



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

**BUREAU OF AIR MANAGEMENT
TITLE V OPERATING PERMIT**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA) and pursuant to the Code of Federal Regulations (CFR), Title 40, Part 70.

Title V Permit Number	172-0133-TV
Client/Sequence/Town/Premises Numbers	7562-001-172-0091
Date Issued	April 10, 2013
Revision (Transfer) Date	September 30, 2013
Expiration Date	April 10, 2018

Corporation:

PolyOne Designed Structures and Solutions

Premises Location:

69 Southfield Avenue, Stamford, Connecticut 06902

Name of Responsible Official and Title:

*Julie MacAlindon, President PolyOne Designed Structures and Solutions,
LLC/Senior VP, PolyOne Corp.*

All the following attached pages, 2 through 47, are hereby incorporated by reference into this Title V permit.

/s/ Anne Gobin for
Daniel C. Esty
Commissioner

September 30, 2013
Date

*PolyOne Designed
Structures and Solutions, LLC*

TABLE OF CONTENTS

	PAGE
List of Abbreviations/Acronyms	4
Section I. Premises Information/Description	
A. Premises Information.....	5
B. Premises Description.....	5
Section II. Emissions Units Information	
A. Emissions Units Description - Table II.A.....	11
B. Operating Scenario Identification - Table II.B	12
Section III. Applicable Requirements and Compliance Demonstration	
A. Grouped Emissions Unit 1	13
B. Emissions Unit 5.....	15
C. Grouped Emissions Unit 2	18
D. Grouped Emissions Unit 3	21
E. Grouped Emissions Unit 4.....	30
F. Applicable 40 CFR Part 63 Requirements.....	33
G. Premises-Wide General Requirements	37
Section IV. Compliance Schedule - Table IV	40
Section V. State Enforceable Terms and Conditions	41
Section VI. Title V Requirements	
A. Submittals to the Commissioner & Administrator.....	42
B. Certifications [RCSA §22a-174-33(b)].....	42
C. Signatory Responsibility [RCSA §22a-174-2a(a)]	42
D. Additional Information [RCSA §§22a-174-33(j)(1)(X), -33(h)(2)].....	43
E. Monitoring Reports [RCSA §22a-174-33(o)(1)]	43
F. Premises Records [RCSA §22a-174-33(o)(2)]	43
G. Progress Reports [RCSA §22a-174-33(q)(1)].....	44
H. Compliance Certifications [RCSA §22a-174-33(q)(2)].....	44
I. Permit Deviation Notifications [RCSA §22a-174-33(p)]	44
J. Permit Renewal [RCSA §22a-174-33(j)(1)(B)].....	44
K. Operate in Compliance [RCSA §22a-174-33(j)(1)(C)]	45
L. Compliance with Permit [RCSA §22a-174-33(j)(1)(G)]	45
M. Inspection to Determine Compliance [RCSA §22a-174-33(j)(1)(M)].....	45
N. Permit Availability.....	45
O. Severability Clause [RCSA §22a-174-33(j)(1)(R)]	45
P. Need to Halt or Reduce Activity [RCSA §22a-174-33(j)(1)(T)].....	45
Q. Permit Requirements [RCSA §22a-174-33(j)(1)(V)]	45
R. Property Rights [RCSA §22a-174-33(j)(1)(W)].....	45
S. Alternative Operating Scenario Records [RCSA §22a-174-33(o)(3)].....	46
T. Operational Flexibility and Off-Permit Changes [RCSA §22a-174-33(r)(2)]	46
U. Information for Notification [RCSA §22a-174-33(r)(2)(A)].....	46
V. Transfers [RCSA §22a-174-2a(g)]	46
W. Revocation [RCSA §22a-174-2a(h)]	46
X. Reopening for Cause [RCSA §22a-174-33(s)]	47
Y. Credible Evidence.....	47

Title V Operating Permit

All conditions in Sections III, IV, and VI of this Title V permit are enforceable by both the Administrator and the commissioner unless otherwise specified. Applicable requirements and compliance demonstration are set forth in Section III of this Title V permit. The Administrator or any citizen of the United States may bring an action to enforce all permit terms or conditions or requirements contained in Sections III, IV, and VI of this Title V permit in accordance with the Clean Air Act, as amended.

LIST OF ABBREVIATIONS/ACRONYMS

<i>Abbreviation/Acronym</i>	<i>Description</i>
°F	Degree Fahrenheit
acfm	Actual cubic feet per minute
AOS	Alternate Operating Scenario
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
CP/OP	Construction Permit/Operating Permit
CPMS	Continuous Parameter Monitoring System
DEEP	Department of Energy and Environmental Protection
EU	Emissions Unit
EPA	Environmental Protection Agency
GEU	Grouped Emissions Unit
HAP	Hazardous Air Pollutant
hr	Hour
IPA	isopropyl alcohol
lb	Pound
MACT	Maximum Achievable Control Technology
MASC	Maximum Allowable Stack Concentration
MCPU	Miscellaneous Organic Chemical Manufacturing Unit
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
Pb	Lead
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 microns
RCSA	Regulations of Connecticut State Agencies
SIC	Standard Industrial Classification Code
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SO _x	Sulfur Oxides
SOS	Standard Operating Scenario
tpy	Tons per year
VOC	Volatile Organic Compound

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Manufacturer of Cast Acrylic Sheets
Primary SIC: 3081
Other SIC:

Facility Mailing Address: Polyone Designed Structures and Solutions, LLC
69 Southfield Avenue
Stamford, CT 06902

Telephone Number: (203) 327-6010 ext. 331

B. PREMISES DESCRIPTION

Polyone Designed Structures and Solutions, LLC “PolyOne” manufactures optical quality cell cast acrylic sheets. The facility is a major source for HAPs and is located in a severe ozone non-attainment area defined in RCSA §22a-174-1(104).

Operations include acrylic sheet casting, mixing, curing, polysilicate coating, cleaning and other miscellaneous support activities. The facility manufactures optical quality cell cast acrylic sheets of various size and thickness. The sheets are used for security windows, aerospace canopies and viewports as well as other applications. Some sheets are polysilicate coated for scratch resistance. Production is carried out 24 hours a day and 7 days a week.

There is an air handling unit which is used for general ventilation of the acrylic polymerization operations (APO) area and the miscellaneous organic chemical manufacturing process unit (MCPU) No. 1 vertical casting hood, which is commonly referred to as the “Blue Stack”. This stack and associated venting is not considered a batch process vent under the MON because it is not ducted, piped, or otherwise connected to the unit operations.

Boilers (GEU1: EU1 – EU3)

Grouped Emissions Unit 1 (GEU1) consists of three Cleaver Brooks Flextube FLX-900 natural gas fired boilers that provide heat for the facility, with one boiler being able to fire No. 2 distillate oil as a backup in case of natural gas curtailment. The Cleaver Brooks boilers each have a maximum rated capacity of 9.0 MMBTU/hr, one was installed in August 2012, one in December 2012 and the third is expected to be installed in during the 2013 calendar year. All of the Muira boilers were removed from service in August and September 2012. No NSR permit or registration is required for the new units. The boilers are subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources; Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD. These boilers are limited to a work practice standard in accordance with 40 CFR §63.7540(a)(11).

Cummins Emergency Engine (EU5)

Emissions Unit 5 (EU5) is a Cummins emergency diesel engine/Onan generator that provides emergency power for the facility. The engine was issued NSR permit 172-0079 on January 15, 1997. A minor permit modification was issued on November 1, 2007.

This unit is an existing stationary diesel engine (>500 bhp) located at a major source of HAP emissions, constructed before December 19, 2002 and therefore subject to the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63 Subpart ZZZZ. Pursuant to 40 CFR §63.6590(b)(3)(iii) this unit is an affected source under Subpart ZZZZ and Subpart A including initial notification requirements. This unit is only required to comply

Section I: Premises Information/Description

with 40 CFR §63.6640(f)(1) through (f)(3) to show that it meets the definition of an emergency engine pursuant to Subpart ZZZZ.

B. PREMISES DESCRIPTION, continued

Acrylic Polymerization Operations (GEU2: MCPU No. 1 – MCPU No. 5)

The five MCPU associated with the acrylic polymerization operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing in 40 CFR 63 Subpart FFFF, the NESHAP for Closed Vent Systems, Control Devices, Recovery Devices & Routing to a Fuel Gas System or a Process as set forth in 40 CFR 63 Subpart SS, and the NESHAP for Equipment Leaks as set forth in 40 CFR 63 Subpart UU.

- **MCPU No. 1: Vertical Casting Line** –The acrylic polymerization operation for the vertical casting line consists of 27 casting machines. Eighteen of the vertical casting machines were installed (constructed on site) before June 1, 1972 and they are registered under a single registration (R 172-0256). Nine of the vertical casting machines were installed after June 1, 1972 and no permits are required for these units. DEEP accepts PolyOne's determination that MCPU No. 1 is comprised of two distinct unit operations, as defined in Subpart FFFF.
 1. The first unit operation starts with transfer of methyl methacrylate (MMA) (or occasionally other monomers) in to a mix pot or series of temperature controlled mix pots. Required additives (polymerization reaction initiators, colorants, stabilizers, etc.) are prepared in a series of additional blending vessels, including master batch color solutions produced as an isolated intermediate in MCPU No. 2. The additives and monomer are combined in mixing pots or color pots and then the mixture is transferred via a vacuum pump system into a series of overhead tanks located on top of the casting machine. This mixture is gravity fed from the top tanks into the mold cavities on the casting machine, where the polymerization reaction takes place. The cavity space within the mold can be varied to produce sheets of various sizes and thickness. Heat for the polymerization reaction is provided by hot water circulating through the cells sandwiched between each mold cavity. At the end of the polymerization cycle, the molds are cooled by a once-through cooling water system and then opened to remove the finished polymethyl methacrylate (PMMA) sheets.

The majority of the temperature controlled mix pots and color pots operated within the vertical casting process are vented either to a low or full vacuum extraction system which routes these batch vent streams to a fume incinerator. The only mixing vessels that are not connected to the vacuum system include bench-scale portable color mixing pots, a small catalyst transfer pot, and a small portable mixing pot. These represent approximately 0.1% of the aggregate HAP emissions from the vertical casting line. These calculations are based on the applicable vapor displacement equation from EPA's Emission Inventory Improvement Program (EIIP), Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Volume II: Chapter 16, August 2007, Section 3.

Section I: Premises Information/Description

B. PREMISES DESCRIPTION, continued

The combined pre-control HAP emission rate from the batch vents leading up the vertical casting line are greater than 10,000 lbs/yr and thus are classified as Group 1 batch process vents and are controlled by the vacuum transfer and fume incinerator system (Registrations R172-0257 & R172-0260, respectively)

2. The second unit operation consists of the uncontrolled MMA emissions from the mold filling, drop tube drying, and cleaning of the gaskets. The cleaning step includes solvent (MMA) wipe cleaning of gaskets on the pre-assembled frames that form the mold cavities and from drying of drop tubes removed from the mold cavity after filling operations. MMA emissions are also released from the mold filling step through small openings in the mold gaskets into the work area as a uncontrolled source of HAP emissions.

PolyOne has submitted calculations in support of their claim that the MMA emissions from mold filling does not meet the definition of batch process vent, as defined in Subpart FFFF, because the total uncontrolled HAP emissions including all emission episodes associated with the unit operation are less than 200 lbs/yr. The permit contains sufficient monitoring/record keeping requirements to verify this claim.

Maximum HAP emissions are estimated by calculating the vapor displacement losses that occur from the filling of the vertical mold cavities, evaporative losses from the drop tubes and from gasket cleaning operations. These calculations are based on the applicable vapor displacement equation from EPA's Emission Inventory Improvement Program (EIIP), Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Volume II: Chapter 16, August 2007, Section 3.1.2. The estimated maximum emission rate calculated by this analysis is 2.89 lbs/hr.

The MMA emission rate was also measured during a June 2006 total enclosure test conducted at the APO production area. The results from this testing showed a total MMA emission rate of 1.45 lbs/hr from the process while 1,288 lbs of polymer / hour were being cast. The maximum hourly MMA emission rate from this testing was estimated at 3.21 lbs/hr by factoring up the production rate to the rated capacity of 2,854 lbs cast/hr. This emission rate matches up reasonably well with the calculated 2.89 lbs/hr theoretical emission rate (within an approximate 10% difference).

All applicable requirements for this unit operation can be found in the Premises Wide Requirements found in Section III.G of this permit. The Department is requiring a total enclosure stack test of the APO area which includes the vertical casting hood, similar to the June 2006 testing.

- **MCPU No. 2: Color Solution Preparation**

MCPU No. 2 is the master batch color solutions preparation process that produces master color solutions in two mixing pots (one dedicated to a master black solution stock and another to a master white solution stock). The solutions are prepared in a batch mixing process that involves blending of MMA with carbon black or white pigment along with other non-HAP additives. The MMA is transferred from the underground storage tanks (UST) into a small surge vessel (MMA transfer pot), which then feeds the two mixing pots. Once a batch is completed, the solution is stored in the mixing pots until small amounts are transferred into portable color containers in the vertical casting line MCPU No. 1.

Section I: Premises Information/Description

B. PREMISES DESCRIPTION, continued

The MCPU No. 2 is limited to the MMA transfer pot and the two dedicated color pots. Both mixing pots in this MCPU are connected to the low vacuum system for control by the fume incinerator. The transfer of the MMA to the vessels is connected to the vacuum system and emissions are controlled by the fume incinerator.

The pre-control HAP emissions rate for this MCPU's batch vents are less than 10,000 lbs/yr and are regulated as Group 2 batch process vents.

- **MCPU No. 3: Color Flush MMA Recovery**

MCPU No. 3 recovers MMA from the color flush purge cleaning process by filtering out color additives and other impurities. This MCPU consists of a stationary color recovery unit (reservoir tank, pump and filtration system) and a smaller portable color flush recovery unit with similar components. Collectively, these units produce an isolated intermediate (purified MMA) that is used for production of future PMMA cast cell sheets in MCPU No. 1.

MMA is flushed through parts of MCPU No. 1, primarily through the vacuum transfer lines and top tanks, in order to purge color monomer residuals from those MCPU components after a colored batch is produced. The color flush MMA is removed from the top tanks via a vacuum transfer loop and directed to either the stationary color recovery unit or, in the case of heavy color batches, to the portable color flush recovery unit. The portable unit vacuum transfers heavily colored MMA flush from the top tanks to its reservoir and then pumps the MMA flush through a filtration system and back in to the top tanks in a closed recirculation loop. When the portable color flushing activity is complete, the filtered MMA flush is pumped into the stationary color recovery unit. Similar recirculating filtration is performed in the stationary unit until the MMA is purified to a level appropriate for re-use, after which the reservoir tank acts as a holding tank for storage of the recovered MMA. The recovered MMA is subsequently pumped to MCPU No. 1 for production of PMMA cast sheets.

Other than the vacuum transfer steps, emission from the portable and stationary color flush recovery units are vented directly into the mixing room or vertical casting machine room. Vacuum transfer MMA emissions are vented to the fume incinerator. The pre-control HAP emissions rate for this MCPU's batch vents are less than 10,000 lbs/yr and are regulated as Group 2 batch process vents.

- **MCPU No. 4: Mold Flush MMA Recovery**

MCPU No. 4 recovers MMA from the MCPU No. 1 casting machine mold flush cleaning process by filtering out impurities removed from the interior surfaces of the mold cavities. This MCPU consists of a flush recovery tank (reservoir tank, pump and filtration system) and two portable mold flush recovery units with similar components.

MMA is flushed through certain MCPU No. 1 mold cavities to prepare them for the PMMA casting step. The MMA is flushed through the mold cavity using a spray bar system, or by using an overflow or fill and draw technique. The mold flush MMA is collected for recovery in the portable mold flush units and Flush recovery tank. All MMA transfers are directed via the vacuum transfer system in the Flush recovery tank reservoir tank, where it is pumped through a series of filters to purify the MMA. The recovery tank functions as a holding tank for the storage of the recovered MMA. This recovered MMA is pumped to MCPU No. 1 casting line for production of PMMA cast sheets.

Section I: Premises Information/Description

B. PREMISES DESCRIPTION, continued

Vents on the portable mold flush units are connected to the full vacuum system and then controlled by the fume incinerator. MMA emissions from the vacuum transfer of MMA mold flush to the portable units and the Flush recovery tank are also collected for treatment by the fume incinerator. The pre-control HAP emissions for this MCPU's batch vents are less than 10,000 lbs/yr and are regulated as Group 2 Batch Process Vents.

- **MCPU No. 5: Horizontal Casting Line**

MCPU No. 5 consists of two horizontal sheet casting stations, a MMA holding tank, the temperature controlled syrup mix tank, portable mixing pots and syrup holding tank. The horizontal casting operation was installed in 1999; no permit was required.

In this process, MMA is vacuum transferred to the MMA holding tank, which feeds the syrup mix tank and portable mixing pots used in the process. MMA syrup is produced to increase the viscosity of the monomer by partially polymerizing the MMA. The syrup is pumped to a dedicated holding tank and then combined with MMA, initiators and colors in portable mixing pots. These ingredients are mixed together and then transferred via the vacuum pump system to overhead tanks on the horizontal sheet line. The mixture is then gravity fed from the overhead tanks into the molds, which are sealed for the polymerization reaction. The filled molds are transferred to a curing rack which is loaded into a curing oven, heated by the boilers, to polymerize the MMA and produce PMMA acrylic sheets.

The horizontal casting process MMA holding tank, syrup mix tank, syrup holding tank and casting machine top tanks are vented to a low vacuum extraction system and connected to the fume incinerator. MMA emissions created by the vacuum transfers from the MMA holding tank, syrup mix tank and portable mixing pots are also collected in the full vacuum system for treatment in the fume incinerator. The portable mix pots and curing ovens are vented directly to the atmosphere and the mold filling emissions escape as fugitives within the casting area. The pre-control HAP emissions for this MCPU's batch vents are less than 10,000 lbs/yr and are regulated as Group 2 Batch Process Vents.

Vacuum Transfer and Fume Incinerator System

The vacuum transfer system and fume incinerator are registered units (R 172-0257 & 260) and act as the control device for GEU2. The Nash vacuum pump is used to transfer MMA from the mix room tanks to the machine tanks located on each individual vertical casting machine. Pump exhaust air containing MMA vapor is vented to a natural gas-fired fume incinerator subject to a minimum MMA destruction efficiency of 98%. The vacuum transfer system is subject to the NESHAP for Miscellaneous Organic Chemical

Manufacturing in 40 CFR 63, Subpart FFFF, the NESHAP for Closed Vent Systems, Control Devices, Recovery Devices & Routing to a Fuel Gas System or a Process as set forth in 40 CFR 63, Subpart SS. Equipment in vacuum service is excluded from the requirements of the NESHAP for Equipment Leaks as set forth in 40 CFR 63, Subpart UU. [40 CFR §63.1019(c)] All federal NESHAP requirements are found in Section III of this permit.

Tank Pump

A tank pump transfers volatile organic liquids from the storage tanks (GEU5) to the vacuum transfer system. No permit or registration is required for this pump. The pump is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical

Section I: Premises Information/Description

B. PREMISES DESCRIPTION, continued

Manufacturing in 40 CFR 63 Subpart FFFF and the NESHAP for Equipment Leaks as set forth in 40 CFR 63 Subpart UU. All federal NESHAP requirements are found in Section III of this permit.

Polysilicate Coating Operation (GEU3: MCPU No. 6 & EU12):

The polysilicate coating operation (GEU3) provides scratch and abrasion resistance through the application of a thin coating of a silica compound onto the acrylic sheet. The polysilicate coating operation was issued permit to construct 172-0156 on July 8, 1999 and the permit to operate on October 19, 2000. A minor permit modification was issued on July 16, 2007.

The entire polysilicate coating operation is regulated under NSR permit 172-0156. However different federal NESHAPS regulate distinct portions of this operation. Therefore, the coating operation is divided into two distinct operations consisting of the following:

- **MCPU No. 6:** The Super Abrasion Resistant (SAR) Polysilicate Coating Production is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing in 40 CFR 63 Subpart FFFF. The polysilicate coating is produced by combining water, colloidal silica, acetic acid and IPA in a mixing vessel. The raw materials are added in a sequence of steps to facilitate the reaction needed to produce the coating. Once finished, the polysilicate coating is transferred to a storage vessel for use in the coating line. The pre-control HAP emission rate from this MCPU's batch vents are less than 10,000 lbs/yr and are regulated as Group 2 Batch Process Vents. Emissions from MCPU No. 6 are exhausted into the mixing room.
- **EU12 - (SAR) Coating line** is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products, 40 CFR Part 63 Subpart PPPP. The coating line is a dip coating process, consisting of a wash section, dip tank, drying enclosure and a curing oven which is heated by the boilers. VOC that is emitted during dip coating and air-drying of the coated acrylic sheets is controlled by a Dupont catalytic oxidizer with a minimum VOC destruction efficiency of 90%.

Storage Tanks (GEU5: EU18 - EU23)

Three aboveground storage tanks EU18-EU20 and three underground storage tanks (UST) EU21-EU23 store volatile organic liquids. No permit or registration is required for these tanks. The three AST and one compartment in a divided UST store HAP containing liquids and are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing in 40 CFR 63 Subpart FFFF. The HAP containing storage tanks are Group 2 Storage Tanks because the capacity of each tank is less than 10,000 gallons and the material stored, MMA, has a maximum true vapor pressure of 3.9 kilopascals which is less than 6.9 kilopascals. Subpart FFFF, Table 4 has no emission limits for Group 2 Storage Tanks.

Baking Ovens (GEU6: EU15 – EU17)

Three natural gas fired curing ovens (GEU6) are used to cure the acrylic sheets produced by the vertical casting line. The maximum rated capacity of each oven is less than 1 MMBTU/hr. No NSR permit or registration is required for these ovens.

Section II: Emissions Units Information

A. EMISSIONS UNITS DESCRIPTION

Emissions units are set forth in Table II.A. It is not intended to incorporate by reference these NSR Permits, Orders, Registrations, or Regulations into this Title V permit.

TABLE II.A: EMISSIONS UNITS DESCRIPTION			
Emissions Unit/ Grouped Emissions Unit	Emissions Unit Description	Control Unit Description	Permit, Order, Registration, or Regulation Number
(GEU1) EU-1 to EU3	Two (2) Cleaver Brooks FLX-900 natural gas fired boilers; 9.0 MMBtu/hr One (1) Cleaver Brooks FLX-900 natural gas and No. 2 distillate fired boiler; 9.0 MMBtu/hr	None	40 CFR 63 Subpart DDDDD
EU5	Cummins KTAA19-G2/Onan 500 DFFB diesel emergency engine/generator set	None	P172-0079
(GEU2) MCPU No. 1 MCPU No. 2 MCPU No. 3 MCPU No. 4 MCPU No. 5	<u>Acrylic Polymerization Operations</u> Vertical Casting Line Color Solution Preparation Color Flush MMA Recovery Mold Flush MMA Recovery Horizontal Casting Line	Vacuum Transfer & Fume Incinerator (R172-0257 & R172-0260, respectively)	Consent Order No. 2170 R172-0256 40 CFR Part 63 Subpart FFFF
(GEU3) MCPU No. 6 EU12	<u>Polysilicate Resin Coating Operation</u> Super Abrasion Resistant (SAR) Polysilicate Coating Production (SAR) Coating line	None Dupont Catalytic Oxidizer	P172-0156 40 CFR Part 63 Subpart FFFF 40 CFR Part 63 Subpart PPPP
(GEU5) EU18 to EU23	Storage Tanks: EU18 Aboveground Tank 1 – 6,750 gallons EU19 Aboveground Tank 2 – 8,000 gallons EU20 Aboveground Tank 3 – 6,000 gallons EU21 Underground Tank F2/H – 6,000 gallons (F2); 2,000 gallons (H) EU22 Underground Tank A2 – 8,000 gallons EU23 Underground Tank G2 – 8,000 gallons	None	40 CFR Part 63 Subpart FFFF

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNITS DESCRIPTION			
Emissions Unit/ Grouped Emissions Unit	Emissions Unit Description	Control Unit Description	Permit, Order, Registration, or Regulation Number
<i>All applicable requirements for the following units are listed in the premises-wide general requirements portion of this Title V permit, in addition to any requirements referenced in Section III of this permit:</i>			
(GEU6) EU15 to EU17	Three (3) natural gas fired baking ovens, 1 MMBtu/hr	None	None

B. OPERATING SCENARIO IDENTIFICATION

The Permittee shall be allowed to operate under the following Standard Operating Scenarios without notifying the commissioner, provided that such operations are explicitly provided for and described in Table II.B below. There is an Alternate Operating Scenarios for EU 12.

TABLE II.B: OPERATING SCENARIO IDENTIFICATION	
Emissions Units Associated with the Scenario	Description of Scenario
GEU1	The boilers provide heat for the facility and hot water for the casting machines/polymerization process firing natural gas. One boiler can fire No 2. Distillate oil.
GEU2, GEU3, GEU5	PolyOne has identified only one operating scenario covering all operations involved in the manufacture of cast acrylic sheets. This includes all the intermediate steps in the production process (casting, mixing, curing, polysilicate coating, cleaning and other miscellaneous support activities).
EU5	The emergency engine provides emergency power for operations in the facility and power for load shedding during local power emergencies.
EU12	PolyOne has identified two operating scenarios covering all operations involved in the production of Polysilicate Coating Operation.
SOS	PolyOne may apply Subpart PPPP compliant coating and use HAP free solvents and cleaning agents in the SAR Coating process. PolyOne has the option to comply with Subpart PPPP HAP emission standard via the “Compliant Materials Option” [40 CFR 63.4491(a)]
AOS	<p>PolyOne has identified a second possible operating scenario for the SAR Coating process that would rely on a VOC and organic HAP control device (catalytic oxidizer) to comply with the Subpart PPPP emission standards. Under this scenario, PolyOne complies with the Subpart PPPP HAP emission standard via the “Emission Rate with Add-On Controls Option” [40 CFR 63.4491(c)]</p> <p>The NSR permit, 172-0156, requires that the catalytic oxidizer is operational at all times that dipping and drying are occurring. The oxidizer is required by the NSR permit to meet BACT.</p>

Section III: Applicable Requirements and Compliance Demonstration

The following contains summaries of applicable regulations and compliance demonstration for each identified Emissions Unit and Operating Scenario, regulated by this Title V permit.

A. GROUPED EMISSION UNIT 1 (GEU1): Three (2) Cleaver Brooks FLX-900, 9.0 MMBtu/hr Natural gas fired boilers; One (1) Cleaver Brooks LX-900, 9.0 MMBtu/hr Natural gas and No. 2 distillate fired boiler - ICI Boiler MACT, Subpart DDDDD

1. Work Practice Standards and Fuel Use

a. Limitation or Restriction

- i. There are no operating restrictions on fuel usage for GEU1. There are monitoring, record keeping and reporting requirements.
- ii. The Permittee shall conduct a biennial tune-up of the boilers in accordance with 40 CFR §63.7540(a)(10)(i) through (a)(10)(iv).

b. Monitoring Requirements

- i. The Permittee shall monitor the natural gas and No. 2 distillate fuel usage of the boilers using a non-resettable totalizing fuel meter. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records in accordance with 40 CFR §63.7555, where applicable.
- ii. The Permittee shall make and keep records of the biennial tune-up for each of the boilers in accordance with 40 CFR §63.7540(a)(10)(vi)(A) through (C).
- iii. The Permittee shall keep records of the monthly and annual fuel usage for the boilers. [RSCA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

- i. The Permittee shall submit all required reports in accordance with 40 CFR §63.7550 and Part VI.E of this permit.

2. NO_x

a. Limitation or Restriction

There are no NO_x emission limitations for GEU1. There are record keeping and reporting requirements because the facility's potential emissions exceeded major source thresholds in the past. [RSCA §22a-174-22(b)(2)]

b. Monitoring Requirements

None.

Section III: Applicable Requirements and Compliance Demonstration

c. Record Keeping Requirements

- i. The Permittee shall keep the following records: [RCSA §22a-174-22(l)(1)]
 - A. Records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether the NOx emissions from such premises on any day from May 1 to September 30, inclusive, are in excess of 137 pounds for premises located in a severe nonattainment area for ozone.
 - B. Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether NOx emissions from such premises in any calendar year are in excess of 25 tons for premises located in a severe nonattainment area for ozone.
 - C. Records of all tune-ups, repairs, replacement of parts and other maintenance;
 - D. Copies of all documents submitted to the commissioner pursuant to RCSA §22a-174-22;
 - E. Procedures for calculating NOx emission rates in (A) and (B) above; and
- ii. The Permittee shall retain all records and reports produced pursuant to the requirements of RCSA §22a-174-22 for five years. Such records and reports shall be available for inspection at reasonable hours by the commissioner or the Administrator. Such records and reports shall be retained at the source, unless the commissioner approves in writing the use of another location in the State. [RCSA §22a-174-22(l)(5)]

d. Reporting Requirements

- i. On or before April 15 of each year, the Permittee shall submit a report on NOx emissions from such source, on a form provided by the commissioner. [RCSA §22a-174-22(l)(6)] The Permittee shall comply with this requirement by reporting NOx emissions for this emission unit in the annual emissions statement.
- ii. The Permittee shall submit all required reports in accordance with Section VI.E of this permit.

3. Opacity

a. Limitation or Restriction

The boilers in GEU1 are restricted to:

- i. Visible emission of no greater than 20% opacity during any six-minute block average as measured by 40 CFR 60, Appendix A, Reference Method 9; or [RCSA §22a-174-18(b)(1)(A)]
- ii. Forty percent (40%) opacity as measured by 40 CFR 60, Appendix A, Reference Method 9, reduced to a one-minute block average. [RCSA §22a-174-18(b)(1)(B)]

b. Monitoring Requirements

As requested by the Commissioner, the permittee shall verify opacity using Method 9, 40CFR Part 60. [22a-174-33(j)(1)(K)(ii)]

Section III: Applicable Requirements and Compliance Demonstration

c. Record Keeping Requirements

The Permittee shall maintain records of the dates and times of all opacity testing including the operating conditions at the time of the test in accordance with Section VI.F of this permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

- i. The Permittee shall submit any reports of opacity testing within 30 days of conducting such tests. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall submit reports of opacity exceedances in accordance with Section VI.E of this permit.

B. EMISSIONS UNIT 5 (EU5): Cummins KTAA19-G2/Onan 500 DFFB diesel emergency engine/generator set. [Permit No. 172-0079; RICE MACT Designation: Emergency, Existing CI, > 500 bhp, Constructed before 12/19/2002, Compliance Date: 05/03/2013]

1. Fuel Use: [Permit No. 172-0079]

a. Limitation or Restriction

- i. Maximum fuel consumption: 16,500 gallons over any consecutive twelve (12) month period.
- ii. Maximum fuel firing rate: 34.9 gallons/hr
- iii. Maximum Fuel Sulfur Content: 0.0015% by weight, dry basis: 15 ppmvd

b. Monitoring Requirements

When more than one fuel supply tank is to service this source or when multiple sources are supplied by one fuel tank, the Permittee shall use a non-resettable totalizing fuel metering device to continuously monitor fuel feed to this permitted source.

c. Record Keeping Requirements

- i. The Permittee shall keep records of monthly and annual fuel consumption for the Cummins emergency engine. Annual fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding the current month's fuel usage to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall keep records of the fuel certification for each delivery of fuel from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel.

Section III: Applicable Requirements and Compliance Demonstration

- iii. The permittee shall make and keep records on premises to determine compliance with the terms and conditions described in Section III.B of this permit in accordance with Section VI.F of this permit. [RSCA §22a-174-33(j)(l)(K)(ii)]

d. Reporting Requirements

- i. The Permittee shall submit all required reports in accordance with Section VI.E of this permit.

2. Operational Conditions [Permit No. 172-0079]

a. Limitation or Restriction

- i. The permittee shall comply with the following:
 - A. Operate only as an emergency engine as defined in RCSEA 22a-174-22.
 - B. The permittee shall not conduct routine scheduled testing or maintenance of the subject engine during days when ambient ozone is forecasted by the commissioner to be moderate to unhealthful, unhealthy, or very unhealthy.
 - C. The permittee shall comply with operating limits found in 40 CFR §63.6640(f)(1) through (f)(3) at all times.
- ii. Design Specifications
 - A. Maximum Gross Heat Input (MMBtu/hr): 4.9
 - B. Maximum Fuel Consumption(gallons/hr): 34.9
 - C. Minimum Stack Height (ft): 12
 - D. Minimum Distance from Stack to Property Line (ft): 105

b. Monitoring Requirements

There are no monitoring requirements for the Operational Conditions for this unit.

c. Record Keeping Requirements

The permittee shall make and keep the following records:

- i. Daily records of operating hours identifying the operating hours of engine and ambient ozone forecast records for each day of operation. [RCSA 22a-174-22(l)(1)(A); P 172-0079]
- ii. Records demonstrating the unit was constructed in accordance with the manufacturer's design specifications. [RSCA 22a-174-33(j)(l)(K)(ii)]

b. Reporting Requirements

Section III: Applicable Requirements and Compliance Demonstration

There are no reporting requirements for the Operational Conditions for this unit.

3. Pollutant Emissions Rates [Permit No. 172-0079]

a. Limitation or Restriction

The permittee shall not exceed the emission limits stated herein at any time.

i. Distillate Oil

<u>Criteria Pollutants</u>	<u>lbs/hr</u>	<u>lbs/MMBtu</u>	<u>TPY</u>
TSP	0.198	0.040	0.047
PM-10	0.198	0.040	0.047
SOx	0.007	0.002	0.002
NOx	18.833	3.843	4.452
VOC	0.595	0.121	0.141
CO	2.083	0.425	0.492

<u>Non-Criteria Pollutants</u>	<u>MASC (ug/m³)</u>
Sulfuric Acid	2,105
Formaldehyde	1,260
Acrolein	526

b. Monitoring Requirements

There are no monitoring requirements for the emission limitations.

c. Record Keeping Requirements

The permittee shall keep the following records:

In accordance with Section VII.F of this permit the permittee shall make and keep records of monthly and annual emissions in units of tons for TSP, PM-10, NO_x, SO_x, VOC, CO. The above calculations shall be based on fuel use, AP-42, manufacturer's data, sulfur content of fuel or other appropriate emissions factor. The consecutive 12 month emission shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant emissions. The permittee shall make these calculations within 30 days of the end of the previous month. [RSCA 22a-174-33(j)(l)(K)(ii)]

d. Reporting Requirements

The Permittee shall submit all required reports in accordance with Section VII.E of this permit. [RSCA 22a-174-33(j)(l)(K)(ii)]

Section III: Applicable Requirements and Compliance Demonstration

C. ACRYLIC POLYMERIZATION OPERATIONS (GEU2 & MCPU No. 6)

The applicable requirements from 40 CFR 63 Subpart FFFF apply individually to each MCPU in GEU2 and MCPU No. 6 unless otherwise noted.

1. General Requirements - Batch Vents

a. Limitation or Restriction

- i. The Permittee must be in compliance with the emission limits and work practice standards in 40 CFR 63 Subpart FFFF, Table 2 at all times, except during periods of startup, shutdown, and malfunction, and must meet the requirements specified in 40 CFR §§63.2460 (or the alternative means of compliance in 40 CFR §§63.2495, 63.2500, or 63.2505), except as specified in paragraphs (b) through (s) of 40 CFR §63.2450. The Permittee must meet the notification, reporting and recordkeeping requirements specified in 40 CFR §§63.2515, 63.2520 and 63.2525. [40 CFR §63.2450(a)]
(Note: See Section III.C.2c.a of this permit for applicable emissions limitation)
- ii. Except when complying with 40 CFR §63.2485, if the Permittee reduces organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the Permittee must meet the requirements of 40 CFR §63.982(c) and the requirements referenced therein. [40 CFR §63.2450(e)(1)]
- iii. The Permittee shall develop a startup, shutdown, malfunction plan (SSMP) as required by 40 CFR 63.6(e)(3), except as specified in 40 CFR §63.2525(j).
- iv. The Permittee shall determine the group status of all batch process vents. [40 CFR §63.2460(b)]
- v. The Permittee must limit organic HAP emissions from each **Group 2 Batch Vent** to less than 10,000 lbs/year for the following MCPU's:
 - MCPU No. 2 - Color Solution Preparation
 - MCPU No. 3 - Color Flush MMA Recovery
 - MCPU No. 4 - Mold Flush MMA Recovery
 - MCPU No. 5 - Horizontal Casting Line
 - MCPU No. 6 – Polysilicate Coating Production

b. Monitoring Requirements

- i. The Permittee shall comply with the requirements for performance tests specified in paragraphs 40 CFR 63.2460 and 63.2450(g)(1) through (5) instead or in addition to the requirements in 40 CFR §63 Subpart SS. [40 CFR §63.2450(g)]

c. Record Keeping Requirements

In addition to the specific record keeping requirements in each identified MCPU, the Permittee shall make and keep the following general 40 CFR §63 Subpart FFFF records:

- i. All applicable records required in 40 CFR §63 Subparts A, F, G, SS, UU, WW, GGG and in referenced subpart F of 40 CFR §65. [40 CFR §63.2525(a)]

Section III: Applicable Requirements and Compliance Demonstration

- ii. Each operating scenario as specified in 40 CFR §63.2525(b).
- iii. A schedule or log of operating scenarios for processes with batch vents as required in 40 CFR §63.2525(c).
- iv. Records to show compliance with the percent reduction emission limit in 40 CFR Part 63, Subpart FFFF – Table 2.
- v. A record of each time a safety device is opened to avoid unsafe conditions in accordance with 40 CFR §63.2450(s). [40 CFR §63.2525(f)]
- vi. The results of each CPMS calibration check and the maintenance performed, as specified in 40 CFR §63.2450(k)(1). [40 CFR §63.2525(g)]
- vii. All applicable records concerning the SSMP required in 40 CFR §63.6(e)(3). [40 CFR §63.2525(j)]
- viii. The Permittee shall make and keep sufficient records of the HAP emissions to verify the group status of all identified batch process vents as specified in 40 CFR §63.2460(b) .

d. Reporting Requirements

In addition to the specific reporting requirements in each identified MCPU, the Permittee shall submit the following general 40 CFR §63 Subpart FFFF reports:

- i. All applicable reports as specified in 40 CFR §63 Subpart FFFF, Table 11. [40 CFR §63.2520(a)]
- ii. Compliance reports shall be submitted as specified in 40 CFR §63 Subpart FFFF, Table 11. [40 CFR §63.2520(b)]
- iii. Notification of compliance status reports shall be submitted as specified in 40 CFR §63.2520(d).
- iv. Compliance reports shall be submitted as specified in 40 CFR §63.2520(e).

2. Material Usage: (Applies to MCPU No. 1 through 5 only)

a. Limitation or Restriction

There are no operating restrictions on material usage for MCPU No. 1 through 5.

b. Monitoring Requirements

The Permittee shall monitor the material usage associated with MCPU No. 1 through MCPU No. 5 [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall keep monthly and consecutive 12 month records of the quantities of monomer, co-monomers, additives, coloring agents and any other process materials used in the vertical casting line. The consecutive 12 month usage of each material shall be determined by adding the current month's usage to that

Section III: Applicable Requirements and Compliance Demonstration

of the previous 11 months. The Permittee shall make these calculations within 30 days of the previous month.
[RCSA §22a-174-4(d)(1)]

3. Organic Material Emissions: (Applies to MCPU No. 1 and MCPU No. 5 only)

a. Limitation or Restriction

- i. The Permittee shall not cause or allow emissions of organic material to exceed any of the following limits:
[RCSA §22a-174-20(f)(2)]
 - A. 8 pounds in any one hour or;
 - B. 40 pounds in any one day

b. Monitoring Requirements

The Permittee shall determine the emissions of organic material from MCPU No. 1 and MCPU No. 5 for each hour of operation using EPA's Emission Inventory Improvement Program (EIIP), Methods for Estimating Air Emissions from Chemical Manufacturing Facilities, Volume II: Chapter 16, August 2007, Section 3.1.2.
[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall keep hourly, daily, monthly and consecutive 12 month records of VOC emissions from the MCPU No. 1 and MCPU No. 5, including all data, assumptions and calculations. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the previous month. [RCSA §22a-174-4(d)(1)]

4. HAP Emissions:

a. Limitation or Restriction

- i. The Permittee shall reduce the collective uncontrolled organic HAP emissions from the sum of all MCPU No. 1 Group 1 batch process vents within the process by $\geq 98\%$.
[40 CFR §63.2460(a), Table 2 – Item 1.a]
- ii. The Permittee shall comply with the control device requirements of 40 CFR §63 Subpart SS in Section III.F.2.a of this permit, where applicable.
- iii. The Permittee shall comply with the leak detection requirements of 40 CFR §63 Subpart UU in Section III.F.1.a of this permit, where applicable.

b. Monitoring Requirements

- i. The Permittee shall demonstrate compliance with the percent reduction emission limits for the control device in Subpart FFFF, Table 2 pursuant to 40 CFR §63.2460(c).
- ii. The Permittee shall comply with the control device monitoring requirements of 40 CFR §63 Subpart SS in Section III.F.2.b of this permit.

Section III: Applicable Requirements and Compliance Demonstration

- iii. The Permittee shall comply with the leak detection monitoring requirements of 40 CFR §63 Subpart UU in Section III.F.1.b of this permit.
- iv. The Permittee shall determine the uncontrolled HAP emissions from the individual vertical casting cell vents for comparison with the definition of Batch Process Vents found in 40 CFR §63.2550(i)(8). [22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall comply with the control device record keeping requirements of 40 CFR §63 Subpart SS in Section III.F.2.c of this permit.
- ii. The Permittee shall comply with the leak detection record keeping requirements of 40 CFR §63 Subpart UU in Section III.F.1.c of this permit.
- iii. The Permittee shall make and keep records of the uncontrolled HAP emissions from the individual vertical casting line cell vents. (MCPU No. 1 only) [22a-174-33(j)(1)(K)(ii)]
- iv. The Permittee shall make and keep the applicable records of the identified Group 1 batch process vents in compliance with the percent reduction emission limit in 40 CFR §63 Subpart FFFF, Table 2 pursuant to 40 CFR §63.2525(d).

d. Reporting Requirements

- i. The Permittee shall comply with the control device reporting requirements of 40 CFR §63 Subpart SS in Section III.F.2.d of this permit.
- ii. The Permittee shall comply with the leak detection reporting requirements of 40 CFR §63 Subpart UU in Section III.F.1.d of this permit.
- iii. The Permittee shall submit all required reports in accordance with Section VI.E of this permit.

D. POLYSILICATE RESIN COATING OPERATION, WITH DUPONT CATALYTIC OXIDIZER – GEU3, Permit No. 172-0156

The requirements of Section III.D apply to MCPU No. 6 and EU12 collectively, except where noted:

MCPU No. 6 – Super Abrasion Resistant (SAR) Polysilicate Coating Production, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, 40 CFR Part 63 Subpart FFFF Requirements.

EU12 – (SAR) Coating line National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, 40 CFR Part 63 Subpart PPPP Requirements.

1. Equipment Design, Material Usage, Operations and Maintenance:

a. Limitation or Restriction

Section III: Applicable Requirements and Compliance Demonstration

- i. Equipment Design Specifications: [P 172-0156 Part I.B]
 - A. Mixing Tank Volume: 500 gallons
 - B. Storage Tank Volume: 500 gallons
 - C. Dipping and Drying Operation:
 - 1. All dipping and drying shall occur with an enclosed space under negative pressure.
 - 2. Dip Tank Volume: 500 gallons
 - 3. Overflow Tank Volume: 85 gallons
 - D. Stack Parameter Specification: [P 172-0156 Part I.D]
 - 1. Minimum exhaust gas flowrate: 1,200 acfm +/- 20%
 - 2. Minimum distance to property line: 129 feet
 - 3. Minimum stack height: 33 feet
- ii. Work Practices: [RCSA §22a-174-20(s)(5)]
 - A. New and used VOC-containing coating, diluents or cleaning solvent, including a coating mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or otherwise actively in use;
 - B. Spills and leaks of VOC-containing coating, diluents or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating, diluents or cleaning solvent shall be absorbed and removed immediately.
 - C. Absorbent applicators, such as cloth and paper, which are moistened with a VOC-containing coating or solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling; and
 - D. VOC-containing coating, diluents and cleaning solvent shall be conveyed from one location to another in a closed container or pipe.
- iii. The Polysilicate Coating Operation is limited to maximum annual material consumption of 17,000 gallons of polysilicate resin coating, including makeup solvent added, per any period of 12 consecutive months, where consumption is the difference between material added to the process and spent process material removed from the process as waste or by-product. [P 172-0156 Part II.A]
- iv. The Permittee shall operate and maintain all equipment in accordance with the manufacturer's recommendations. [P 172-0156 Part II.C.1]

Section III: Applicable Requirements and Compliance Demonstration

- v. The Permittee shall operate the catalytic oxidizer at all times during which dipping and drying are occurring. The Permittee shall equip the dipping and drying operation and catalytic incinerator with an interlocking mechanism. Such mechanism shall prevent the operation of the dipping and drying operation at all times during which the operating temperature of the catalyst media is below the minimum value specified in Part III.D.2.a.iii of this permit. [P 172-0156 Part II.C.2]

b. Monitoring Requirements

- i. The Permittee shall monitor the daily and annual material consumption of polysilicate resin coating, including makeup solvent added per any period of 12 consecutive months. [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall perform periodic maintenance activities according to a documented maintenance and operations plan. [P 172-0156 Part II.C.5]
- iii. The Permittee shall monitor pressure in the dipping and drying area. [RCSA §22a-174-33(j)(1)(K)(ii)]
- iv. The Permittee shall monitor that the catalytic oxidizer is operating at all times during which dipping and drying operations are occurring. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall maintain monthly and annual records of all materials consumed in the process of mixing polysilicate resin and in the process of cleaning the equipment specified in this permit. Such records shall include, at least, the date, the name of the material, the amount of each material used, and the total amount of polysilicate resin produced during each recording period in units of pounds and/or gallons (including any off-spec resin collected to be removed from the premises as by-product or waste). For the purposes of this permit annual material consumption shall be the sum of each material consumed during the current month and the amount of each material consumed during the previous 11 months [P 172-0156 Part IV.C]
- ii. The Permittee shall maintain quarterly records of the amount of materials purchased for use with this source. [P 172-0156 Part IV.B]
- iii. The Permittee shall maintain monthly and annual records of the amounts of all materials removed from this process either by-product, solid waste, and/or manifested waste from the production, storage, use of polysilicate resin and from cleaning operations. Such records shall include, at least, the date, the name of the material, the amount of each material removed from the process during each recording period in units of pounds and/or gallons, and any material content analysis that may have been performed on the removed material. For the purposes of this permit annual material removed shall be the sum for each material disposed of as by-product, solid waste, or manifested waste during the current month and the amount of that same material disposed of as by-product, solid waste, or manifested waste during the previous 11 months. [P 172-0156 Part IV.E]
- iv. The Permittee shall record the daily and monthly hours of operation of the dipping, drying and curing operations. Such records shall include the date of operation, the time at which coating, drying, and curing operations began, the time at which coating, drying and curing operations

Section III: Applicable Requirements and Compliance Demonstration

ended; and the total number of hours during which coating and curing operations were conducted. Monthly hours of operation shall be the sum of the hours during which coating and curing operations were conducted during each calendar month. [P 172-0156 Part IV.G]

- v. The Permittee shall make and keep records sufficient to show that negative pressure is present during all dipping and drying activities. Records may consist of chart recordings or computer logging. [RCSA §22a-174-33(j)(1)(K)(ii)]
- vi. The Permittee shall make and keep records sufficient to show that the catalytic oxidizer is operating at all times during which dipping and drying operations are occurring. Records may consist of chart recordings or computer logging. [RCSA §22a-174-33(j)(1)(K)(ii)]
- vii. The Permittee shall make and keep records demonstrating the facility is constructed and maintained within the specification in Section III.D.1.a of this permit. Records shall also include the maintenance and operations plan and all performed maintenance activities, Such records shall be maintained at the premises and made available to the Commissioner upon request. [P 172-0156 Part II.C.5; RCSA §22a-174-33(j)(1)(K)(ii)]
- viii. The Permittee shall make and keep records sufficient to determined compliance with RCSA §22a-174-20(s), including, at a minimum, the following information for each calendar month: [RSCA 22a-174-20(s)(8)(A)(i) through (v)]
 - A. name and description of each coating and cleaning solvent,
 - B. VOC content of each coating and diluents, as applied, and the associated calculations,
 - C. VOC content of each coating or cleaning solvent, as supplied,
 - D. The amount of each coating and cleaning solvent:
 - 1. Purchased, or
 - 2. Used,
 - E. A Material Safety Data Sheet, Environmental Data Sheet, Certified Product Data Sheet, or an equivalent data sheet for each coating and cleaning solvent,

2. Catalytic Oxidizer Operating Requirements:

a. Limitation or Restriction

- i. Capture Efficiency of Catalytic Oxidizer System: 100% of dipping and drying emissions. [P 172-0156 Part II.B.1]
- ii. Destruction Efficiency of Catalytic Oxidizer System: $\geq 90\%$ of emissions captured. [P 172-0156 Part II.B.2]
- iii. Overall Destruction Efficiency: 90% or greater. [RCSA §22a-174-20(s)(3)(C).

Section III: Applicable Requirements and Compliance Demonstration

- iv. Minimum Catalyst Media Operating Temperature: the greater of 491 °F (255 °C) or the average temperature at which the most recently DEEP approved stack test demonstrates a destruction efficiency of $\geq 90\%$ of emissions captured. [P 172-0156 Part II.B.3]
- v. Maximum Annual Fuel Consumption: 39.42 million cubic feet of natural gas during any period of 12 consecutive months. [P 172-0156 Part II.B.4]
- vi. Maximum Rated Capacity of Catalytic Oxidizer Burner: 4.5 MMBtu/hr. [P 172-0156 Part I.C.5]
- vii. Design Inlet Flowrate to Oxidizer: $\leq 3,872$ acfm [P 172-0156 Part II.B.3]
- viii. Minimum Negative Pressure shall be determined at each block of 8,760 hours of oxidizer operation.

b. Monitoring Requirements

- i. The Permittee shall monitor the daily and monthly hours of operation of the dipping, drying and curing operations. [P 172-0156 Part IV.G]
- ii. The Permittee shall, by means of stack emissions testing, demonstrate compliance with the capture and destruction efficiencies for EU12. Stack emissions testing shall be performed according to P 172-0156 Appendix B, after each block of 8,760 hours of oxidizer operation. [P 172-0156 Part II.C.4 & Appendix B]
- iii. The Permittee shall test the temperature monitoring device in the catalytic oxidizer after each block of 4,380 hours of oxidizer operation. A testing and calibrating procedure document shall be written detailing all steps in the testing and calibration procedure. This procedure document shall be maintained at the premises and made available to the Commissioner upon request. Should the results of testing indicate a percent error of $\pm 1.5\%$, based on temperatures measured in degrees Fahrenheit, the Permittee shall repair, calibrate and/or replace the portion of the process and/or monitoring system responsible for the error. [P 172-0156 Part II.C.3]
- iv. The Permittee shall install and operate a non-resettable fuel metering device on the catalytic oxidizer. Such device shall continuously monitor the amount of natural gas consumed by the oxidizer. For each month of operation, the Permittee shall record the monthly and annual fuel consumption for the catalytic oxidizer. For the purposes of this permit, annual fuel consumption shall be defined as the sum of the fuel consumed during the current month and the aggregate amount of fuel consumed during the previous 11 months. [P 172-0156 Part IV.F]
- v. The Permittee shall install and operate a temperature monitoring device. Such device shall continuously monitor and record the temperature within the catalyst media. All temperature records shall indicate the date and the operating hours of the dipping, curing, and oxidizer operations. [P 172-0156 Part IV.D]
- vi. The Permittee shall determine the minimum negative pressure required to meet the capture and

Section III: Applicable Requirements and Compliance Demonstration

destruction efficiencies for EU12 after each block of 8,760 hrs of oxidizer operation during the required oxidizer stack emission testing. [RSCA 22a-174-33(j)(l)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall continuously record the temperature within the catalyst media. All temperature records shall indicate the date and the operating hours of the dipping, curing, and oxidizer operations.
[P 172-0156 Part IV.D]
- ii. The permittee shall make and keep records of all testing and the average temperature at which the most recent DEEP approved stack test showed a destruction efficiency of $\geq 90\%$.
[RSCA 22a-174-33(j)(l)(K)(ii); [RSCA 22a-174-20(s)(8)(A)(vi)]
- iii. For each month of operation, the Permittee shall record the monthly and annual fuel consumption for the catalytic oxidizer. [P 172-0156 Part IV.F]
- iv. Date and type of maintenance performed on catalytic oxidizer.
[RSCA 22a-174-20(s)(8)(A)(vii)]

d. Reporting Requirements

- i. The permittee shall submit stack test results for EU12 to the commissioner as soon as available but not more than 60 days after the completion of the stack emission test. [P 172-0156 Appendix C]
- ii. The Permittee shall submit all required reports in accordance with Section VII.E of this permit.
[RSCA 22a-174-33(j)(l)(K)(ii)]

3. VOC/HAP Emissions from Mixing, Storage and Coating Process:

a. Limitation or Restriction

- i. Maximum VOC Load to Catalytic Oxidizer: 10.79 lb/hr as VOC (calendar month average)
[P 172-0156 Part II.B.5]
- ii. Allowable VOC emissions 1.08 lb/hr. [P 172-0156 Part II.D]
- iii. Allowable VOC emissions 4.73 tpy. [P 172-0156 Part II.D]
- iv. The number of sheets and the square footage coated on a daily basis shall not exceed 1582 ft²/hr (both sides of the sheet surface area coated). [P 172-0156 Part IV.H]
- v. Emissions from Hazardous Air Pollutants (HAPs) from this source shall not exceed the Maximum Allowable Stack Concentration (MASC) for emissions of any Hazardous Air Pollutant listed in Tables 29-1, 29-2, 29-3 of the RCSA, calculated in accordance with the provisions of RCSA 22a-174-29, as amended from time to time.

b. Monitoring Requirements

Section III: Applicable Requirements and Compliance Demonstration

The Permittee shall monitor the number of sheets and the square footage coated on a daily basis.
[RSCA 22a-174-33(j)(l)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall record the number of sheets and the square footage coated on a daily basis:
[P 172-0156 Part IV.H]
- ii. The Permittee shall calculate and record the monthly and annual VOC and HAP emissions from the Polysilicate Coating Operation, using stack test data and square footage coated, in units of tons/month and tons/year, respectively. For the purposes of this permit, annual emissions shall be the sum of VOC emissions from the current month and the VOC emissions from the previous 11 consecutive months. [P 172-0156 Part IV.I]
- iii. The Permittee shall maintain a list of all materials and the material safety data sheets for all materials used in the formulation of polysilicate resin and/or used for cleaning the equipment specified in permit number 172-0156. [P 172-0156 Part IV.A]
- iv. Demonstration of compliance with the provisions of RCSA Section 22a-174-29 regarding the MASC for each Hazardous Air Pollutant, shall be made by periodically calculating an Actual Stack Concentration (“ASC”) and comparing said ASC value with the MASC value for the same time period, based on the same average operating parameters specified for that time period. The ASC for each Hazardous Air Pollutant shall not exceed the MASC for that pollutant for the specified time period and operating parameters. [P 172-0156 Part II.2.c]

A. ASC shall be calculated using the following equation:

$$1. \text{ ASC } (\mu\text{g}/\text{m}^3) = C * F^{-1} * (2.6714 \times 10^8)$$

Where:

C = lbs/hr mass emission rate of each HAP

F = exhaust gas flow rate exiting the stack (actual cubic feet per minute)

- v. The Permittee shall calculate and record the maximum actual concentration of each and every Hazardous Air Pollutant listed in Tables 29-1, -2, and -3 of Section 22a-174-29 of the RCSA and emitted in the exhaust gases exiting the discharge point of this source. This calculation need only be repeated if one or more of the following occur: [P 172-0156 Part IV.J]
 - A. There is a decrease of 20% or more in any of the stack parameters listed in Part I of this Permit, or;
 - B. There is a increase of 20% or more in the maximum rate of emission of any Hazardous Air Pollutant over the amounts specified in the Hazardous Air Pollutant calculations submitted to the DEP on October 15, 2002, or
 - C. There is a change in the materials used that results in the emission of a Hazardous Air Pollutant that was not present in the Hazardous Air Pollutant calculations submitted to the DEP on October 15, 2002.
- vi. The Permittee shall maintain a copy of the Hazardous Air Pollutant calculations submitted on

Section III: Applicable Requirements and Compliance Demonstration

October 15, 2002 and any subsequent Hazardous Air Pollutant calculations.
[P 172-0156 Part IV.K]

4. Pollutant Emissions Rates for Catalytic Oxidizer :

a. Limitation or Restriction

The permittee shall not exceed the emission limits stated herein at any time.

i. Natural Gas

<u>Criteria Pollutants</u>	<u>lbs/MMBtu</u>	<u>TPY</u>
TSP	0.012	0.24
PM-10	0.012	0.24
SO _x , expressed as	0.001	0.02
SO ₂		
NO _x , expressed as	0.1	1.97
NO ₂		
VOC	0.005	0.10
CO	0.021	0.41

b. Monitoring Requirements

There are no monitoring requirements for the emission limitations.

c. Record Keeping Requirements

In accordance with Section VII.F of this permit the permittee shall make and keep records of monthly and annual emissions in units of tons for TSP, PM-10, NO_x, SO_x, VOC, CO. The calculations shall be based on fuel use, FIRE v6.2 for external combustion sources rated less than 10 MMBtu/hr, manufacturer's data, sulfur content of fuel or other appropriate emissions factor. The consecutive 12 month emission shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant emissions. The permittee shall make these calculations within 30 days of the end of the previous month. [RSCA 22a-174-33(j)(l)(K)(ii)]

5. National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing, 40 CFR Part 63 Subpart FFFF requirements apply to MCPU No. 6 only.

a. Limitation or Restriction

- i. The Permittee shall comply with the batch vent requirements for EU12a as described in Part III.C.1 of this permit.
- ii. The Permittee shall comply with the leak detection requirements of 40 CFR §63 Subpart UU in Section III.F.1 of this permit, where applicable.

Section III: Applicable Requirements and Compliance Demonstration

6. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products, 40 CFR Part 63 Subpart PPPP; General Use Coating Process requirements apply to EU12 only.

a. Limitation or Restriction

- i. The Permittee must be in compliance with the applicable emission limit at all times. [40 CFR §63.4500(a)(1) (Compliant material option); 40 CFR §63.4500(a)(2) (Add-on control option)]
- ii. HAP emissions to the atmosphere shall not exceed 0.16 pounds of organic HAP per pound of coating solids used during each 12-month compliance period. [40 CFR §63.4490(b)(1)]
- iii. The Permittee shall use no coating for which the organic HAP content exceeds the applicable emission limit, and use no thinner and/or other additive, or cleaning material that contains organic HAP. [Compliant material option, 40 CFR §63.4542(a)]
- iv. The Permittee shall conduct an initial compliance demonstration for the emission rate with add-on control option in accordance with 40 CFR §63.4561, (Add-on control option]
- v. The Permittee shall meet the operating limits in 40 CFR Part PPPP, Table 1. [Add-on control option]
- vi. The Permittee shall develop and implement a work practice plan to minimize organic HAP emissions in accordance with §63.4493(b). [Add-on control option]

b. Monitoring Requirements

- i. The Permittee shall monitor the HAP content of each coating used in the coating operation is less than or equal to 0.16 lbs of organic HAP per pound of coating solids and that each thinner and/or other additive, and cleaning material used contains no HAP. [40 CFR §63.4491(a); Continuous Compliant Material Option Demonstration, 40 CFR §63.4542(b)]
- ii. The Permittee shall conduct an initial compliance demonstration for the compliant material option in accordance with 40 CFR §63.4540 and CFR §63.4541.
- iii. The Permittee shall demonstrate continuous compliance with the HAP emissions rate in accordance with 40 CFR §63.4542. [Compliant material option]
- iv. The Permittee shall conduct an initial compliance demonstration for the add-on control option in accordance with 40 CFR §4561. [Add-on control option]
- v. The Permittee shall demonstrate continuous compliance with the HAP emissions rate for the add-on control option in accordance with 40 CFR §63.4563. [Add-on control option]
- vi. The Permittee shall comply with the performance test requirements for the add-on control option in accordance with 40 CFR §63.4564 through §63.4567. [Add-on control option]
- vii. The Permittee shall conduct all required monitoring accordance with 40 CFR §63.4568. [Add-

Section III: Applicable Requirements and Compliance Demonstration

on control option]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records in accordance with 40 CFR §63.4530 and §63.4531.
- ii. The Permittee shall document changes in compliance method in accordance with §63.4530(c). [40 CFR §63.4491]
- iii. The Permittee shall make and keep records of the initial compliance demonstration in accordance with 40 CFR §63.4530 and §63.4531. [§63.4542(d), Compliant material option; §63.4561(c) and §63.4562(n), Add-on control option]
- iv. The Permittee shall make and keep records of the continuous compliance demonstration in accordance with 40 CFR §63.4530 and §63.4531. [§63.4551(d), Compliant material option; §63.4563(j), Add-on control option]

d. Reporting Requirements

- i. The Permittee shall submit all required reports in accordance with 40 CFR §63.4520.
- ii. The Permittee shall report any changes in compliance method in accordance with §63.4491.
- iii. The Permittee shall submit, as part of the reporting requirements required by 40 CFR §63.4520, all required reports in accordance with 40 CFR §63.4542(c). [Compliant material option]
- iv. The Permittee shall, as part of the reporting requirements required by 40 CFT §63.4520, all required reports in accordance with 40 CFR §63.4565(f), when applicable. [Add-on control option]
- v. The Permittee shall submit all required reports in accordance with Section VII.E of this permit. [RSCA 22a-174-33(j)(1)(K)(ii)]

E. GROUPED EMISSIONS UNIT 4 (GEU4): Monomer Vacuum Transfer System R172-0157; Fume Incinerator: R172-0260

1. Fuel Usage

a. Limitation or Restriction

There are no limitations of fuel use for the fume incinerator.

b. Monitoring Requirements

The Permittee shall monitor the fuel usage of the fume incinerator, using either fuel purchase receipts or a fuel meter. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

Section III: Applicable Requirements and Compliance Demonstration

The Permittee shall record the monthly annual fuel usage of the fume incinerator. [RCSA §22a-174-4(d)(1)]

d. Reporting Requirements

- i. The Permittee shall report annual fuel usage for the fume incinerator in the annual emission statement. [RCSA §22a-174-4(d)(1)]
- ii. The Permittee shall submit all required reports in accordance with Section VII.E of this permit. [RCSA 22a-174-33(j)(l)(K)(ii)]

2. Hours of Operation

a. Limitation or Restriction

There is no operating limitation on the hours of operation of the fume incinerator for GEU3. There are monitoring, record keeping and reporting requirements.

b. Monitoring Requirements

The Permittee shall continuously monitor the daily hours of operation of the fume incinerator for the Monomer Vacuum Transfer System using a data logging device. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall make and keep records the hours of operation of the fume incinerator for the Monomer Vacuum Transfer System. Records shall include the date and the hours of fume incinerator downtime. The Permittee shall calculate the hours of operation monthly and annually. [RCSA §22a-174-4(d)(1)]

(Note: The fume incinerator operates 24/ hours a day except during periods the Monomer Vacuum Transfer System is not operating, e.g., shutdown or maintenance.)

d. Reporting Requirements

The Permittee shall submit all required reports in accordance with Section VII.E of this permit. [RCSA 22a-174-33(j)(l)(K)(ii)]

3. VOC Emissions

a. Limitation or Restriction

There is no operating limitation on VOC emissions of the fume incinerator for GEU3. There are monitoring, record keeping and reporting requirements.

b. Monitoring Requirements

The Permittee shall calculate the VOC emissions of the Monomer Vacuum Transfer System using emission factors from the most recent stack test and the hours of operation of the of the fume incinerator. [RCSA §22a-174-33(j)(1)(K)(ii)]

Section III: Applicable Requirements and Compliance Demonstration

c. Record Keeping Requirements

The Permittee shall record the monthly and consecutive 12 month VOC emissions of the Monomer Vacuum Transfer System in units of tons/month and tons/year, respectively. The consecutive 12 month usage shall be determined by adding the current month's usage to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the previous month. [RCSA §22a-174-4(d)(1)]

d. Reporting Requirements

- i. The Permittee shall report annual VOC emissions of the Monomer Vacuum Transfer System in the annual emission statement. [RCSA §22a-174-4(d)(1)]
- ii. The Permittee shall submit all required reports in accordance with Section VII.E of this permit. [RCSA 22a-174-33(j)(l)(K)(ii)]

4. Operating Temperature

a. Limitation or Restriction

The Minimum Operating Temperature of the fume incinerator for the Monomer Vacuum Transfer System is 1200°F at all times during which the vacuum transfer of monomer occurs. Or, the minimum temperature, as determined by the latest stack test, required to reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by $\geq 98\%$. [40 CFR §63.2460(a), Table 2 – Item 1.a]

b. Monitoring Requirements

The Permittee shall comply with the control device monitoring requirements of 40 CFR §63 Subpart SS in Section III.F.2.b of this permit, where applicable.

c. Record Keeping Requirements

The Permittee shall comply with the control device record keeping requirements of 40 CFR §63 Subpart SS in Section III.F.2.c of this permit, where applicable.

d. Reporting Requirements

The Permittee shall submit all required reports in accordance with 40 CFR §63 Subpart SS in Section III.F.2.d of this permit, where applicable.

Section III: Applicable Requirements and Compliance Demonstration

F. BROADLY APPLICABLE 40 CFR PART 63 REQUIREMENTS:

The following requirements apply to emission units GEU2, GEU3, EU13 and EU25 except where noted.

1. Equipment Leaks – 40 CFR §63 Subpart UU

a. Limitation or Restriction

The Permittee shall comply with the requirements of 40 CFR Part §63 Subpart UU, except as specified in 40 CFR §63.2480(b), (c) and (d), for equipment leaks.

[40 CFR §63.2480(a) & 40 CFR Part §63 Subpart FFFF Table 6]

- i. The Permittee shall identify all the applicable equipment subject to 40 CFR §63 Subpart UU. [40 CFR §63.1022]
- ii. The Permittee shall comply with the instrument and sensory monitoring requirements for leaks pursuant to 40 CFR §63.1023.
- iii. The Permittee shall comply with the leak repair requirements pursuant to 40 CFR §63.1024.

b. Monitoring Requirements

- i. The Permittee shall comply with the following instrument monitoring requirements:
[40 CFR §63.1023(a)(1)]
 - A. Valves in gas and vapor service and in light liquid service shall be monitored pursuant to 40 CFR §63.1025(b). [40 CFR §63.1023(a)(1)(i)]
 - B. Pumps in light liquid service shall be monitored pursuant to 40 CFR §63.1026(b). [40 CFR §63.1023(a)(1)(ii)]
 - C. Connectors in gas and vapor service and in light liquid service shall be monitored pursuant to 40 CFR §63.1027(b). [40 CFR §63.1023(a)(1)(iii)]
 - D. Agitators in gas and vapor service and in light liquid service shall be monitored pursuant to 40 CFR §63.1028(c). [40 CFR §63.1023(a)(1)(iv)]
- ii. The Permittee shall comply with the following sensory monitoring requirements:
[40 CFR §63.1023(a)(2)]
 - A. Pumps in light liquid service shall have weekly visual inspections pursuant to 40 CFR §63.1026(b)(4). [40 CFR §63.1023(a)(2)(i)]
 - B. Agitators in gas and vapor service and in light liquid service shall be monitored pursuant to 40 CFR §63.1028(c). [40 CFR §63.1023(a)(2)(iii)]
- iii. The Permittee shall comply with the instrument monitoring methods with Method 21 of 40 CFR Part 60, Appendix A. [40 CFR §63.1023(b)(1)]

Section III: Applicable Requirements and Compliance Demonstration

- iv. The Permittee shall comply with the sensory monitoring methods using visual, audible, olfactory, or any other detection method used to determine a potential leak to the atmosphere. [40 CFR §63.1023(d)]
- v. The Permittee may comply with one of the standards specified in 40 CFR §63.1036(b) and (c) as an alternative to the monitoring requirements in Section III.F.1.b.i of this permit above. The alternative standards provide the options of pressure testing or monitoring for leaks. The Permittee may switch among the alternatives provided the change is documented as specified in 40 CFR §63.1036(b)(7). [40 CFR §63.1036(a)]
 - A. The Permittee may elect to use pressure testing of to demonstrate compliance as specified in 40 CFR §63.1036(b). [40 CFR §63.1036(b)]
 - B. The Permittee may elect to monitor for leaks as specified in 40 CFR §63.1036(c). [40 CFR §63.1036(c)]

c. Record Keeping Requirements

The Permittee shall keep records for leak detection as required by 40 CFR §63.1038, as applicable. [40 CFR §63.2525(a)]

d. Reporting Requirements

- i. The Permittee shall submit a compliance report to the Administrator. Compliance reports must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Compliance report must be postmarked or delivered no later than February 28 or August 31, whichever date is the first date following the end of the semiannual reporting period. In addition all reports must be submitted in accordance with Section VI.E of this permit. [40 CFR §63.2520(b)(1) to (4)]
 - A. The compliance report shall contain the information specified in 40 CFR §63.2520(e)(1) through (10), as applicable. [40 CFR §63.2520(e)]
 - B. The periodic report for the alternate standards compliance method shall contain the information specified in 40 CFR §63.1036(f)(1) through (f)(4), as applicable. [40 CFR §63.1036(f)]
 - C. The Permittee shall submit all required reports pursuant to 40 CFR §63.1039.

2. Control Devices - 40 CFR §63 Subpart SS and Subpart FFFF

The following requirements apply only to emission units GEU2 and GEU3.

(Note: The initial performance test for GEU2 required pursuant to 40 CFR §63.2460(c)(2) was conducted on 12/17/2008. An initial performance test for EU12 is not required until such time the AOS is selected by the permittee.)

a. Limitation or Restriction

Section III: Applicable Requirements and Compliance Demonstration

- i. Except when complying with 40 CFR §63.2485, the Permittee must meet the requirements of 40 CFR §63.982(c) and the requirements referenced therein. [40 CFR §63.2450(e)]
 - A. The Permittee shall comply with the applicable requirements to the control devices being used in 40 CFR §63.988. [40 CFR §63.982(c)(2)]
 1. The Permittee shall operate the fume incinerator at all times the when emissions are vented to the control device. [40 CFR §63.988(a)(2)]

b. Monitoring Requirements

- i. The Permittee shall comply with the monitoring requirements of 40 CFR §63.996. [40 CFR §63.988(c)]
- ii. The Permittee shall comply with the monitoring requirements of 40 CFR §63.2450(k)(1) and (k)(2).
- iii. The Permittee shall use a continuous temperature recording device to record to meet the requirements of 40 CFR §63.988(c).
 - A. The Permittee shall comply with the monitoring requirements concerning the operation and maintenance of the continuous parameter monitoring systems in accordance with 40 CFR §63.988(c)(1)
- iv. The Permittee must conduct a subsequent performance test or compliance demonstration equivalent to an initial compliance demonstration within 180 days of a change in the worst-case-conditions. [40 CFR §63.2460(c)(2)(vi)]
- v. The Permittee shall conduct performance testing on the fume incinerator following the provisions in 40 CFR §63.2450(g) and 40 CFR §63.2460.

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of the applicable record requirements in 40 CFR §63.998(a)(2) for the control device performance test records.
- ii. The Permittee shall make and keep records of the incinerator temperature in accordance with 40 CFR §63.99, with exceptions as specified in 40 CFR §63.2460(c)(3) &(4).

d. Reporting Requirements

- i. The Permittee shall submit records of the applicable requirements in 40 CFR §63.999(a)(1) and (2) concerning the control device performance test requirements.
- ii. The Permittee shall submit records of the applicable requirements in 40 CFR §63.999(b) concerning the Notification of Compliance Status requirements.
- iii. The Permittee shall submit records of the applicable requirements in 40 CFR §63.999(c) concerning the Periodic reporting requirements.
- iv. The Permittee shall submit all required reports in accordance with Section VI.E of this permit.

Section III: Applicable Requirements and Compliance Demonstration

3. Work Practice Standards for Transfer Racks - 40 CFR §63 Subpart FFFF

a. Limitation or Restriction

- i. The Permittee shall comply with each emission limit and work practice standard in 40 CFR §63 Subpart FFFF, Table 5 where applicable. [40 CFR §63.2475(a)]
Note: There are no requirements for the transfer racks because they are considered a Group 2 transfer rack. There are record keeping and monitoring requirements for these transfer racks.

b. Monitoring Requirements

The Permittee shall monitor the monthly and yearly volume of MMA that is loaded through the transfer racks. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep sufficient records of the yearly MMA volume used in the transfer rack to determine group status as defined in 40 CFR §63.2550(i). [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall make and keep sufficient records of the monthly and yearly volume of MMA that is loaded through the transfer racks to verify that the loading racks are considered Group 2 loading racks pursuant to 40 CFR §63.2550. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

There are no specific reporting requirements for the transfer racks pursuant to 40 CFR §63 Subpart FFFF.

4. Work Practice Standards for Wastewater Streams, - 40 CFR §63 Subpart F; 40 CFR §63 Subpart G

a. Limitation or Restriction

The Permittee shall comply with each emission limit and work practice standard in 40 CFR §63 Subpart FFFF, Table 7 where applicable. [40 CFR §63.2485(a)]
(Note: There are no requirements for the wastewater streams because they are considered a Group 2 wastewater stream. There are record keeping and monitoring requirements for the wastewater streams in accordance with 40 CFR §63 Subpart F and 40 CFR §63 Subpart G.)

b. Monitoring Requirements

- i. The Permittee shall use the test methods and procedures in 40 CFR §63.144 to determine the Group status of the wastewater.

c. Record Keeping Requirements

The Permittee shall make and keep sufficient records to verify the Group status of the process wastewater streams pursuant to 40 CFR §63.147(b)(8), as defined in 40 CFR §63.2550.

Section III: Applicable Requirements and Compliance Demonstration

d. Reporting Requirements

- i. The Permittee shall submit all required reports in accordance with 40 CFR §63.152.

5. Work Practice Standards for Heat Exchange System Requirements - 40 CFR §63 Subpart F

a. Limitation or Restriction

The Permittee shall comply with each requirement in 40 CFR §63 Subpart FFFF, Table 10 where applicable. [40 CFR §63.2490(a); 40 CFR §63 Subpart F]

(Note: There are no requirements for the heat exchange system because the process fluids contain less than 5% by weight of total hazardous air pollutants listed in Table 9 of 40 CFR §63 Subpart G. There are record keeping and monitoring requirements for the heat exchange system.)

b. Monitoring Requirements

The Permittee shall monitor the HAP concentration levels of the process fluids being cooled pursuant to the applicable methods found in 40 CFR §63.104.

c. Record Keeping Requirements

- i. The Permittee shall make and keep sufficient records to verify that the heat exchange system uses “once-through cooling water” pursuant to 40 CFR §63.104(a)(6).
- ii. The Permittee shall make and keep sufficient records to verify that the process fluids being cooled contain less than 5% organic HAP. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements [RCSA §22a-174-33(j)(1)(K)(ii)]

There are no specific reporting requirements for the heat exchange system pursuant to 40 CFR §63 Subpart F.

G. PREMISES-WIDE GENERAL REQUIREMENTS:

Premises-Wide General Requirements

- 1. Annual Emission Statements:** The Permittee shall submit annual emission statements requested by the commissioner as set forth in RCSA §22a-174-4(d)(1).
- 2. Emergency Episode Procedures:** The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
- 3. Reporting of Malfunctioning Control Equipment:** The Permittee shall comply with the reporting requirements of malfunctioning control equipment as set forth in RCSA §22a-174-7.
- 4. Prohibition of Air Pollution:** The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.

Section III: Applicable Requirements and Compliance Demonstration

5. **Public Availability of Information:** The public availability of information shall apply, as set forth in RCSA §22a-174-10.
6. **Prohibition Against Concealment/Circumvention:** The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
7. **Violations and Enforcement:** The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
8. **Variances:** The Permittee may apply to the commissioner for a variance from one or more of the provisions of these regulations as set forth in RCSA §22a-174-13.
9. **No Defense to Nuisance Claim:** The Permittee shall comply with the regulations as set forth in RCSA §22a-174-14.
10. **Severability:** The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.
11. **Responsibility to Comply:** The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
12. **Particulate Emissions:** The Permittee shall comply with the standards for control of particulate matter and visible emissions as set forth in RCSA §22a-174-18. (Section 18 approved by EPA on 9-23-1982, current Regulation submitted to EPA on 12-1-2004.)
13. **Sulfur Compound Emissions:** The Permittee shall comply with the requirements for control of sulfur compound emissions as set forth in RCSA §22a-174-19.
14. **Organic Compound Emissions:** The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
15. **Nitrogen Oxide Emissions:** The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22.
16. **Ambient Air Quality:** The Permittee shall not cause or contribute to a violation of an ambient air quality standard as set forth in RCSA §22a-174-24(b).
17. **Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
18. **Miscellaneous Organic Chemical Manufacturing, 40 CFR 63 Subpart FFFF:** The Permittee comply with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) as set forth in 40 CFR 63 Subpart FFFF.
19. **Closed Vent Systems, 40 CFR 63 Subpart SS:** The Permittee shall comply with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) as set forth in 40 CFR 63 Subpart SS.
20. **Equipment Leaks, 40 CFR 63 Subpart UU:** The Permittee shall comply with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) as set forth in 40 CFR 63 Subpart UU.
21. **Closed Vent Systems, 40 CFR 63 Subpart SS:** The Permittee shall comply with the National Emissions

Section III: Applicable Requirements and Compliance Demonstration

Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry as set forth in 40 CFR 63 Subpart F.

- 22. Surface Coating of Plastic Parts and Products, 40 CFR 63 Subpart PPPP:** The Permittee shall comply with the National Emissions Standards for Hazardous Air Pollutants (NESHAP) as set forth in 40 CFR 63 Subpart PPPP.
- 23. Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63 Subpart ZZZZ:** The Permittee shall comply with the National Emissions Standards for Reciprocating Internal Combustion Engines (RICE) as set forth in 40 CFR 63 Subpart ZZZZ. (EU5)
- 24. Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 64 Subpart DDDDD:** The Permittee shall comply with the National Emission Standards for Hazardous Air Pollutants for Major Sources for Industrial, Commercial and Institutional Boilers and Process Heaters as set forth in 40 CFR 63 Subpart DDDDD. (GEU1)
- 25. The Permittee shall conduct a total enclosure test on the “Blue Stack” air handling unit that is representative of the testing conducted in June 2006 to determine the actual uncontrolled MMA emissions rate. Testing shall include the APO area and the vertical casting hood.**

The Permittee shall submit an ITT stack testing protocol within 180-days after permit issuance. Actual testing shall be witnessed by the Department and be conducted within 180-days after the Department’s approval of the protocol.

[RSCA 22a-174-33(j)(1)(K)(ii)]

Section IV: Compliance Schedule

TABLE IV: COMPLIANCE SCHEDULE				
Emissions Unit	Applicable Regulations	Steps Required for Achieving Compliance (Milestones)	Date by which Each Step is to be Completed	Dates for Monitoring, Record Keeping, and Reporting
		N/A		

Section V: State Enforceable Terms and Conditions

Only the Commissioner of the Department of Energy and Environmental Protection has the authority to enforce the terms, conditions and limitations contained in this section.

State Enforceable Terms and Conditions

- A.** This Title V permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Energy and Environmental Protection or any federal, local or other state agency. Nothing in this Title V permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Nothing in this Title V permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- C.** Odors: The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA §22a-174-23.
- D.** Noise: The Permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA §§22a-69-1 through 22a-69-7.4, inclusive.
- E.** Hazardous Air Pollutants (HAPs): The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- F.** Open Burning: The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
- G.** Fuel Sulfur Content: The Permittee shall not use No. 2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS §16a-21a.

Section VI: Title V Requirements

The Administrator of the United States Environmental Protection Agency and the Commissioner of the Department of Energy and Environmental Protection have the authority to enforce the terms and conditions contained in this section.

Title V Requirements

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

The date of submission to the commissioner of any document required by this Title V permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this Title V permit, including, but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this Title V permit, the word "day" means calendar day. Any document or action which is required by this Title V permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

Any document required to be submitted to the commissioner under this Title V permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of the Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the Environmental Protection Agency shall be in a computer-readable format and addressed to: Director, Air Compliance Program; Attn: Air Compliance Clerk; Office of Environmental Stewardship; EPA-New England, Region 1; 5 Post Office Square, Suite 100; Boston, Massachusetts 02109-3912.

B. CERTIFICATIONS [RCSA §22a-174-33(b)]

In accordance with RCSA §22a-174-33(b), any report or other document required by this Title V permit and any other information submitted to the commissioner or Administrator shall be signed by an individual described in RCSA §22a-174-2a(a), or by a duly authorized representative of such individual. Any individual signing any document pursuant to RCSA §22a-174-33(b) shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and shall also sign the following certification as provided in RCSA §22a-174-2a(a)(4):

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.”

C. SIGNATORY RESPONSIBILITY [RCSA §22a-174-2a(a)]

For purposes of signing any Title V-related application, document, report or certification required by RCSA §22a-174-33, any corporation's duly authorized representative may be either a named individual or any individual occupying a named position. Such named individual or individual occupying a named position is a duly authorized representative if such individual is responsible for the overall operation of one or more manufacturing, production or operating facilities subject to RCSA §22a-174-33 and either:

1. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding 25 million dollars in second quarter 1980 dollars; or

Section VI: Title V Requirements

Title V Requirements

2. The delegation of authority to the duly authorized representative has been given in writing by an officer of the corporation in accordance with corporate procedures and the following:
 - i. Such written authorization specifically authorizes a named individual, or a named position, having responsibility for the overall operation of the Title V premises or activity,
 - ii. Such written authorization is submitted to the commissioner and has been approved by the commissioner in advance of such delegation. Such approval does not constitute approval of corporate procedures, and
 - iii. If a duly authorized representative is a named individual in an authorization submitted under subclause ii. of this subparagraph and a different individual is assigned or has assumed the responsibilities of the duly authorized representative, or, if a duly authorized representative is a named position in an authorization submitted under subclause ii. of this subparagraph and a different named position is assigned or has assumed the duties of the duly authorized representative, a new written authorization shall be submitted to the commissioner prior to or together with the submission of any application, document, report or certification signed by such representative.

D. ADDITIONAL INFORMATION [RCSA §22a-174-33(j)(1)(X), RCSA §22a-174-33(h)(2)]

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier, including information to determine whether cause exists for modifying, revoking, reopening, reissuing, or suspending this Title V permit or to determine compliance with this Title V permit.

In addition, the Permittee shall submit information to address any requirements that become applicable to the subject source and shall submit correct, complete, and sufficient information within 15 days of the applicant's becoming aware of any incorrect, incomplete, or insufficient submittal, during the pendency of the application, or any time thereafter, with an explanation for such deficiency and a certification pursuant to RCSA §22a-174-2a(a)(5).

E. MONITORING REPORTS [RCSA §22a-174-33(o)(1)]

A Permittee, required to perform monitoring pursuant this Title V permit, shall submit to the commissioner, on forms prescribed by the commissioner, written monitoring reports on March 1 and September 1 of each year or on a more frequent schedule if specified in such permit. Such monitoring reports shall include the date and description of each deviation from a permit requirement including, but not limited to:

1. Each deviation caused by upset or control equipment deficiencies; and
2. Each deviation of a permit requirement that has been monitored by the monitoring systems required under this Title V permit, which has occurred since the date of the last monitoring report; and
3. Each deviation caused by a failure of the monitoring system to provide reliable data.

F. PREMISES RECORDS [RCSA §22a-174-33(o)(2)]

Unless otherwise required by this Title V permit, the Permittee shall make and keep records of all required monitoring data and supporting information for at least five years from the date such data and information were obtained. The Permittee shall make such records available for inspection at the site of the subject source, and shall submit such records to the commissioner upon request. The following information, in addition to required monitoring data, shall be recorded for each permitted source:

1. The type of monitoring or records used to obtain such data, including record keeping;
2. The date, place, and time of sampling or measurement;

Section VI: Title V Requirements

Title V Requirements

3. The name of the individual who performed the sampling or the measurement and the name of such individual's employer;
4. The date(s) on which analyses of such samples or measurements were performed;
5. The name and address of the entity that performed the analyses;
6. The analytical techniques or methods used for such analyses;
7. The results of such analyses;
8. The operating conditions at the subject source at the time of such sampling or measurement; and
9. All calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by the subject permit.

G. PROGRESS REPORTS [RCSA §22a-174-33(q)(1)]

The Permittee shall, on March 1 and September 1 of each year, or on a more frequent schedule if specified in this Title V permit, submit to the commissioner a progress report on forms prescribed by the commissioner, and certified in accordance with RCSA §22a-174-2a(a)(5). Such report shall describe the Permittee's progress in achieving compliance under the compliance plan schedule contained in this Title V permit. Such progress report shall:

1. Identify those obligations under the compliance plan schedule in this Title V permit which the Permittee has met, and the dates on which they were met; and
2. Identify those obligations under the compliance plan schedule in this Title V permit which the Permittee has not timely met, explain why they were not timely met, describe all measures taken or to be taken to meet them and identify the date by which the Permittee expects to meet them.

Any progress report prepared and submitted pursuant to RCSA §22a-174-33(q)(1) shall be simultaneously submitted by the Permittee to the Administrator.

H. COMPLIANCE CERTIFICATIONS [RCSA §22a-174-33(q)(2)]

The Permittee shall, on March 1 of each year, or on a more frequent schedule if specified in this Title V permit, submit to the commissioner a written compliance certification certified in accordance with RCSA §22a-174-2a(a)(5) and which includes the information identified in 40 CFR §§70.6(c)(5)(iii)(A) to (C), inclusive.

Any compliance certification prepared and submitted pursuant to RCSA §22a-174-33(q)(2) shall be simultaneously submitted by the Permittee to the Administrator.

I. PERMIT DEVIATION NOTIFICATIONS [RCSA §22a-174-33(p)]

Notwithstanding Section VI.D of this Title V permit, the Permittee shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

1. For any hazardous air pollutant, no later than 24 hours after such deviation commenced; and
2. For any other regulated air pollutant, no later than ten days after such deviation commenced.

J. PERMIT RENEWAL [RCSA §22a-174-33(j)(1)(B)]

All of the terms and conditions of this Title V permit shall remain in effect until the renewal permit is issued or denied provided that a timely renewal application is filed in accordance with RCSA §§22a-174-33(g), -33(h), and -33(i).

Section VI: Title V Requirements

Title V Requirements

K. OPERATE IN COMPLIANCE [RCSA §22a-174-33(j)(1)(C)]

The Permittee shall operate the source in compliance with the terms of all applicable regulations, the terms of this Title V permit, and any other applicable provisions of law. In addition, any noncompliance constitutes a violation of the Clean Air Act and Chapter 446c of the Connecticut General Statutes and is grounds for federal and/or state enforcement action, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

L. COMPLIANCE WITH PERMIT [RCSA §22a-174-33(j)(1)(G)]

This Title V permit shall not be deemed to:

1. Preclude the creation or use of emission reduction credits or allowances or the trading thereof in accordance with RCSA §§22a-174-33(j)(1)(I) and -33(j)(1)(P), provided that the commissioner's prior written approval of the creation, use, or trading is obtained;
2. Authorize emissions of an air pollutant so as to exceed levels prohibited pursuant to 40 CFR Part 72;
3. Authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or
4. Impose limits on emissions from items or activities specified in RCSA §§22a-174-33(g)(3)(A) and -33(g)(3)(B) unless imposition of such limits is required by an applicable requirement.

M. INSPECTION TO DETERMINE COMPLIANCE [RCSA §22a-174-33(j)(1)(M)]

The commissioner may, for the purpose of determining compliance with this Title V permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under such permit; to sample or otherwise monitor substances or parameters; and to review and copy relevant records lawfully required to be maintained at such premises in accordance with this Title V permit. It shall be grounds for permit revocation should entry, inspection, sampling, or monitoring be denied or effectively denied, or if access to and the copying of relevant records is denied or effectively denied.

N. PERMIT AVAILABILITY

The Permittee shall have available at the facility at all times a copy of this Title V permit.

O. SEVERABILITY CLAUSE [RCSA §22a-174-33(j)(1)(R)]

The provisions of this Title V permit are severable. If any provision of this Title V permit or the application of any provision of this Title V permit to any circumstance is held invalid, the remainder of this Title V permit and the application of such provision to other circumstances shall not be affected.

P. NEED TO HALT OR REDUCE ACTIVITY [RCSA §22a-174-33(j)(1)(T)]

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Title V permit.

Q. PERMIT REQUIREMENTS [RCSA §22a-174-33(j)(1)(V)]

The filing of an application or of a notification of planned changes or anticipated noncompliance does not stay the Permittee's obligation to comply with this Title V permit.

R. PROPERTY RIGHTS [RCSA §22a-174-33(j)(1)(W)]

This Title V permit does not convey any property rights or any exclusive privileges. This Title V permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including CGS §4-181a(b) and RCSA §22a-3a-5(b). This Title V permit shall neither create nor affect any rights of persons who are not

PolyOne Designed

Structures and Solutions, LLC

Page 45 of 47

Permit No. 172-0133-TV

Section VI: Title V Requirements

Title V Requirements

parties to this Title V permit.

S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA §22a-174-33(o)(3)]

The Permittee shall, contemporaneously with making a change authorized by this Title V permit from one alternative operating scenario to another, maintain a record at the premises indicating when changes are made from one operating scenario to another and shall maintain a record of the current alternative operating scenario.

T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA §22a-174-33(r)(2)]

The Permittee may engage in any action allowed by the Administrator in accordance with 40 CFR §§70.4(b)(12)(i) to (iii)(B), inclusive, and 40 CFR §§70.4(b)(14)(i) to (iv), inclusive, without a Title V non-minor permit modification, minor permit modification or revision and without requesting a Title V non-minor permit modification, minor permit modification or revision provided such action does not:

1. Constitute a modification under 40 CFR Part 60, 61 or 63;
2. Exceed emissions allowable under the subject permit;
3. Constitute an action which would subject the Permittee to any standard or other requirement pursuant to 40 CFR Parts 72 to 78, inclusive; or
4. Constitute a non-minor permit modification pursuant to RCSA §22a-174-2a(d)(4).

At least seven days before initiating an action specified in RCSA §22a-174-33(r)(2)(A), the Permittee shall notify the Administrator and the commissioner in writing of such intended action.

U. INFORMATION FOR NOTIFICATION [RCSA §22a-174-33(r)(2)(A)]

Written notification required under RCSA §22a-174-33(r)(2)(A) shall include a description of each change to be made, the date on which such change will occur, any change in emissions that may occur as a result of such change, any Title V permit terms and conditions that may be affected by such change, and any applicable requirement that would apply as a result of such change. The Permittee shall thereafter maintain a copy of such notice with the Title V permit. The commissioner and the Permittee shall each attach a copy of such notice to their copy of the Title V permit.

V. TRANSFERS [RCSA §22a-174-2a(g)]

No person other than the Permittee shall act or refrain from acting under the authority of this Title V permit unless such permit has been transferred to another person in accordance with RCSA §22a-174-2a(g).

The proposed transferor and transferee of a permit shall submit to the commissioner a request for a permit transfer on a form provided by the commissioner. A request for a permit transfer shall be accompanied by any fees required by any applicable provision of the general statutes or regulations adopted thereunder. The commissioner may also require the proposed transferee to submit with any such request, the information identified in CGS §22a-6m.

W. REVOCATION [RCSA §22a-174-2a(h)]

The commissioner may revoke this Title V permit on his own initiative or on the request of the Permittee or any other person, in accordance with CGS §4-182(c), RCSA §22a-3a-5(d), and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The Permittee requesting revocation of this Title V permit shall state the requested date of revocation and provide evidence satisfactory to the commissioner that the subject source is no longer a Title V source.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this Title V permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this Title V permit if the Administrator has

Section VI: Title V Requirements

Title V Requirements

determined that the commissioner failed to act in a timely manner on a permit renewal application.

This Title V permit may be modified, revoked, reopened, reissued, or suspended by the commissioner, or the Administrator in accordance with RCSA §22a-174-33(r), CGS §22a-174c, or RCSA §22a-3a-5(d).

X. REOPENING FOR CAUSE [RCSA §22a-174-33(s)]

This Title V permit may be reopened by the commissioner, or the Administrator in accordance with RCSA §22a-174-33(s).

Y. CREDIBLE EVIDENCE

Notwithstanding any other provision of this Title V permit, for the purpose of determining compliance or establishing whether a Permittee has violated or is in violation of any permit condition, nothing in this Title V permit shall preclude the use, including the exclusive use, of any credible evidence or information.

MEMORANDUM

Date: September 24, 2013

SIMS No.: 201303957 (Multimedia)
201303960 (TV Revision)

Date Rec'd: September 4, 2013

TO: Gary S. Rose, Director

FROM: James Grillo, APCE
Kiernan J. Wholean, Supervising APCE

SUBJECT: Multi-media Transfer of Title V Permit number 172-0133-TV (Revision); NSR permit numbers 172-0156 and 172-0079; Air Registration number R172-0256, R172-0257, and R172-0260 from Spartech Polycast, Inc. to PolyOne Designed Structures and Solutions, LLC

On September 4, 2013, the Department received an application to transfer the Title V permit, two (2) NSR permits and three (3) air registrations from Spartech Polycast, Inc. to PolyOne Designed Structures and Solutions, LLC.

In accordance with RCSA Section 22a-174-2a(g), the transfer of a Title V permit shall comply with 40 CFR 70.7(d)(1)(iv) and proceed under permit revision pursuant to RCSA 22a-174-2a(f)(2)(E). The only changes made to the Title V permit were updates to the company name throughout the permit to reflect the change in ownership.

The application lists R172-0258 as a registration that needs to be transferred. During the recent Title V renewal it was determined that registration 0258 does not exist and that only R172-0257, vacuum pump is an active registration.

The compliance record was reviewed in accordance with the Environmental Compliance History Policy. Title V compliance certification, agency records, including the SIMS Enforcement database, were reviewed for information to evaluate the applicant's compliance history and the relevance of such history to the activity for which authorization is being sought.

Title V compliance certification that was submitted on February 5, 2013 for the reporting period of January 1, 2012 to December 31, 2012 indicates that the facility showed intermittent compliance with the permit conditions. Additionally, a review of air program compliance was requested from the Enforcement Section and that response forms a part of this record.

PolyOne Designed Structures and Solutions, LLC

Recommendation:

Based on the information submitted by the applicant, the permit files, and the compliance history review, it is recommended that the above referenced permits and registrations be transferred from Spartech Polycast, Inc. to PolyOne Designed Structures and Solutions, LLC

/s/ James Grillo
James Grillo, APCE

9/27/13
Date

Review:

/s/ Kiernan Wholean 9/27/13
Kiernan J. Wholean, Supervising APCE