloxane oil.	Approx. 190 tons of soil was removed down to the clay layer. Sumps and joints were sealed. Dye tests conducted. Dike repaired. Backfilled and paved area in September 2007.
120 8/13/07	MH-28A	Historical spill discovered during excavation on south & west sides of MH-28A. Additional excavation identified a leak in the bottom of the 8" chemical sewer pipe flowing into MH-28A.	Chemical Sewer	Approximately 21 tons of soil removed.
121 9/7/07	MH 15	A 10-inch clay lateral process sewer line was found to be leaking from a flange near process sewer manhole 15	Chemical Sewer	Approximately 5 cubic yards of soil removed.
122 9/7/07	Fumed Silica Acid Drainage Line	A fibercast line that provides drainage to the process sewer from the Fumed Silica process was found to have a small leak	Acid/water – pH < 2.0	Sodium bicarbonate applied. 2 55-gal drums soil removed.
123 10/2/07	Containment wet well pump discharge line to containment tank	Leak in WWTP line from discharge of the containment wet well pumps to containment tank.	Acid/water 30 gals – pH -1.75	Water vacuumed – sent to process sewer. Affected soil removed; area backfilled with clean soil.
124 12/3/07	FS - dike, process sewer line, and north sump	Acid water overflow from FS dike / funnel to north sump. Sump walls compromised resulting in acid water to surrounding soil.	Acid/water – 91 gal of 32% HCl *285 lbs hydrogen chloride PH < 1	12/4 sump pumped out & excavated area total 3-4 rolloffs 12/5 dike, process sewer line, sump repaired
125 3/31/08	B76 Floor Trench	Floor trench that provides containment for B76 was cleaned out and discovered to have holes and cracks.	PH of trench water =5	No waste other than residual wash water.
126 4/5/08	B23 Acid Line and Acid Pit	B23 Acid Line from B23 TF to MH26. B23 Acid Pit. B23 acid line. Discolored soil discovered during excavation to repair line. Hole discovered in acid pit.	Acidic soil.	Acidic soil excavated. Acid line and pit repaired.

SWMU No.	SWMU Description	Usage	Wastes Handled	Remedial Measures
127 4/6/08	MH-44 lateral	Chemical process sewer	Waste water with pH of 9.95. Acetone and isopropanol were detected in concentrations of 51 ppm and 257 ppm respectively and oil was observed in sample.	Lateral repaired.
128 12/21/08	B35/41 load/unload station	B35/41 load/unload station for 81365M hydrolyzate – Process line cracked resulting in material release to cracked containment and surrounding dirt/stone	Dirt contaminated with 81365M hydrolyzate	Excavated contaminated material and load/unload station containment repaired.
129 4/13/10	MH16 & MH-16A – manholes and laterals	Chemical process sewer – manholes and laterals contained cracks	Acidic soil	Manholes and laterals repaired.
130 12/20/10	B3 TF Transfer Line – East of B23 / South of TF	Leaking valve stem dripped toluene to pavement and caused pavement to crack	Three cubic yards of toluene contaminated soil excavated.	Line repaired. Toluene contaminated soil containerized and incinerated

TABLE IX-2 SITE SPECIFIC COMPOUNDS ⁵		
ORGANIC CONTAMINANTS	CAS #S	PART 703 GA STANDARD OR GW POC STANDARD (µg/L) ¹
Benzene	71-43-2	1
1,2-dichlorobenzene	95-50-1	3
1,2,4-trichlorobenzene	120-82-1	5
1,2,4,5-tetrachlorobenzene	95-94-3	5
Chlorobenzene	108-90-7	5
1,2-Xylene	95-47-6	5
1,3-Xylene ²	108-38-3	5
1,4-Xylene ²	106-42-3	5
Ethylbenzene	100-41-4	5
Hexachlorobenzene	118-74-1	0.04
Toluene	108-88-3	5
Pentachlorobenzene	608-93-5	5
Bis (2-ethylhexyl) phthalate	117-81-7	5
2-butanone	78-93-3	50
Chrysene	218-01-9	0.002
1,1-dichloroethane	75-34-3	5
1,1,1-trichloroethane	71-55-6	5
Vinyl chloride	75-01-4	2
1,1-dichloroethene	75-35-4	5
trans-1,2-Dichloroethene	156-60-5	5
Tetrachloroethylene	127-18-4	5
Trichloroethylene	79-01-6	5
Chloromethane	74-87-3	5
Methylene Chloride	75-09-2	5

ORGANIC CONTAMINANTS	CAS #S	PART 703 GA STANDARD OR GW POC STANDARD (µg/L) ¹
Carbon Tetrachloride	56-23-5	5
Chloroform	67-66-3	7
Naphthalene	91-20-3	10
Phenol ³	108-95-2	1
2-chlorophenol ³	95-57-8	1
o-Cresol ³	95-48-7	1
2,4-dimethylphenol ³	105-67-9	1
p-Cresol ³	106-44-5	1
Acetone	67-64-1	50
Acrolein	107-02-8	5
Acrylonitrile	107-13-1	5
1,1,2-Trichlorotrifluoroethane	76-13-1	5
Isopropylbenzene	98-82-8	5
1,2,4-Trimethylbenzene	95-63-6	5
Dimethylformamide	68-12-2	50
Dichlorodifluoromethane	75-71-8	5
1,2 Dichloroethane	107-06-2	0.6
1,1,2-Trichloroethane	79-00-5	1
Trichlorofluoromethane	75-69-4	5
1,4 Dichlorobenzene (para)	106-46-7	3
Chloroethane	75-00-3	5
Nitrobenzene	98-95-3	0.4
2-Chloroethyl vinyl ether	110-75-8	na ⁴
Methanol	67-56-1	na ⁴
1,4-Dioxane	123-91-1	na ⁴
2-propanol	67-63-0	na ⁴

ORGANIC CONTAMINANTS	CAS #S	PART 703 GA STANDARD OR GW POC STANDARD (µg/L) ¹
ethyl acetate	141-78-6	na ⁴
n-butanol	71-36-3	na ⁴
cyclohexane	110-82-7	na ⁴
octamethylcyclotetrasiloxane	556-67-2	na ⁴
octamethyltrisiloxane	107-51-7	na ⁴
hexamethylcyclotrisiloxane	541-05-9	na ⁴
Antimony	7440-36-0	3
Arsenic	7440-38-2	25
Barium	7440-39-3	1000
Beryllium	7440-41-7	3
Cadmium	7440-43-9	5
Chromium	7440-47-3	50
Copper	7440-50-8	200
Lead	7439-92-1	25
Mercury	7439-97-6	0.7
Nickel	7440-02-0	100
Selenium	7782-49-2	10
Silver	7440-22-4	50
Thallium	7440-28-0	0.5
Zinc	7440-66-6	2000
Aluminum	7429-90-5	na ⁴
Cobalt	7440-48-4	na ⁴

1. Current Part 703 Class GA GW standards or GW POC standards or guidance values must be revised if updated standards or guidance values are available at the time of closure.

Every effort should be made to report data at or below the Class GA standards, GW POC standard, or guidance value. If the laboratory reporting limit cannot meet these standards, please submit the laboratory's Method Detection Limit (MDL) for each compound along with the reporting limit that the laboratory is able to provide.

For any compound that will have a reporting limit above the standard, please report data greater than the MDL and use a "J" qualifier to indicate it is an estimated value.

2. If 1,3-Xylene and 1,4-Xylene are reported together a standard of 10 µg/L shall be used versus 5 µg/L for each compound.

3. The 6 NYCRR Part 703 Class GA water standards for total phenols is 1.0 ug/L, and the sum of the concentrations for the phenol compounds noted above must meet the 1.0 ug/L standard.

4. A Part 703 GA standard or GW POC standard or guidance value has not been developed for these compounds as of July 2014. The concentrations of these contaminants must be reported.

5. At the time of closure if MPM can provide information satisfactorily demonstrating to the Department that any of the site specific compounds have never been stored at the unit being closed, analysis of those compounds for that unit will not be required.

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES					
COMPOUND NAME	CAS NUMBERS	GC/MS METHOD	GC METHOD	CONTAINERS1	PRESERVATIVES
Acrylonitrile 2-Propenitrile	107-13-1	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C, adjust pH to 4-5 in sampled
Benzene	71-43-2	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 602	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Carbon tetrachloride Methane, tetrachloro-	56-23-5	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Chlorobenzene	108-90-7	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Chloroform Methane, trichloro-	67-66-3	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Dichlorodifluoroaetha Methane, dichlorodifluoro-	75-71-8	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,1-Dichloroethane	75-34-3	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,2-Dichloroethane	107-06-2	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,1-Dichloroethylene	75-35-4	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Ethylbenzene Ethene, 1,1- dichloro-Benzene, ethyl	100-41-4	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 602	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES					
COMPOUND NAME	CAS NUMBERS	GC/MS METHOD	GC METHOD	CONTAINERS1	PRESERVATIVES
Methyl Chloride Methane, chloro-	74-87-3	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Methylene Chloride Methane, dichloro-	75-09-2	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Tetrachloroethylene Ethene, tetrachloro-	127-18-4	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Toluene Methyl Benzene	108-88-3	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,2-Trans-dichloroethylene Ethene, 1,2-dichloro,E	156-60-5	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,1,1-Trichloroethane	71-55-6	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,1,2-Trichloroethane	79-00-5	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Trichloroethylene	79-01-6	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Trichlorofluoromethane	75-69-4	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Chloroethane Ethyl Chloride	70-00-3	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES					
COMPOUND NAME	CAS NUMBERS	GC/MS METHOD	GC METHOD	CONTAINERS1	PRESERVATIVES
Vinyl Chloride Ethene, chloro-	75-01-4	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Xylene Dimethyl Benzene	1330-20-7	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	EPA Method 8021	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Methyl ethyl ketone 2-Butanone	78-93-3	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	Direct Injection	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Acetone 2-Propanone	67-64-1	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	Direct Injection GC	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Methanol	67-56-1	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	Direct Injection GC	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Ethanol	64-17-5	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	Direct Injection GC	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
2-Propanol Isopropanol	67-63-0	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition prep method 5030	Direct Injection GC	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Bis 2-ethylhexyl phthalate	117-81-7	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,2-Dichlorobenzene ortho		EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,4-Dichlorobenzene para	106-46-7	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES					
COMPOUND NAME	CAS NUMBERS	GC/MS METHOD	GC METHOD	CONTAINERS1	PRESERVATIVES
1,2,4-Trichlorobenzene	106-46-7	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,2,4-Trichlorobenzene	120-82-1	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Hexachlorobenzene	110-74-1	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Pentachlorobenzene	608-93-5	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8120	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Phenol	108-95-2	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
o-Cresol 2-Methyl Phenol	95-48-7	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
p-Cresol 3 & 4-Methyl Phenol coelution	106-44-5	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
2,4-Dimethylphenol 2,4-Xylenol	105-67-9	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
2-Chlorophenol	95-57-8	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Naphthalene	91-20-3	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES					
COMPOUND NAME	CAS NUMBERS	GC/MS METHOD	GC METHOD	CONTAINERS ¹	PRESERVATIVES
Chrysene	218-01-9	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition prep method 3540/3550	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Antimony	7440-36-0	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HNO ₃ to pH <2
Arsenic	7440-38-2	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HNO ₃ to pH <2
Barium	7440-3903	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HNO ₃ to pH <2
Calcium	7440-70-2	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HNO ₃ to pH <2
Copper	7440-50-8	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HNO ₃ to pH <2
Nickel	7440-02-0	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HNO ₃ to pH <2
Selenium	7782-49-2	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HNO ₃ to pH <2

¹ Sample containers are prepared in the following manners.

- Sample containers are pre-cleaned and certified by the manufacturer
- Vials used for Methods 624, 601, 602, 8260 and 8021 are pre-preserved with HCl by the supplier and certified
- Metals containers are preserved with HNO₃ at the laboratory

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES					
COMPOUND NAME	CAS NUMBERS	GC/MS METHOD	GC METHOD	CONTAINERS(1)	PRESERVATIVES
Vinyl Chloride (Ethene, chloro-)	75-01-4	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition (prep method 5030)	EPA Method 601	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Xylene (Dimethyl Benzene)	1330-20-7	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition (prep method 5030)	EPA Method 8021	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Methyl ethyl ketone (2-Butanone)	78-93-3	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition (prep method 5030)	Direct Injection	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Acetone (2-Propanone)	67-64-1	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition (prep method 5030)	Direct Injection GC	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Methanol	67-56-1	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition (prep method 5030)	Direct Injection GC	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Ethanol	64-17-5	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition (prep method 5030)	Direct Injection GC	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
2-Propanol (Isopropanol)	67-63-0	EPA Method 624 or EPA Method 8260 in SW-846 3rd Edition (prep method 5030)	Direct Injection GC	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Bis (2-ethylhexyl) phthalate	117-81-7	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,2-Dichlorobenzene (ortho)		EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,4-Dichlorobenzene (para)	106-46-7	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES					
COMPOUND NAME	CAS NUMBERS	GC/MS METHOD	GC METHOD	CONTAINERS(1)	PRESERVATIVES
1,2,4-Trichlorobenzene	106-46-7	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
1,2,4-Trichlorobenzene	120-82-1	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Hexachlorobenzene	110-74-1	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Pentachlorobenzene	608-93-5	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8120	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Phenol	108-95-2	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
o-Cresol (2-Methyl Phenol)	95-48-7	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
p-Cresol (3 & 4-Methyl Phenol coelution)	106-44-5	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
2,4-Dimethylphenol (2,4-Xylenol)	105-67-9	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
2-Chlorophenol	95-57-8	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Naphthalene	91-20-3	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C

TABLE IX-3 PARAMETERS, TEST METHODS, CONTAINERS, AND PRESERVATIVES					
COMPOUND NAME	CAS NUMBERS	GC/MS METHOD	GC METHOD	CONTAINERS(1)	PRESERVATIVES
Chrysene	218-01-9	EPA Method 625 or EPA Method 8270 in SW-846 3rd Edition (prep method 3540/3550)	EPA Method 8270	Glass, Teflon Lined Caps Liquid – 40 ml VOA Soil – 8 oz jar	Cool 4°C
Antimony	7440-36-0	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HN03 to pH <2
Arsenic	7440-38-2	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HN03 to pH <2
Barium	7440-3903	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HN03 to pH <2
Calcium	7440-70-2	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HN03 to pH <2
Copper	7440-50-8	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HN03 to pH <2
Nickel	7440-02-0	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HN03 to pH <2
Selenium	7782-49-2	EPA Method 200.7 or EPA Method 6010B in SW-846 3rd Edition	Atomic Absorption	Glass or Polyethylene Container	Filtered, HN03 to pH <2

(1) Sample containers are prepared in the following manners.

- Sample containers are pre-cleaned and certified by the manufacturer
- Vials used for Methods 624, 601, 602, 8260 and 8021 are pre-preserved with HCl by the supplier and certified
- Metals containers are preserved with HNO3 at the laboratory

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SECTION X: MISCELLANEOUS UNITS**A. DESCRIPTION AND USE OF MISCELLANEOUS UNITS**

Momentive maintains miscellaneous units in accordance with the requirements of 6 NYCRR 373-2.24 and as specified below.

(1) API Pad

The API pad is divided into two sections. The larger, northern section is divided from a smaller, southern section by a short concrete berm. There are concrete berms and curtains around the pad. The following activities conducted at the pad involve hazardous and non-hazardous wastes.

Hazardous wastewaters in containers such as vacuum trailers, roll-off boxes, trailers or other containers, many containing solids, are received at the pad for dewatering. The wastewater in the containers is allowed to drain onto the pad where it flows into a trench installed in the pad that discharges into the wastewater treatment plant. If there are solids in the wastewater, the mixture is discharged onto the pad surface in order to separate the liquid from the solids, thereby treating the wastewater and generating wastewater treatment plant sludges. These sludges are then containerized and disposed of appropriately. Also, wastewater sludge generated from treatment activities at the wastewater treatment plant is occasionally brought to the pad to dewater if the treatment plant does not have the capacity to immediately containerize and dewater the sludge.

The API pad is also used to wash equipment that has been in service at the wastewater treatment plant or at one of the RCRA permitted incinerators. Erosion prevention materials such as plastic mats, plywood, or other suitable materials will be used directly under the area of likely high pressure blast activity. Significant damage to pads will be reported to area personnel so that repairs can be made in a timely manner.

Wastewater generated from the cleaning activities is allowed to drain into the wastewater treatment plant and any resulting solids, which are sludges generated from wastewater treatment, are also allowed to dewater on the pad prior to being containerized.

Packing materials removed from the scrubbers and the ionizers installed as part of the RCRA incineration systems are removed from service and taken to the pad for sorting and washing. After washing, the unbroken packing material is placed back into service while the broken pieces are containerized for disposal. Wastewater generated from the cleaning activities is allowed to

drain into the wastewater treatment plant and any resulting solids, which are sludges generated from wastewater treatment, are also allowed to dewater on the pad prior to being containerized. The oil is managed as solid waste and disposed of offsite via fuels blending.

Contaminated solid wastes, such as excavated soil or debris generated from hydro-cutting activities, may be placed upon the pad for storage or dewatering prior to placing the material in a container. In the event that the solid waste is a hazardous waste, the materials are placed into a container prior to dewatering at the pad. Wastewater generated from the dewatering activities is allowed to drain into the wastewater treatment plant and any resulting solids, which are sludges generated from wastewater treatment, are also allowed to dewater on the pad prior to being containerized.

A series of API-type oil/water separators remove oil from wastewater generated at the facility and is stored in decant tanks. Periodically the decanted oil needs to be removed from the system for disposal. The oil captured in the decant tanks is pumped to containers located at a small section of the API pad via hard piped lines. These containers may need to be dewatered and accumulated water is drained onto the pad that enters the wastewater treatment plant via a trench.

(2) RKI Transfer Station

The RKI Transfer Station may be used for transferring wastes from containers to tanks, for transferring wastes between different containers, for parking hazardous waste trailers (including clinker trailers), or washing equipment. Erosion prevention materials such as plastic mats, plywood, or other suitable materials will be used directly under the area of likely high pressure blast activity. Significant damage to pads will be reported to area personnel so that repairs can be made in a timely manner.

When equipment is being washed, temporary, sturdy splash guards that prevent splashing is erected. Washwater generated by these activities is collected in the sump and pumped out by vacuum truck for transfer to the wastewater treatment unit.

Hazardous waste transfer activities are not permitted when equipment is being washed.

(3) Truck Wash Pad

A truck and vehicle wash station is immediately adjacent to Landfill No. 6. The wash station is for vehicles that travel inside of the cell while accepting waste

and that come in direct contact with hazardous waste. Contamination is washed off these vehicles before they use site access roads. The wash station is equipped with the following:

- a. A base constructed of an impervious material to prevent the migration of hazardous constituents.
- b. A run-off collection system to collect run-off generated from washing vehicles. The run-off is connected to the leachate transport system to facilitate treatment.
- c. High-pressure water capable of efficiently removing chemical contamination from vehicles within the landfill cell.

Momentive has previously submitted to the Commissioner engineering reports and plans for the design of the wash station, including information on the liner and joint sealing materials.

Although Landfill No. 6 was closed in 2003, the truck wash station has been maintained as an operational maintenance area for cleaning leachate, sludge, and/or contaminated water from leachate collection system or groundwater recovery pumps, fittings, or piping. The truck wash pad is periodically used for washing equipment and vehicles, including sludge and clinker trucks and trailers. The wash station is inspected annually and necessary repairs to the joint compounds, liner, and run-off collection system are completed as soon as practical.

B. MAINTENANCE OF MISCELLANEOUS UNITS

Miscellaneous units will be inspected at least weekly for deterioration and to ensure that the materials managed on or by the unit are properly managed. The API Pad, the RKI Transfer Station, and the Truck Wash Pad will be subject to an annual comprehensive inspection.