

*West Virginia Department of Environmental Protection*

*Division of Air Quality*

Joe Manchin, III  
Governor

Stephanie R. Timmermeyer  
Cabinet Secretary

# Permit to Operate



*Pursuant to*

**Title V**

*of the Clean Air Act*

*Issued to:*

**SABIC Innovative Plastics US LLC ~~General Electric Company~~**

**~~GE Plastics~~/Washington, WV**

**R30-10700010-2005**

**Parts 2-5 of 5**

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*John A. Benedict*

*Director*

*Issued: December 22, 2006 • Effective: January 8, 2007*  
*Expiration: December 22, 2011 • Renewal Application Due: June 22, 2011*

Permit Number: **R30-10700010-2005, Parts 2 to 5 of 5**  
Permittee: **SABIC Innovative Plastics US LLC General Electric Company**  
Facility Name: ~~GE Plastics~~  
Mailing Address: P.O.Box 68, Washington, WV 26181

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*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

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Facility Location: State Route 892, Washington, Wood County, West Virginia  
Mailing Address: P.O.Box 68, Washington, WV 26181  
Telephone Number: 304-863-7231  
Type of Business Entity: Limited Liability Company Corporation  
Facility Description: Thermoplastic Manufacturing  
SIC Codes: 2821  
UTM Coordinates: 441.6 km Easting • 4345.2 km Northing • Zone 17

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [ §§ 22B-1-1 et seq. ], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

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**Appendix 1: CERTIFICATION OF DATA ACCURACY**

**Appendix 2: Attachment A of R13-2678**

**Appendix 3: Dust Collector List\***

**\* For informational purposes only**

**1.0 Emission Units (For informational purposes only, not enforceable requirements)**

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Control Device</b>
<i>Latex Process Area</i>				
30B-01002	001-01 (LX1) aka. (L1)	Latex Building A and Building B Process Equipment and Recovery System (all to flare)	1963-1969; 1972	Latex Area Flare: 30B-01002
30A08275	001-02 (LX5)	Latex Wash Tank (Latex Decant Losses)	1957	None
	001-03 (LX7)	Flare Knockout Tank Drain	1988	None
30A-08046	001-04 (LX6)	ER Knockout Tanks Drains	1958	None
30A08055, 30A28020	001-05 (LX14)	Latex Blend Tanks and Screeners	1957	Latex Area CTO: 30B-12130
30A25069	001-06 (LX4)	Latex Blend Tank #38 (Latex blend tanks)	1967	None
30B29275, 30B28136	001-07 (LX8)(CGL)	Latex Coag Pits	1957	None
30A-08267	001-0A (LX11)	Latex Activator. Mix and Charge Tank	1957	None
30B-08408	001-0C (LX13)	Latex Recovery Tank	1997	None
<i>Resin A Process area</i>				
10A-12021	002-01 (RA1) aka (10A-V28)	Resin Building A Reactor-Coagulation-Vacuum System	1962	Resin A Catalytic Incinerator: (10A-12021)
10A27002, 10A27003	002-02 (RA2) aka (10A-V32, 10A-V34)	Resin A Predryer and Dryer	1962, 1974	Resin A Dryer stack (EP202); Dust collector (10A-26022 - Integral to Process)
10A-25019, 10A-25020, 10A-25046, 10A-25060, 10A-25062	002-08 (RA5) aka (10A-V16, 10A-V18, 10A-V20, 10A-V22, 10A-V24)	Resin A Blend Tanks (5) (aka: Latex Storage Tanks)	1963; 1974	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Control Device
10A-25058 10A-25059	OOD-01 (RN1) aka (10A-V36, 10A-V38, 10A-V40, 10A-V42 - vent ID#s)	Resin A Transfer  Note: Equip. IDs used are for Weigh Silos (aka: Scale Tanks) although site emission factors include multiple resin transfers between silos.	1962	Scale Tank Dust Collectors 10A-26024 and 10A-26025 - Integral to Process
<i>Resin C Process area</i>				
Reactor #3 (10C-04008) Reactor #4 (10C-04009) Reactor #5 (10C-04010) Coag #2 Tank (10C- 08115) Melt Tank (10C-08111) Mix tank (10C-08112) Feed Tank (10C-08114) Feed Tank (10C-08113) Vacuum Drum Filter (10C-28052)	003-01 (RC1) aka (C1)	Resin Building C Reactor- Coagulation-Vacuum System  Reactor #3 (10C-04008) Reactor #4 (10C-04009) Reactor #5 (10C-04010) Coag #2 Tank (10C-08115) Melt Tank (10C-08111) Mix tank (10C-08112) Feed Tank (10C-08114) Feed Tank (10C-08113) Vacuum Drum Filter (10C-28052)	1960	(Resin C Catalytic Incinerator: 10C-01002) incin = 3.5MMBtu/hr
10C27005	003-02 (RC2) aka (C-2)	Resin C Fluidized Bed Dryer	1990	Carbon bed
10C25026, 10C25027, 10C25028, 10C25045, 10C25046	003-03 (RC3)	Resin C Blend Tanks (5)	1960; 1974	None

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Control Device</b>
10C-25042 10C-25043	OOD-01 (RN1)	Resin C Transfer  Note: Equip. IDs used are for Weigh Silos (aka: Scale Tanks) although site emission factors include multiple resin transfers between silos.	1960	Scale Tank Dust Collectors 10C-26024 and 10C-26025 - Integral to Process
<b><i>Resin E Process area</i></b>				
10E-01002	004-01 (RE1) aka (10E-V56)	Resin Building E Reactor-Coagulation-Vacuum System	1962	(Resin E Catalytic Incinerator: 10E-01002) <sup>1</sup>
10E-27001	004-02 (RE2) aka (10E-V60)	Resin E Rotary Dryer	1963	Dust Collector 10E-26021 - Integral to Process
10E-25051, 10E-25052, 10E-25053, 10E-25054, 10E-25055, 10E-25064, 10E-25066	004-03 (RE3) aka (10E-V38, 10E-V40, 10E-V42, 10E-V44, 10E-V46, 10E-V48, 10E-V50)	Resin E Blend Tanks (7)  aka Latex Storage Tanks	1962	(Resin E Catalytic Incinerator: 10E-01002) <sup>1</sup>
10E-25056, 10E-25057	OOD-01 (RN1) aka 10E-V62, 10E-V64, 10E-V66, 10E-V68, 10E-V70, 10E-V72 10E-V74	Resin E Transfer  Note: Equip. IDs used are for Weigh Silos (aka: Scale Tanks) although site emission factors include multiple resin transfers between silos.	1962	Scale Tank Dust Collectors 10E-26004 and 10E-26005 - Integral to Process
<b><i>Resin G Process area</i></b>				
10G-01001	005-01 (RG1)	Resin Building G Reactor-Coagulation-Vacuum System	1965	Resin G Catalytic Incinerator: 10G-01001
10G-27001	005-02 (RG2)	Resin G Rotary Dryer	1965	Dryer D/C 10G-26001-Integral to Process

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Control Device</b>
10G-25001, 10G-25002, 10G-25003, 10G-25004, 10G-25005, 10G25009	005-03 (RG3)	Resin G Blend Tanks (6)  (aka: Latex Storage Tanks)	1965	None
10G-25007 10G-25008	OOD-01 (RN1)	Resin G Transfer  Note: Equip. IDs used are for Weigh Silos (aka: Scale Tanks) although site emission factors include multiple resin transfers between silos.	1965	10G-26004,10G-26005 (scale tank D/C) Integral to Process
<b><i>Resin J Process area</i></b>				
10J-01001	006-01 (RJ1) aka (10J-V14)	Resin Building J Reactor-Coagulation-Vacuum System	1965	Resin J Catalytic Incinerator: (10J-01001) <sup>1</sup>
10J27001	006-02 (RJ2) aka (10J-V20)	Resin J Rotary Dryer	1965/66	Dryer D/C 10J-26001 - Integral to Process
10J-25003, 10-J25004, 10J-25005, 10J-25011	006-03 (RJ3) aka (10J-V04, 10J-V06, 10J-V08, 10J-V10)	Resin J Blend Tanks (4)  (aka: Latex Storage Tanks)	1966	None
10J-04007	00N-01 (RJ4) aka (09-12010)	PBA Production Equipment (Process) (Mix Tank, Feed Tank, 30 gallon reactor mix pot, reactor, Latex Hold Tank, Startup Tank, and Latex Storage Tanks #1, 2, 3, and 6)	1996	Caustic Scrubber/Carbon Canister: 09-12010
10J-08011	00N-03 (RJ5) aka(10J-V26014)	PBA Reactor Solution Tanks (Activator Make-up Tank, Activator Feed Tank, Sol'n Makeup Tank, Makeup Tank, Feed Tank, Solution Makeup Tank, Solution Feed Tank, Solution Feed Tank and Solution Feed Tank)	1996	Resin J Catalytic Incinerator: (10J-01001) <sup>1</sup>

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Control Device</b>
10J-08097	10J-V26013	Supersack Hopper	1996	Dust collector 10J-26015
10J-25013, 10J25014	(RJ6)	PBA Latex storage tanks #4 and #5 (when Resin A Cat. Ox. Is not operating)	1976	Resin J Catalytic Incinerator: (10J-01001) <sup>1</sup> OR Carbon Canister system (RJ6) 09-12010
10J-08083	none	Additive Storage Tank	1996	None
10J-25007, 10J-25008	OOD-01 (RN1) aka(10J-V18 10J-V22 10J-V24 10J-V26	Resin J Transfer  Note: Equip. IDs used are for Weigh Silos (aka: Scale Tanks) although site emission factors include multiple resin transfers between silos.	1966	10J-26004,10J-26005 (scale tank D/C) Integral to Process
<b><i>Finishing A, B and C Areas</i></b>				
11A-29000 11A-29111 11A-29112	00K-01 (FA1)	Finishing A Feeders, Weigh-up Booth, Banbury Mixers (3) (WC and WA Banbury Lines), and Dicers	1957	See DC List – Appendix 3
11A-08083	00K-01	Resin hopper	1988	Dust Collector 11A-26066
11B-29000 11B-29001 11B-29007	00K-01 (FB1)	Finishing B Feeders, Weigh-up Booth, Banbury Mixer (WL and WP Banbury Lines), and Dicers	1962; 1966	See DC List – Appendix 3
11C-29000 11C-29001	00K-01 (FC1)	Finishing C Feeders, Weigh-up Booth, Banbury Mixer (WM Banbury Line), and Dicers	1965	See DC List – Appendix 3
11B-08037	MB-14	Finishing B resin hoppers/blenders	1989	DC 11B-26063
11B-08038	MB-16	Finishing B resin hoppers/blenders	1989	DC 11B-26064
11A-29112	MA-17	Finishing A Blender #1 resin hoppers/blenders	1989	DC 11A-26068
11A-29113	MA-20	Finishing A Blender #2 resin hoppers/blenders	1989	DC 11A-26069
<b><i>Finishing D Area</i></b>				
11D01001	00A-03 (FD1) aka (MD37)	Finishing D Extruders (WT, WU, WF, WJ and WK)	1971	Fin D Thermal Oxidizer 11D-01001

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Control Device</b>
11D-10138	MD38	Central Strand Dryer Exhaust Blower #1	1989	None
11D-10139	MD39	Central Strand Dryer Exhaust Blower #2	1989	None
11D-28091 11D-28094	00A-04 (FD2) aka MD7, MD8	Finishing D Extruders – HEAF Units - (2 - one runs at a time)	1992	Mist eliminators 011D- 28092 11D-28095
11D-11185	MD40	Additive Conveying System in Finishing D	1990	Dust Collector 11D-26044 <sup>1</sup>
NA	MD-33	Resin Conveying System	1989	Dust Collector 11D-26039
NA	MD-36	Resin Conveying System	1989	Dust Collector 11D-26040
11D-11187	MD-41	Resin Conveying System	1990	Dust Collector 11D-26044 <sup>1</sup>
MD-131	MD-131	Finishing D Preblend	1993	Dust Collector (11D-26053)
NA	E-4	WF Line - Mixer (S-2), Weigh Hopper (S-3), Compounder (S-5), Feed Hopper (S-6), Weigh Hopper (S-7)	1982	Dust Collectors C-3 & C-4
Compounder (s-5)	E-5	Uncontrolled part of WF Line Compounder	1982	None
11D-29017	FG1 (00A-05)	Finishing D Blender/Hopper Mat'l Handling	1971	See Dust Collector List Appendix 3
<b><i>Converting Lab</i></b>				
1512069	00O-01 (TC1)	Tech center converting lab WV, Extruder Line, and Pelletizers	1965	Converting Lab Dust Collectors
1529010	00O-02 (TC1)	Tech center converting lab WS, Extruder Line, and Pelletizers	1965	Converting Lab Dust Collectors
WS-E1	WS-E1	WS Extruder (WS-X1), WS screens (WS-S1)	App. 1988	None
WS-E2	WS-E2	WS Extruder (WS-X1), WS screens (WS-S1)	App. 1988	None

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Control Device</b>
WS-E3	WS-E3	WS Resin Feeder 1 (WS-F1), WS Resin Feeder 2 (WS-F2), WS Hopper 1 (WS-H1), WS Hopper 2 (WS-H2), WS Hopper 3 (WS-H3), WS Hopper 4 (WS-H4), Overflow to extruder (WS-X1), Chute to Extruder (WS-X1)	App. 1988	WS-DC1 (Dust collector/baghouse)
WV-E1	WV-E1	WV Extruder (WV-X1)	1988	None
WV-E2	WV-E2	WV Overflow to Extruder (WV-X1)	1988	None
WV-E3	WV-E3	WV Resin Feeder 1 (WV-F1), WV Resin Feeder 2 (WV-F2), WV Hopper 1 (WV-H1), WV Hopper 2 (WV-H2), WV Hopper 3 (WV-H3), Chute to Extruder (WV-X1)	1988	WV-DC1 (Dust Collector/baghouse)
<b>Laboratories</b>				
22B12313	00E-02 (CL1)	Color Lab	1963	None
22A27006 (QCL)	00E-03 (QC1)	Quality Control Lab	1960	None
<b>Pilot Plant</b>				
1904006, 1904006, 1904009 (ABS)	00I-02 (PP1)	Pilot Plant	1957	None
Various	00I-01 (SP1)	Soap Pilot Plant	1979	Absorber (Check List)
<b>Other Sources</b>				
	00P-01 (CGR)	Resin Coag Pits	1957	None
Various	00M-01 (FUG)	Equipment Leaks	1957	LDAR program
<b>Bulk Resin and Pellet Transfer Systems</b>				
11B-25001;	SC-28	Silo #28	1966	Dust Collector (2) 11B-26050, 11B-26021
11B-25002;	SC-29	Silo #29	1966	Dust Collector (2) 11B-26051, 11B-26022

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Control Device
11A25076;	SC-33	Silo #33	1967	Dust Collector (2)11A-26100, 11A-26054
11A-25077;	SC-34	Silo #34	1967	Dust Collector (2)11A-26101, 11A-26053
10E-25060;	SC-45	Silo #45	1971	Dust Collector 10E-26019
10E-25061;	SC-46	Silo #46	1971	Dust Collector 10E-26020
10A-25058	SC A1-1	Scale Tank (Resin A Scale Tank (Possibly double counted - R13-1886ED and R13-301)	1962	Dust Collector
10A-25059	SC A1-2	Scale Tank (Resin A Scale Tank (Possibly double counted - R13-1886ED and R13-301)	1962	Dust Collector
10C-25047;	SC-48 aka (E-1, E-2)	Silo #48 - Dust Collector C-1	1976	Dust Collector 10C-26010, 10C-26011
	E-3	Rail Car (S-4)	1976	Dust Collector
11D-25005;	MD-28	Silo #56	1988	Dust Collector 11D-26037, 11D-26038 (MD-29)
2S	MD-31	Railcar Unloading	1988	Baghouse(MD-30)
12-26029	12-10035	Railcar Spot #15 (?) (Resin railcar direct loading facility) (#3 resin loading?)	1989	Dust Collector 12-26029
11A-25078	55-57	Silo #57	1989	Dust Collector (11A-26071)
12-25007	55-95	Silo #95	1989	Dust Collector (12-26030)
C-5	C-5	Automatic bagging system (Resin C Resin Automatic Bagging System)	1989	Dust Collector
MC-8, MA-33, MB-13, MB-14	MC-8, MA-33, MB-13, MB-14	Truck Loading Lines (For direct loading, Pellets Only – Fin A/B/C)	1993	None
<b>Additional Site Dust Collectors, Silos, and Rail/Truck Loading Stations are included in Appendix 3 – Dust Collector List</b>				

**1= One control device for two sources. The site calculates emissions separately before applying the control efficiency for ease of calculation and for better process information.**

## 2.0 General Conditions

### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the data being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>CBI</b>	Confidential Business Information	<b>pph</b>	Pounds per Hour
<b>CEM</b>	Continuous Emission Monitor	<b>ppm</b>	Parts per Million
<b>CES</b>	Certified Emission Statement	<b>PSD</b>	Prevention of Significant Deterioration
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>psi</b>	Pounds per Square Inch
<b>CO</b>	Carbon Monoxide	<b>SIC</b>	Standard Industrial Classification
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>SIP</b>	State Implementation Plan
<b>DAQ</b>	Division of Air Quality	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>DEP</b>	Department of Environmental Protection	<b>TAP</b>	Toxic Air Pollutant
<b>FOIA</b>	Freedom of Information Act	<b>TPPU</b>	<u>Thermoplastic Product Process Unit</u>
<b>HAP</b>	Hazardous Air Pollutant	<b>TPY</b>	Tons per Year
<b>HON</b>	Hazardous Organic NESHAP	<b>TRS</b>	Total Reduced Sulfur
<b>HP</b>	Horsepower	<b>TSP</b>	Total Suspended Particulate
<b>lbs/hr or lb/hr</b>	Pounds per Hour	<b>USEPA</b>	United States Environmental Protection Agency
<b>LDAR</b>	Leak Detection and Repair	<b>UTM</b>	Universal Transverse Mercator
<b>M</b>	Thousand	<b>VEE</b>	Visual Emissions Evaluation
<b>MACT</b>	Maximum Achievable Control Technology	<b>VOC</b>	Volatile Organic Compounds
<b>MM</b>	Million		
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour		
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet Burned per Hour		
<b>NA</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		
<b>NO<sub>x</sub></b>	Nitrogen Oxides		
<b>NSPS</b>	New Source Performance Standards		
<b>PM</b>	Particulate Matter		

### **2.3. Permit Expiration and Renewal**

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.  
**[45CSR§30-5.1.b.]**
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.  
**[45CSR§30-4.1.a.3.]**
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.  
**[45CSR§30-6.3.b.]**
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.  
**[45CSR§30-6.3.c.]**

### **2.4. Permit Actions**

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
**[45CSR§30-5.1.f.3.]**

### **2.5. Reopening for Cause**

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

**[45CSR§30-6.6.a.]**

## **2.6. Administrative Permit Amendments**

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.  
**[45CSR§30-6.4.]**

## **2.7. Minor Permit Modifications**

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.  
**[45CSR§30-6.5.a.]**

## **2.8. Significant Permit Modification**

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.  
**[45CSR§30-6.5.b.]**

## **2.9. Emissions Trading**

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.  
**[45CSR§30-5.1.h.]**

## **2.10. Off-Permit Changes**

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
  - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
  - c. The change shall not qualify for the permit shield.
  - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
  - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

**[45CSR§30-5.9.]**

## **2.11. Operational Flexibility**

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

**[45CSR§30-5.8]**

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

**[45CSR§30-5.8.a.]**

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

**[45CSR§30-5.8.c.]**

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

**[45CSR§30-2.39]**

## **2.12. Reasonably Anticipated Operating Scenarios**

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
- b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
- c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

**[45CSR§30-5.1.i.]**

## **2.13. Duty to Comply**

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**[45CSR§30-5.1.f.1.]**

## **2.14. Inspection and Entry**

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

**[45CSR§30-5.3.b.]**

## **2.15. Schedule of Compliance**

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

**[45CSR§30-5.3.d.]**

## **2.16. Need to Halt or Reduce Activity not a Defense**

- 2.16.1. It shall not be a defense for a 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 permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

**[45CSR§30-5.1.f.2.]**

## **2.17. Emergency**

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

**[45CSR§30-5.7.a.]**

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

**[45CSR§30-5.7.b.]**

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

## **2.18. Federally-Enforceable Requirements**

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

## **2.19. Duty to Provide Information**

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

## **2.20. Duty to Supplement and Correct Information**

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit (renewal or revision) application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

## **2.21. Permit Shield**

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically

identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

**[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

**[45CSR§30-5.6.c.]**

## **2.22. Credible Evidence**

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

**[45CSR§30-5.3.e.3.B. and 45CSR38]**

## **2.23. Severability**

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

**[45CSR§30-5.1.e.]**

## **2.24. Property Rights**

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

**[45CSR§30-5.1.f.4]**

## **2.25. Acid Deposition Control**

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

**[45CSR§30-5.1.d.]**

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

**[45CSR§30-5.1.a.2.]**

### 3.0 Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40 C.F.R. §61.145(b) and 45CSR15]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1; State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.  
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.  
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

**[40 C.F.R. 82, Subpart F]**

- 3.1.8. **Risk Management Plan.** This stationary source, as defined in 40 C.F.R. § 68.3, is subject to Part 68. This stationary source submitted a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10. This stationary source shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

**[40 C.F.R. 68]**

- 3.1.9. Emissions sources and the associated emission points affected by permit R13-1886~~ED~~ and subject to 45CSR21 shall be subject to the standards and requirements set forth in Section 4.0 of permit R13-2678, as incorporated in Section 12 of this permit.

**[45CSR13, R13-1886~~ED~~, 4.1.9]**

- 3.1.10. Emissions sources and the associated emission points affected by permit R13-1886~~ED~~ and subject to 45CSR27, shall be subject to the standards and requirements set forth in Section 5.0 of permit R13-2678, as incorporated in Section 13 of this permit.

**[45CSR13, R13-1886~~ED~~, 4.1.10]**

- 3.1.11. The permitted facility shall comply with all applicable requirements of 40CFR63, Subpart JJJ - *National Emission Standards for Hazardous Air Pollutants Emissions: Group IV Polymers and Resins*, with the exception of any more stringent limitations set forth in this permit.

**[45CSR13, R13-1886~~ED~~, 4.1.11; 40 CFR 63 Subpart JJJ]**

Note: 40 C.F.R 63 Subpart JJJ requirements are incorporated by reference. These requirements are, for informational purposes, included in R30-10700010-2005, Part 1 of 5.

- 3.1.12. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 of permit R13-1886~~ED~~ and permit R13-2678 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

**[45CSR13, R13-1886~~ED~~, 4.1.12] [45CSR13, R13-2678, 4.1.3] [45CSR13, R13-2678, 5.1.4 State-Enforceable only]**

- 3.1.13. For the emission units listed in Section 1.0 of permit R13-1886~~ED~~, the permittee shall comply with all applicable requirements of 45CSR7 and any more stringent limits or requirements set forth in R13-1886~~ED~~.

**[45CSR13, R13-1886~~ED~~, 4.1.8]**

- 3.1.14. Emission of Visible Particulate Matter --No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any of the incinerators (the Latex Area Flare (30B-01002), the Latex Area RTO (30B-12130), the five Resin incinerators (10A-12021, 10C-01002, 10-E01002, 10G-01001, and 10J-01001), and the Finishing D Thermal Oxidizer (11D-01001)) which is twenty (20%) percent opacity or greater.

**[45CSR§6-4.3]**

- 3.1.15. The provisions of Section 3.1.14 of this permit shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.

**[45CSR§6-4.4]**

- 3.1.16. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator listed in Section 3.1.14 which are large enough to be individually distinguished in the open air.  
**[45CSR§6-4.5]**
- 3.1.17. The incinerators listed in Section 3.1.14, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.  
**[45CSR§6-4.6]**
- 3.1.18. The permittee shall give the utmost care and consideration to the potential harmful effects of the emissions resulting from the incineration of hazardous materials in the incinerators listed in Section 3.1.14. Evaluation of these facilities as to adequacy, efficiency and emission potential will be made on an individual basis by the Director, working in conjunction with other appropriate governmental agencies.  
**[45CSR§6-4.7]**
- 3.1.19. Due to unavoidable malfunction of equipment, emissions from an incinerator listed in Section 3.1.14 exceeding those provided for in 45CSR6 may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.  
**[45CSR§6-8.2]**
- 3.1.20. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in Section 3.1.21 of this permit.  
**[45CSR§7-3.1]**
- 3.1.21. The provisions of Section 3.1.20 of this permit shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.  
**[45CSR§7-3.2]**
- 3.1.22. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to Section 3.1.26 of this permit is required to have a full enclosure and be equipped with a particulate matter control device.  
**[45CSR§7-3.7]**
- 3.1.23. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of 45CSR7.  
**[45CSR§7-4.1]**
- 3.1.24. No person shall circumvent the provisions of 45CSR7 by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration.  
**[45CSR§7-4.3]**
- 3.1.25. During stack sampling pursuant to 45CSR§7-8.1, any stack serving any process source operation or air pollution control equipment on any process source operation that emits particulate matter and is subject to stack testing shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. **[45CSR§7-4.12]**

- 3.1.26. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.  
**[45CSR§7-5.1]**
- 3.1.27. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.  
**[45CSR§7-5.2]**
- 3.1.28. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.  
**[45CSR§7-8.1]**
- 3.1.29. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions from manufacturing process source operations.  
**[45CSR§7-8.2]**
- 3.1.30. Each heat exchange system in the Thermoplastic Product Process Unit is subject to 40 C.F.R §63.1328 and, accordingly, shall comply with 40 C.F.R §63.104, with the differences noted in paragraphs (c) through (h) of 40 C.F.R §63.1328.
- 3.1.31. Each process wastewater discarded from the Thermoplastic Product Process Unit is subject to 40 C.F.R §63.1330(b) (except as specified in paragraphs (d) and (e) of 40 C.F.R §63.1330) and, accordingly, shall comply with 40 C.F.R §§63.132 through 63.149, with the differences noted in paragraphs (1) through (22) of 40 C.F.R §63.1330(b).
- 3.1.32. Each maintenance wastewater generated in the Thermoplastic Product Process Unit is subject to 40 CFR §63.1330(c) (except as specified in paragraphs (d) and (e) of 40 CFR §63.1330) and, accordingly, shall comply with 40 CFR §63.105, with the differences noted in §63.1330(c).
- 3.1.33 **Benzene Waste Operations.** The permittee is subject to the Benzene Waste Operations NESHAP (40 C.F.R 61, Subpart FF) because the permittee owns and operates a “chemical manufacturing plant” as defined in 40 C.F.R §61.341. The chemical manufacturing plant does not manufacture benzene, but does use a raw material in its manufacturing operations that contains benzene as a contaminant. The chemical manufacturing plant's Total Annual Benzene (TAB) quantity is less than 1 Megagram/year (Mg/yr). Pursuant to 40 C.F.R §61.355(a)(5), the permittee shall:
- a. Comply with the following record keeping requirements specified in 40 C.F.R §§61.356(a) and (b)(1):
    - i. Maintain records of the quantity of each raw material received, by shipment, that is known to contain benzene.
    - ii. Maintain records of the benzene concentration in each shipment of each such raw material (either by

- (1) analyzing, using an EPA-approved method, a representative sample of each shipment, or (2) using a supplier's analysis for the shipment, or (3) using the contractual specification of the maximum benzene level allowed in the raw material).
- iii. Calculate the total benzene received in a calendar year in all such raw materials to demonstrate that this total is less than 1 Mg, and maintain a record of this calculation.
- iv. Maintain each record in a readily accessible location at the facility site for a period not less than 2 years from the date the information is recorded unless otherwise specified.
- b. Submit to the WV DAQ, in accordance with 40 C.F.R §61.357(b), a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 C.F.R §61.357 whenever there is a change in the process generating the waste stream that could cause the TAB quantity from facility waste to increase to 1 Mg/yr or more.
- c. Repeat the determination of TAB quantity from facility waste, in accordance with 40 C.F.R §61.355(a)(5)(ii), whenever there is a change in the process generating the waste that could cause the TAB quantity from facility waste to increase to 1 Mg/yr or more.

**[40 CFR 61, Subpart FF]**

- 3.1.34 Site Remediation MACT. In the event the Permittee conducts a site remediation that is not exempt from 40 C.F.R 63, Subpart GGGGG, pursuant to 40 CFR 63.7881(b), the Permittee shall comply with the applicable requirements in Subpart GGGGG with respect to such site remediation.  
**[40 C.F.R.63, Subpart GGGGG]**
- 3.1.35. **New applicable requirements.** If any applicable requirement becomes effective during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.  
**[45CSR§30-4.3.h.1.B.]**

### **3.2. Monitoring Requirements**

- 3.2.1. Each emissions unit with a visible emissions limit contained in this permit and identified as Pollution Control equipment in Appendix 3 of this permit shall be observed visually at least each calendar month during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. These checks shall be conducted by personnel trained in the practices and limitations of 40 C.F.R. 60, Appendix A, Method 22, or 45CSR7A. If visible emissions from any such emission unit are observed during these monthly observations, or at any other time, that appear to exceed the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. 60 Appendix A, Method 9 or 45CSR7A, whichever is appropriate, shall be conducted as soon as practicable, but no later than two weeks from the time of the observation. A Method 9 or 45CSR7A evaluation shall not be required if the visible emissions condition is corrected in a timely manner; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.  
**[45CSR§30-5.1.c.]**

- 3.2.2. Compliance with hourly limits shall be determined using monthly average emission calculations. Compliance with annual limits shall be determined using a "Rolling Yearly Total".  
**[45CSR§30-5.1.c.]**

- 3.2.3. For the purpose of determining compliance with Section 3.1.11. of this permit, the permittee shall conduct monitoring in accordance with the requirements set forth in 40 C.F.R.63, Subpart JJJ, including the equipment leak provisions under 40 C.F.R. §63.1331 for all equipment in organic HAP service in the TPPU (Latex and Resin production areas and associated activities within the TPPU) at the site.

**[45CSR13, R13-1886E, 4.2.1; 40 CFR 63 Subpart JJJ]**

### 3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
  - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
  - c. All periodic tests to determine mass emission from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

#### [WV Code § 22-5-4(a)(15) and 45CSR13]

- 3.3.2. As set forth under 40 CFR Part 60, Appendix A, the following test methods shall be employed for any performance stack testing required by the Director for emission units regulated under R13-1886~~ED~~:
- a. Acrylonitrile - Method 18
  - b. Methyl Methacrylate - Method 18
  - c. Styrene - Method 18
  - d. Total VOC - Method 25 or 25A
  - e. Nitrogen Oxides - Method 7, 7B, or 7E
  - f. Particulate Matter - Method 9

#### [45CSR13, R13-1886~~ED~~, 4.3.1]

- 3.3.3. Code specific process loss factors used under Sections 5.4.1 and 5.4.2 of this permit shall be determined using the stack testing methods specified under Section 3.3.2. [45CSR13, R13-1886~~ED~~, 4.3.2]

- 3.3.4. At such reasonable times as the Director may designate, the permittee shall be required to conduct or have conducted stack tests for the incinerators listed in Section 3.1.14 to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5 or other equivalent EPA approved method approved by the Director, in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or the Director's authorized representative, may at the Director's option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. **[45CSR§6-7.1.]**
- 3.3.5. The Director, or the Director's duly authorized representative, may conduct such other tests as the Director may deem necessary to evaluate air pollution emissions other than those noted above, from the incinerators listed in Section 3.1.14. **[45CSR§6-7.2.]**

### **3.4. Recordkeeping Requirements**

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

**[45CSR§30-5.1.c.2.A.] [45CSR13, R13-1886ED, 4.4.1] [45CSR13, R13-2678, 4.4.1] [45CSR13, R13-2678, 5.4.1, State-Enforceable only.]**

- 3.4.2. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site, or be accessible electronically at the site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche. **[45CSR§30-5.1.c.2.B.] [45CSR13, R13-2678, 3.4.1; R13-2288C, B.6]**

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.  
[45CSR§30-5.1.c. State-Enforceable only.]
- 3.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 of permit R13-1886ED and permit R13-2678, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.  
[45CSR13, R13-1886ED, 4.4.2, R13-2678, 4.4.2, R13-2678, 5.4.2 (State-Enforceable only)]
- 3.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 of permit R13-1886ED and in permit R13-2678, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- The equipment involved.
  - Steps taken to minimize emissions during the event.
  - The duration of the event.
  - The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- The cause of the malfunction.
- Steps taken to correct the malfunction.
- Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-1886ED, 4.4.3] [45CSR13, R13-2678, 4.4.3] [45CSR13, R13-2678, 5.4.3, State-Enforceable only.]

- 3.4.6. For the purpose of demonstrating compliance with Section 3.1.11 of this permit, the permittee shall maintain records in accordance with the requirements set forth in 40CFR63, Subpart JJJ.  
[40 CFR 63 Subpart JJJ; 45CSR34] [45CSR13, R13-1886E, 4.4.9]

### 3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.  
[45CSR§30-4.4. and 5.1.c.3.D.]
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.  
[45CSR§30-5.1.c.3.E.]

- 3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
 WVDEP  
 Division of Air Quality  
 601 57<sup>th</sup> Street SE  
 Charleston, WV 25304  
  
 Phone: 304/926-0475  
 FAX: 304/926-0478

**If to the US EPA:**

Associate Director  
 Office of Enforcement and Permits Review  
 (3AP12)  
 U. S. Environmental Protection Agency  
 Region III  
 1650 Arch Street  
 Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. Proof of payment of the appropriate fee shall be maintained at the site and shall be made available for inspection by the Secretary or his/her duly authorized representative.

[45CSR§30-8.]

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site, or accessible electronically at the site, for five (5) years from submittal of the certification.

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.

[45CSR§30-5.1.c.3.A.]

- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

- 3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance

with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

**[45CSR§30-5.1.c.3.C.]**

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

**[45CSR§30-5.1.c.3.B.]**

- c. Every report submitted under this subsection shall be certified by a responsible official.

**[45CSR§30.5.1.c.3.D.]**

- 3.5.9. For the purpose of demonstrating compliance with Section 3.1.11 of this permit, the permittee shall assemble and submit all reports in accordance ~~with~~ to the requirements set forth in 40CFR63, Subpart JJJ and Sections 3.5.1 through 3.5.3 of this permit.

**[40 CFR 63 Subpart JJJ; 45 CSR 34; R13-1886E, 4.5.1.]**

### **3.6. Compliance Plan**

- 3.6.1. None

### **3.7. Permit Shield**

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
  - a. 40 CFR 60 Subpart E - Standards of Performance for Incinerators. Basis for Applicability Determination: Applies only to burning solid waste. The facility ~~GE Washington~~ has decommissioned its non-hazardous solid waste incinerator.

- b. 40 CFR 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids constructed/modified after June 11, 1973 and prior May 19, 1978. Basis for Applicability Determination: Petroleum liquid storage vessels have capacities less than 40,000 gallons.
- c. 40 CFR 60 Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids constructed/modified after May 18, 1978 and prior July 23, 1984. Basis for Applicability Determination: Petroleum liquid storage vessels have capacities less than 40,000 gallons.
- d. 40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) constructed/modified after July 23, 1984. Basis for Applicability Determination: All the Tanks at the ~~Part 1-F~~ facility are exempt from the requirements of the Subpart Kb based either on time when they were built, size/pressure or tank content.
- e. 40 CFR 60 Subpart VV - Equipment Leaks of VOC for the Synthetic Organic Chemical Manufacturing Industry (SOCMI). Basis for Applicability Determination: ~~The facility GE Washington~~ does not manufacture as an intermediate or final product any of the listed SOCMI chemicals.
- f. 40 CFR 60 Subpart DDD - Standards of Performance for VOC Emissions from the Polymer Manufacturing Industry. Basis for Applicability Determination: ~~The facility GE Washington~~ does not have SOCMI air oxidation unit processes.
- g. 40 CFR 60 Subpart III - Standards of Performance for VOC Emissions from SOCMI Air Oxidation Unit Processes. Basis for Applicability Determination: ~~The facility GE Washington~~ does not manufacture as an intermediate or final product any of listed SOCMI chemicals.
- h. 40 CFR 60 Subpart KKK - Standards of Performance for Equipment Leaks of VOC from On-Shore Natural Gas Processing Plants. Basis for Applicability Determination: The structural wells at the ~~facility GE Washington site~~ do not meet the applicability criteria because ~~it GE Washington~~ burns raw natural gas directly from its natural gas wells without extracting any natural gas liquids, fractionating any mixed natural gas, or sweetening the natural gas prior to burning.
- i. 40 CFR 60 Subpart LLL - Standards of Performance for Onshore Natural Gas Processing; SO<sub>2</sub> Emissions. Basis for Applicability Determination: The structural wells at the ~~facility GE Washington~~ site do not meet the applicability criteria because ~~it GE Washington~~ burns raw natural gas directly from its natural gas wells without extracting any natural gas liquids, fractionating any mixed natural gas, or sweetening the natural gas prior to burning.
- j. 40 CFR 60 Subpart NNN - Standards of Performance for VOC Emissions from SOCMI Distillation Operations. Basis for Applicability Determination: ~~The facility GE Washington~~ does not manufacture as an intermediate or final product any of listed SOCMI chemicals.
- k. 40 CFR 60 Subpart RRR - Standards of Performance for VOC Emissions from SOCMI Reactor Process. Basis for Applicability Determination: ~~The facility GE Washington~~ does not manufacture as an intermediate or final product any of listed SOCMI chemicals.
- l. 40 CFR Part 63, Subpart I - National Emission Standards for Organic Hazardous Air Pollutants for certain processes subject to the negotiated regulation for Equipment Leaks. Basis for Applicability Determination: Subpart JJJ §63.1311(g)(1).
- m. 40 CFR 63 Subpart U - National Emission Standards for HAPs for Group I Polymers and Resins. Basis for Applicability Determination: The latex area is not subject to this requirement, but is rather subject to 40 CFR 63 Subpart JJJ, as stated in Subpart U under 63.480(f)(4).
- n. 40 C.F.R. Part 63, Subpart FFFF - National Emission Standards for Hazardous Air Pollutant Emissions: Miscellaneous Organic Chemical Manufacturing (MON). Basis for Applicability Determination: ~~The facility~~

~~GE Washington~~ has operations that compound solid resins produced at the site with additives to produce compounded polymer plastic resin pellets. These operations are exempted from the requirements of this Subpart per 63.2435(c) (as fabricating operations). The facility's ~~GE Washington~~ Finishing (or Compounding) operation does not involve processing with HAP solvent and is not intended to remove residual HAP monomer.

o. The facility has only one operating scenario; therefore, the requirements of Section 2.12. "Reasonably Anticipated Operating Scenarios" are not applicable and it is not required to certify compliance with them.

p. The facility is not a subject to a Compliance Plan (as per Requirement 3.6.); therefore, the requirements of Section 2.15. "Schedule of Compliance" are not applicable and it is not required to certify compliance with them.

q. The facility is not subject to Title IV of the Clean Air Act; therefore, the requirements of Section 2.25. "Acid Deposition Control" are not applicable and it is not required to certify compliance with them.

## 4.0 Source-Specific Requirements [Latex Processing Area]

### 4.1. Limitations and Standards

#### 4.1.1. Latex Building A & B Process Equipment and Recovery System

The Latex A & B Process Equipment and Recovery System has one Group 1 continuous process vent that must comply with 40 C.F.R §63.1315.

**[45CSR34; 40 C.F.R § 63.1315]**

4.1.1.1. In order to comply with 40 C.F.R §63.1315, the permittee shall reduce emissions of organic HAP from the Group 1 continuous process vent using one of the compliance options set forth in 40 C.F.R 63.113(a). The permittee currently uses a flare (Latex Area Flare) as the compliance option.

**[45CSR34; 40 C.F.R. §§63.113(a)]**

4.1.1.2. The permittee shall comply with 40 CFR 63.11(b) for the Latex Area Flare as follows:

- a. Owners or operators using flares to comply with the provisions of 40 C.F.R. 63 Subpart JJJ shall monitor these control devices to assure that they are operated and maintained in conformance with their designs.
- b. Flares shall be steam-assisted, air-assisted, or non-assisted.
- c. Flares shall be operated at all times when emissions may be vented to them.
- d. Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in 40 C.F.R 60 appendix A shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.
- e. Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- f. An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of 40 C.F.R. § 63.11, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of 40 C.F.R. § 63.11, or adhering to the requirements in paragraph (b)(6)(i) of 40 C.F.R. § 63.11.

**[45CSR34, 40 C.F.R § 63.11]**

4.1.1.3. Emissions from the Latex Area flare (Emission Point ID 30B-01002) shall not exceed the following:

Pollutant	Lbs/Hr	Lbs/Yr
Styrene	0.240	105
Acrylonitrile	1.000	200
1,3 Butadiene	40.000	43,000
Total VOC*	50.000	63,000
NOx	5.000	6,000

\* Includes Acrylonitrile, Butadiene and Styrene.

**[45CSR13, R13-1009A, A.1.]**

4.1.1.4. The Latex Area Flare unit shall be operated in such a manner that a minimum of 97% of all incoming volatile organic compounds (VOCs) will be destructed by the flare.

**[45CSR13, R13-1009A, A.2.]**

Note: Compliance with this requirement has been demonstrated through a performance test.

4.1.2. The permittee shall be limited to the regulated pollutants and associated emission rates from those sources and respective emission points identified in Table 4.1.2 of this permit.

**Table 4.1.2.**

Emission Point	Source		Pollutant	Emissions	
	ID	Description		Hourly (PPH)	Annual (TPY)
LX5	001-02	Latex Wash Tanks	1, 3 Butadiene	---	0.21
LX13	001-0C	Latex Recovery Tank	1, 3 Butadiene	---	0.27
LX7	001-03	Latex Flare KO Tank	1, 3 Butadiene	---	0.09
LX6	001-04	Latex ER KO Tank	1, 3 Butadiene	---	0.02
CGL	001-07	Latex Coag Pits	1, 3 Butadiene	---	0.9*

\* State Enforceable Only

**[45CSR13, R13-1886E, 4.1.7.]**

4.1.3. Emissions from the Catalytic Thermal Oxidizer (CTO) [Control Device ID 30B-12130] and Latex Blend Tank 38 shall not exceed the following limits:

Table 4.1.3.

Pollutant	Emission Point ID LX14 Vapor Collection and CTO		Emission Point ID LX4 Latex Blend Tank 38		Total	
	PPH	TPY	PPH	TPY	PPH	TPY
NO <sub>x</sub>	8.0	32.0	---	---	8.0	32.0
CO	2.0	9.0	---	---	2.0	9.0
SO <sub>2</sub>	0.5	1.0	---	---	0.5	1.0
PM <sub>10</sub>	1.0	2.0	---	---	1.0	2.0
Total VOCs*	9.1	2.4	0.9	2.1	9.9	4.4
Acrylonitrile	0.15	0.09	0.01	0.01	0.16	0.1
1, 3 Butadiene	6.42	1.65	0.29	0.71	6.7	2.4

\*Includes 1,3 butadiene (TAP, HAP), acrylonitrile (TAP, HAP), 2-butene, 4-vinylcyclohexane, styrene (HAP), ethylbenzene (HAP), xylene (HAP), cumene (HAP), alpha-methyl styrene, and other nonHAP, nonTAP VOCs.

**[45CSR13, R13-2288C, A.1.]**

4.1.4. The CTO shall be constructed, maintained, and operated so to maintain a minimum VOC control efficiency of 99% for total VOC's released through Emission Point LX14.

**[45CSR13, R13-2288C, A.2.]**

4.1.5. Emissions sources and the associated emission points (LX4 & LX14) affected by permit R13-2288C and subject to 45CSR21, shall be subject to the standards and requirements set forth in Section 4.0 of permit R13-2678 (Section 3.4.5 and Section 12.0 of this permit) and any amendments thereto, provided that compliance with any more stringent

limitations set forth under Section 4.0 of this permit is also demonstrated.  
**[45CSR13, R13-2288C, A.3.]**

- 4.1.6. Emissions sources and the associated emission points (LX4 & LX14) affected by permit R13-2288C and subject to 45CSR27, shall be subject to the standards and requirements set forth in Section 5.0 of permit R13-2678 (Section 3.4.5 and Section 13.0 of this permit) and any amendments thereto, provided that compliance with any more stringent limitations set forth under Section 5.0 of this permit is also demonstrated.  
**[45CSR13, R13-2288C, A.4, State-Enforceable only]**
- 4.1.7. Each of the Latex Tanks FST ##5-17, 25-33, 35-39 has a Group 2 batch process vent and shall comply with 40 C.F.R § 63.1321 and the applicable provisions referenced therein.  
**[45CSR34; 40 C.F.R. §§63.1321][Latex Blend Tanks/Screeners except FST#21,22 & 23; 001-05(LX14), Latex Blend Tank #38; 001-06(LX4)]**
- 4.1.8. Each of the Latex Tanks FST #21, 22, and 23 is a surge Control vessel that is subject to the applicable provisions of 40 C.F.R §63.1331 and, accordingly, shall comply with 40 C.F.R §63.170.  
**[45CSR34; 40 C.F.R. §63.1331] [Emission Units: FST # 21, 22 & 23]**
- 4.1.9. The Latex Process Area is subject to the equipment leak requirements of 40 C.F.R. § 63.1331 and, accordingly, shall comply with the applicable provisions of 40 CFR 63 Subpart H.  
**[40 CFR 63.1331]**

## **4.2. Monitoring Requirements**

- 4.2.1. For the purpose of demonstrating compliance with the guaranteed CTO performance requirement set forth in Section 4.1.4, the permittee shall operate and maintain a device that continuously measures and records the combustion temperature at least once every fifteen (15) minutes. Compliance with the combustion temperature requirement, as established in accordance with the requirements set forth in Section 4.3.1 of this permit, shall be determined based on daily average temperature, which shall be calculated based on temperature measurements made at least once every fifteen (15) minutes during the time periods when the control device is operational (not including Stand-By mode). **[45CSR13, R13-2288C, B.4.]**
- 4.2.2. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr particulate emissions based on CTO fuel usage and emission factors (AP-42 or site-specific testing) to show compliance with the PM-10 emission limit in Section 4.1.3 of this permit.  
**[45CSR§30-5.1.c.]**
- 4.2.3. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr Acrylonitrile, Styrene, 1,3 Butadiene, CO, NO<sub>x</sub>, SO<sub>2</sub> and Total VOC emissions based on latex area production, emission factors (AP-42 or site-specific testing), and (for acrylonitrile, styrene, 1,3-butadiene, and Total VOC) CTO control efficiency to show compliance with Sections 4.1.1.3, 4.1.2 (except for LX6 and LX7), & 4.1.3 of this permit.  
**[45CSR§30-5.1.c.]**
- 4.2.4. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr 1,3-butadiene emissions based on emission factors (AP-42 or site-specific testing) to show compliance with Section 4.1.2 (LX6 and LX7 only).  
**[45CSR§30-5.1.c.]**

#### 4.2.5. Group 1 Process Vents.

4.2.5.1. To demonstrate compliance with Section 4.1.1 for Group 1 process vents using a flare, a device (including but not limited to a thermocouple, ultra-violet beam sensor, or infrared sensor) capable of continuously detecting the presence of a pilot flame shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

**[45CSR34; 40 C.F.R. §§63.114(a) and 63.114(a)(2)] [LX1]**

### 4.3. Testing Requirements

4.3.1. For the purpose of demonstrating compliance with the minimum CTO performance requirement set forth in Section 4.1.4, the permittee shall conduct performance stack testing of the catalytic oxidizer system. The permittee shall conduct such testing within one hundred and eighty (180) days after the CTO start-up, at the maximum permitted operating parameters of the facility. This test will be used to demonstrate compliance with the emission limits established in Section 4.1.3, and establish the minimum operating temperature in which the CTO can provide a minimum VOC control efficiency of 99%. Upon determining the minimum allowable operating temperature of the CTO, the permittee shall demonstrate compliance in accordance with ~~to~~ the requirements set forth in Section 4.2.1 of this permit.

**[45CSR13, R13-2288C, B.3.] [LX14]**

4.3.2 Any required compliance demonstrations for the Latex Area Flare (LX1) shall be conducted in accordance with 40 CFR 63.1333(e).

**[45CSR34, 40 C.F.R §63.1333(e)]**

### 4.4. Recordkeeping Requirements

4.4.1. For the purpose of determining compliance with the maximum permitted emission limits set forth in Section 4.1.3 of this permit for the CTO, the permittee shall maintain monthly and annual records of CTO fuel usage and latex area production.

**[45CSR13, R13-2288C, B.2.] [45CSR§30-5.1.c.]**

4.4.2. CTO (LX14) Recordkeeping :

4.4.2.1. The permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the CTO during which emissions occur in excess of those which are permitted in Section 4.1.3 of this permit. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction

**[45CSR13, R13-2288C, B.5.] [LX14]**

4.4.3. **Group 1 Process Vents.** To demonstrate compliance with Section 4.1.1.1 for Group 1 process vents using a flare as a control device, the permittee shall keep the following records up-to-date and readily accessible: **[45CSR34; 40 C.F.R. §63.118(a)] [LX1]**

4.4.3.1. Hourly records of whether the device described in Section 4.1.1.2 was continuously operating and whether the pilot flame was continuously present during each hour. **[45CSR34; 40 C.F.R. §63.118(a)(1) and Table 3 of 40 C.F.R. 63, Subpart G] [LX1]**

4.4.3.2. Records of the times and duration of all periods during which all pilot flames were absent or the device described in Section 4.1.1.2 was not operating shall be kept rather than daily averages. **[45CSR34; 40 C.F.R. §63.118(a)(2) and Table 3 of 40 CFR 63 Subpart G] [LX1]**

4.4.3.3. With respect to the Latex Area flare (LX1), the permittee shall keep an up-to-date, readily accessible record of the following data:

- a. Flare design (i.e., steam-assisted, air-assisted, or non-assisted);
- b. All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by 40 C.F.R. §63.116(a).
- c. All periods during the compliance determination when the pilot flame was absent. **[45CSR34; 40 C.F.R. §63.117(a)] [LX1]**

#### **4.5. Reporting Requirements**

4.5.1. The permittee shall submit Periodic Reports as described in 40 C.F.R. § 63.1335. **[45CSR34; 40 C.F.R. §63.1335]**

#### **4.6. Compliance Plan**

None

## 5.0 Source-Specific Requirements [Resin Process]

### 5.1. Limitations and Standards

- 5.1.1. Emissions of volatile organic compounds from the Caustic Scrubber/Carbon Canister system emission point ID 09-12010, shall be limited to the following:

Table 5.1.1

Emission Point ID	Source Description	Allowable Emissions (lb/hr)	Allowable Emissions (TPY)
09-12010 Caustic Scrubber	Process Units <sup>1</sup>	0.4	0.7
RJ6 Carbon Canister <sup>2</sup>	Polybutyl Acrylate Latex Storage Tanks #4 and #5	0.1	0.1

<sup>1</sup> Process Units consist of Butyl Acrylate/triallyl cyanurate Mix Tank, Butyl Acrylate/triallyl cyanurate Feed Tank, 30 Gallon Reactor Mix Pot, Polybutyl Acrylate Reactor, Polybutyl Acrylate Latex Hold Tank, Polybutyl Acrylate Startup Tank, and Polybutyl Acrylate Latex Storage Tanks #1, 2, 3, and 6.

<sup>2</sup> As set forth in Section 5.1.2 used for periods when the Resin A catalytic oxidizer, 10A-V28, is not operating, emissions from Polybutyl Acrylate Latex Storage Tanks #4 and #5 will be vented to RJ6, carbon canister, for odor abatement.

**[45CSR13, R13-2084CB, A.3.]**

- 5.1.2. Emissions from Polybutyl Acrylate Latex Storage Tanks #4 and #5 will be vented through the Resin A catalytic oxidizer, identified and permitted as Emission Point ID No. 10A-V28 in existing current permit R13-1886ED. For periods when the Resin A catalytic oxidizer is not operating, emissions from the two tanks will be vented to carbon canister, emission point ID RJ6, which shall not exceed the allowable limits set forth in Section 5.1.1 of this permit.

**[45CSR13, R13-2084CB, A.4.]**

- 5.1.3. Emissions of particulate matter from the Supersack Hopper and the PBA Process Solution Tanks to the atmosphere shall be limited to the following:

Table 5.1.3

Emission Point ID	Source Description	Allowable Emissions (lb/hr)	Allowable Emissions (TPY)
10J-V26013	Supersack Hopper	0.2	0.8
10J-V26014	Solution Tanks <sup>3</sup>	0.13	0.58

<sup>3</sup> The solution tanks consist of Activator Make-up Tank, Activator Feed Tank, Tetrasodium Pyrophosphate Solution Make-up Tank, Polybutyl Acrylate FeSO<sub>4</sub> Make-up Tank, Polybutyl Acrylate FeSO<sub>4</sub> Feed Tank, Solution Make-up Tank, Sodium Formaldehyde Sulfoxalate Solution Feed Tank, Ethylene-dinitrilo-tetraacetic acid Solution Feed Tank, and Tetrasodium Pyrophosphate Solution Feed Tank.

**[45CSR13, R13-2084CB, A.6.]**

- 5.1.4. Emissions of Sulfur Dioxide (SO<sub>2</sub>), which are generated from the Sodium Formaldehyde Sulfoxalate storage tank designated as 10J-08083, shall be limited to 0.03 pounds per hour or 0.13 tons per year.

**[45CSR13, R13-2084CB, A.7.]**

5.1.5. Emissions from Emission Point C-2 shall not exceed the following:

<b>Pollutant</b>	<b>lb<sub>m</sub>/hr</b>	<b>ton/yr</b>
Particulate Matter	0.075	0.20
<b>TOTAL:</b>	<b>0.075</b>	<b>0.20</b>
<u>VOC</u>		
Acrylonitrile	0.282	0.74
Methyl methacrylate	0.422	1.11
Styrene	0.948	2.49
Others (including 4-vinyl-cyclohexane, ethyl-benzene, cumene, and alpha-methyl-styrene)	0.137	0.36
<b>TOTAL:</b>	<b>1.79</b>	<b>4.7</b>

**[45CSR13, R13-1351A, A.1.]**

5.1.6. Resin as fed to the flash-fluidized bed dryer system shall not exceed 9,500 lb<sub>m</sub>/hr (dry basis) or 50,000,000 lb<sub>m</sub> per year (dry basis).

**[45CSR13, R13-1351A, A.2.]**

5.1.7. Wet resin fed to the flash-fluidized bed dryer system shall not contain acrylonitrile in excess of 2,400 ppm.

**[45CSR13, R13-1351A, A.3.]**

5.1.8. Carbon bed absorption system as applied to combination flash-fluidized bed drying system shall reduce potential acrylonitrile emissions by 98.76%. Potential emissions shall be based on inlet concentration to the flash dryer. **[45CSR13, R13-1351A, A.4.]**

5.1.9. Secondary acrylonitrile emissions associated with waste water treatment shall not be included in calculations determining the efficiency as described under Section 5.1.8 of this permit above and such emissions shall not exceed 0.076 lb<sub>m</sub>/hr or 0.20 ton/yr.

**[45CSR13, R13-1351A, A.5.]**

5.1.10. The Resin C Dryer shall comply with all applicable requirements of 45CSR27 provided, however, that compliance with any more stringent limitations set forth under Sections 5.1.5 to 5.1.9 of this permit is also demonstrated. Under permit R13-1351A it has been determined that compliance with the provisions set forth under Sections 5.1.8 & 5.1.9 of this permit above meets BAT under 45CSR27.

**[45CSR13, R13-1351A, B.3, State-Enforceable only.]**

5.1.11. Emissions of styrene, acrylonitrile, and methyl methacrylate generated as a result of operations associated with Reactor #3 [10C-04008], Reactor #4 [10C-04009], Reactor #5 [10C-04010], Coag #2 Tank [10C-08115], AOE Melt Tank [10C-08111], AOE Mix Tank [10C-08112], AOE Feed Tank [10C-08114], NOE Feed Tank [10C-08113], and Vacuum Drum Filter [10C-28052] shall be ducted to the existing Resin C catalytic incinerator [10C-01002].

**[45CSR13, R13-1588B, A.1.]**

- 5.1.12. Emissions to the atmosphere from the stack [C1] venting the Resin C catalytic incinerator [10C-01002] shall not exceed the following:

Pollutant	lb <sub>m</sub> /hr	lb <sub>m</sub> /yr
Styrene	2.00	8,000
Acrylonitrile	1.95	17,082
Methyl Methacrylate	2.20	10,000
Total VOC	3.70	19,000
NO <sub>x</sub>	17.00	148,600

[45CSR13, R13-1588B, A.2.]

- 5.1.13. The maximum allowable emissions released to the atmosphere in association with the operation of RESIN A shall be limited to the regulated pollutants and emission rates from the associated emission points listed in Table 5.1.13 of this permit.

Table 5.1.13.

Source	Emission Point ID	Pollutant	Emission Rates	
			Hourly (PPH)	Annual (TPY)
Latex Storage Tanks	10A-V16 10A-V18 10A-V20 10A-V22 10A-V24	Acrylonitrile	4.5	1.0
		Methyl Methacrylate	0.2	0.1
		Styrene	0.3	0.1
		Total VOC	6.1	1.2
Catalytic Incinerator	10A-V28	Nitrogen Oxides	6.10	17.3
		Sulfur Dioxide	1.90	8.4
		Particulate Matter	<u>0.02</u> <del>0.25</del>	<u>0.07</u> <del>1.10</del>
		Carbon Monoxide	<u>0.25</u> <del>0.02</del>	<u>1.10</u> <del>0.07</del>
		Acrylonitrile	0.82	2.31
		Methyl Methacrylate	1.27	2.39
		Styrene	0.60	2.01
		Total VOC	1.76	7.37
Pre-dryer and Dryer	10A-V32 10A-V34	Particulate Matter	0.40	0.8
		Acrylonitrile	0.85	2.38
		Methyl Methacrylate	12.84	20.38

		Styrene	23.47	77.28
		Total VOC	32.36	133.01
Resin Transfer	10A-V36 10A-V38 10A-V40 10A-V42	Particulate Matter	1.20	1.00
		Acrylonitrile	0.02	0.02
		Methyl Methacrylate	0.62	0.64
		Styrene	0.62	0.64
		Total VOC	1.64	1.68

[45CSR13, R13-1886ED, 4.1.2]

- 5.1.14. The maximum allowable emissions released to the atmosphere in association with the operation of RESIN E shall be limited to the regulated pollutants and emission rates from the associated emission points listed in Table 5.1.14 of this permit.

Table 5.1.14.

Source	Emission Point ID	Pollutant	Emission Rates	
			Hourly (PPH)	Annual (TPY)
Latex Storage Tanks	10E-V38 10E-V40 10E-V42 10E-V44 10E-V46 10E-V48 10E-V50	Acrylonitrile	1.0	0.9
		Total VOC	5.0	2.43
Catalytic Incinerator	10E-V56	Nitrogen Oxides	20.0	34.4
		Sulfur Dioxide	3.06	8.16
		Carbon Monoxide	0.24	0.24
		Particulate Matter	0.02	0.09
		Acrylonitrile	3.0	4.8
		Total VOC	13.0	24.0
Dryer	10E-V60	Particulate Matter	1.0	0.64
		Acrylonitrile	8.0	7.9
		Total VOC	35.0	45.0
Resin Transfer	10E-V62 10E-V64 10E-V66 10E-V68 10E-V70 10E-V72 10E-V74	Particulate Matter	1.0	1.92
		Acrylonitrile	1.0	0.05
		Total VOC	2.0	1.75

[45CSR13, R13-1886ED, 4.1.3]

- 5.1.15. The maximum allowable emissions released to the atmosphere in association with the operation of RESIN J shall be limited to the regulated pollutants and emission rates from the associated emission points listed in Table 5.1.15 of this permit.

Table 5.1.15.

Source	Emission Point ID	Pollutant	Emission Rates	
			Hourly (PPH)	Annual (TPY)
Latex Storage Tanks	10J-V04	Acrylonitrile	1.0	1.2
	10J-V06	Total VOC	5.0	2.9
	10J-V08			
10J-V10				
Catalytic Incinerator	10J-V14	Nitrogen Oxides	14.0	35.0
		Sulfur Dioxide	4.08	15.3
		Carbon Monoxide	0.19	0.83
		Particulate Matter	0.02	0.08
		Acrylonitrile	6.0	5.1
		Styrene	0.59	1.17
		Total VOC	15.0	12.0
Dryer	10J-V20	Particulate Matter	1.0	0.96
		Acrylonitrile	15.0	12.0
		Total VOC	222.0	230.0
Resin Transfer	10J-V18	Particulate Matter	1.0	1.92
	10J-V22	Acrylonitrile	1.0	0.05
	10J-V24			
10J-V26	Total VOC	2.0	1.75	

[45CSR13, R13-1886ED, 4.1.4]

- 5.1.16. The permittee shall vent process generated acrylonitrile, styrene, methyl methacrylate, and total VOC, specified in Sections 5.1.13, 5.1.14, and 5.1.15 of this permit, to the corresponding catalytic incinerators at all times, except in the event of an unavoidable malfunction, emergency repair, or when no process vent emissions are occurring. In the event of an unavoidable malfunction or emergency repair, process vent emissions to the atmosphere shall be minimized and the permittee shall take the following actions:
- The Director shall be notified and any variances requested in accordance with the requirements set forth in 45CSR27.
  - The relevant coagulant feed shall be immediately terminated.
  - The relevant reaction process will be discontinued once the in-process material is processed.
- [45CSR13, R13-1886ED, 4.1.5]

- 5.1.17. The catalytic incinerators within RESIN A, RESIN E, and RESIN J shall be operated and maintained so to provide a minimum destruction efficiency of 92% for total VOC and acrylonitrile emissions.  
[45CSR13, R13-1886ED, 4.1.6]
- 5.1.18. The permittee shall be limited to the regulated pollutants and associated emission rates from those sources and respective emission points identified in Table 5.1.18 of this permit.

Table 5.1.18

Emission Point	Source		Pollutant	Emissions	
	ID	Description		Hourly (PPH)	Annual (TPY)
RC3	003-03	Resin C Blend Tanks	Acrylonitrile	---	0.8
RG3	005-03	Resin G Blend Tanks	Acrylonitrile	---	1.0
G1	005-01	Resin G Fume Burner	NO <sub>x</sub>	---	39*
			VOC	2.0	6.0
			Acrylonitrile	2*	1.0*
G4	005-02	Resin G Dryer	VOC	25.0	80.0
			Acrylonitrile	5*	4.5*
CGR	00P-01	Resin Coag Pits	Acrylonitrile	---	2.1*
RN1	00D-01	Resin C & G Transfer	Acrylonitrile	---	0.3*

\*State Enforceable only.

[45CSR13, R13-1886ED, 4.1.7.]

- 5.1.19. Group 1 Continuous Process Vents:  
Each of the five Resin buildings A, C, E, G, and J contains combined vents from the reaction, coagulation, and vacuum steps, and each of these combined vents is considered a Group 1 Continuous Process Vent under subpart JJJ that is required to comply with 40 C.F.R §63.1315.  
[45CSR34, 40 C.F.R § 63.1315] [Resin Building A, C, E, G & J Reactor-Coagulation-Vacuum systems]
- 5.1.20. Group 2 Process Vents :  
Each of the five Resin buildings A, C, E, G, and J contains a Resin dryer, the exit of which is considered a Group 2 continuous process vent under Subpart JJJ that is required to comply with 40 C.F.R §63.1315.  
[45CSR34, 40 C.F.R § 63.1315] [Resin A,C,E,G & J dryers; 002-02,003-02,004-02,005-02,006-02]
- 5.1.21. Each of the following Resin Tanks is a surge control vessel that is subject to the applicable provisions of 40 C.F.R §63.1331 and, accordingly, shall comply with 40 C.F.R §63.170: Resin A, LST # 2, 4-7; Resin C, LST # 4-8; Resin E, LST # 1-5, 7 & 8; Resin G, LST # 1-6; Resin J, LST # 3-6.  
[45CSR34; 40 C.F.R. §63.1331]
- 5.1.22. The Resin Process Area is subject to the equipment leak requirements of 40 C.F.R. § 63.1331 and, accordingly, shall comply with the applicable provisions of 40 CFR 63 Subpart H.  
[40 C.F.R §63.1331; 45CSR34]

## 5.2. Monitoring Requirements

- 5.2.1. The permittee has been approved to use, and shall comply with, the following alternative monitoring to assure that the catalytic incinerators operate in compliance with 40 C.F.R 63 Subpart JJJ:
- Continuous flow monitoring and recording of the volumetric flow stream (which translates into space velocity across the catalyst bed);
  - Continuous inlet (inlet to the catalyst bed; after the incinerator burner) temperature recording;
  - Annual analysis of catalyst activity; and
  - Recording of catalyst bed replacement date.

**[45CSR34, 40 C.F.R 63, Subpart JJJ] [Resin A, C, E, G & J Catalytic Incinerators; 002-01,003-01,004-01,005-01,006-01]**

Note: According to Notification of Compliance Status following are the Minimum parameter monitoring levels for the catalytic Incinerators:

Table 5A – Minimum parameter monitoring levels for the catalytic Incinerators

Resin Building	Minimum Catalyst Bed Inlet Temperature (deg F)	Minimum Volumetric Flow (CFM)
Resin A	744	1,500
Resin C	736	1,000
Resin E	750	2,000
Resin G	744	1,500
Resin J	702	1,500

- 5.2.2. Group 2 Continuous Process Vents

Resin Dryers with  $1 < TRE \leq 4$ :

To comply with Section 5.1.20 of this permit, continuously monitor and record emissions (according to 40 C.F.R 63, Subpart JJJ) from the dryers to verify that the daily average TRE index value for each dryer vent does not fall below 1.0.

**[45CSR34, 40 C.F.R 63.1315(a), 40 C.F.R 63.114(b)][Resin A, G & J dryers]**

- 5.2.3. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr particulate emissions based on material throughput, emission factors (AP-42 or site specific testing) and control system efficiency to show compliance with Sections 5.1.3, and 5.1.13 to 5.1.15 of this permit.

**[45CSR§30-5.1.c.]**

- 5.2.4. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr Acrylonitrile, Cumene, Ethyl Benzene, Styrene, VOC, SO<sub>2</sub>, Methyl Methacrylate, Other VOCs, NO<sub>x</sub> and CO emissions based on material throughput, emission factors (AP-42 or site specific testing) and control efficiency to show compliance with Sections 5.1.1, 5.1.4, 5.1.5, 5.1.12, 5.1.13, 5.1.14, 5.1.15 and 5.1.18 of this permit.

**[45CSR§30-5.1.c.]**

## 5.3. Testing Requirements

- 5.3.1. The caustic scrubber (ID # 09-12010) liquor pH shall be tested and recorded on a monthly basis. The scrubber liquor shall be replaced when its pH drops below a value of 9.

**[45CSR13, R13-2084CB, A.5.]**

- 5.3.2. At the request of the Director, the method of determining compliance with the emissions limits presented in

Section 5.1.1 of this permit will be EPA Method 25 and/or Method 25A stack test conducted on the outlet of the Caustic Scrubber/Carbon Canister System. The results of this test will be converted to code specific process loss factors (lb loss/M lb production).

Actual emissions of VOC from the Caustic Scrubber/Carbon Canister system will be based on code specific process loss factors (lb loss / M lb production) and actual production (as shown in the following example calculation):

$$\text{lb pollutant emitted (VOC) /calendar quarter} = (\text{M lb production of code A} / \text{calendar quarter}) \times (\text{lb pollutant} / \text{M lb production of Code A}) \times (1 - \text{destruction efficiency}/100)$$

Hourly emissions will be estimated in a similar manner by applying the maximum hourly production of the PBA process by the code specific process loss factor. If the code specific emissions factor shows that the hourly emissions can exceed the hourly allowable emissions limit the daily actual production divided by 24 hours will be used as the actual hourly production.

**[45CSR13, R13-2084CB, B.1.]**

- 5.3.3. At the request of the Director, the method of determining compliance with the emissions limits presented in Section 5.1.3 of this permit will be EPA Method 9 stack test conducted on the outlet of the supersack hopper dust collector and solution tank dust collector respectively.

**[45CSR13, R13-2084CB, B.2.]**

- 5.3.4. At the request of the Director, the method of determining compliance with the emissions limits presented in Section 5.1.4 of this permit will be EPA method 6 stack test conducted on the outlet of the solution tank dust collector. The results of this test will be converted to code specific process loss factors (lb loss/M lb production).

Actual emissions of SO<sub>2</sub> from the solution tank dust collector will be based on code specific process loss factors (lb loss / lb SFS mixed) and actual production (as shown in the following example calculation):

$$\text{lb pollutant emitted (SO}_2\text{) /calendar quarter} = (\text{lb SFS mixed} / \text{calendar quarter}) \times (\text{lb pollutant} / \text{lb SFS mixed})$$

Hourly emissions will be estimated in a similar manner by applying the maximum hourly mixing rate of the SFS by the code specific process loss factor. If the code specific emissions factor shows that the hourly emissions can exceed the hourly allowable emissions limit the daily actual production divided by 24 hours will be used as the actual hourly production.

**[45CSR13, R13-2084CB, B.3.]**

- 5.3.5. Tests to establish compliance with emission limitations set forth under Section 5.1.5 of this permit shall be performed in accordance with the following test methods as set forth under 40 CFR Part 60 Appendix A or as approved by the WVAPCC Director:

Particulates	Method 5
Total VOC	Method 25
Acrylonitrile	Method 25 with gas <u>chromatographic</u> chromatographic FID system
Methyl methacrylate	Method 25 with gas <u>chromatographic</u> chromatographic FID system
Styrene	Method 25 with gas <u>chromatographic</u> chromatographic FID system

**[45CSR13, R13-1351A, B.4.]**

- 5.3.6. Test to establish compliance with acrylonitrile percentage reduction as required under Section 5.1.8 of this permit shall be determined by test methodology as set forth under Section 5.3.5 of this permit in conjunction with ppm (by weight) determination of acrylonitrile in feed and dried product associated with flash-fluidized

bed drying system.

**[45CSR13, R13-1351A, B.5.]**

- 5.3.7. For any stack testing of the Resin C incinerator required by DAQ, the following test methods shall be employed:

Styrene	Method 18
Acrylonitrile	Method 18
Methyl Methacrylate	Method 18
Total VOC	Method 25 or 25A
NO <sub>x</sub>	Method 7, 7B, or 7E

The above methods may be found in 40 CFR 60 Appendix A. Alternate methods may be accepted if prior approval is granted by the Director

**[45CSR13, R13-1588B, B.2.]**

#### 5.4. Recordkeeping Requirements

- 5.4.1. In order to demonstrate compliance with Sections 5.1.13, 5.1.14, and 5.1.15 calculations of) Nitrogen oxide emissions from the catalytic incinerators (in Resin A, E and J) shall be based on code specific process loss factors (lb acrylonitrile/M lb production), nitrogen oxide loss factors (lb NO<sub>x</sub> generated/lb acrylonitrile destroyed), and actual production, as shown in the following sample calculation for resin code A:

**lb NO<sub>x</sub> emitted/calendar quarter** = (M lb production of code A/calendar quarter) x (lb acrylonitrile/M lb production code A) x (destruction efficiency/100) x (lb NO<sub>x</sub> generated/lb acrylonitrile destroyed),

and shall be summed on a calendar quarter basis (i.e., January 1<sup>st</sup> to March 31<sup>st</sup>, April 1<sup>st</sup> to June 30<sup>th</sup>, July 1<sup>st</sup> to September 30<sup>th</sup>, and October 1<sup>st</sup> to December 31<sup>st</sup>) for all codes produced in RESIN A, E, and J.

**[45CSR13, R13-1886E, 4.4.4]**

- 5.4.2. In order to demonstrate compliance with Sections 5.1.13, 5.1.14, and 5.1.15 calculations of) emissions of acrylonitrile, styrene, methyl methacrylate, and total VOCs from the RESIN A catalytic incinerator, and emissions of acrylonitrile and total VOC from the RESIN E and RESIN J catalytic incinerators shall be based on code specific process loss factors (lb loss/M lb production) and actual production as shown in the following calculation for resin code A:

**lb pollutant/calendar quarter** = (M lb production code A/calendar quarter) x (lb pollutant/M lb production of code A) x (1 - destruction efficiency/100),

and shall be summed on a calendar quarter basis for all codes produced in RESIN A, E, and J.

**[45CSR13, R13-1886E, 4.4.5]**

- 5.4.3. In order to demonstrate compliance with Sections 5.1.13, 5.1.14, and 5.1.15) emissions from the dryers in RESIN A, E, and J shall be calculated in the same manner as specified under Section 5.4.2 of this permit, but without application of the destruction efficiency, and summed on a calendar quarter basis for all codes produced in RESIN A, E, and J.

**[45CSR13, R13-1886E, 4.4.6]**

- 5.4.4. In order to demonstrate compliance with the emission limitations specified in Sections 5.1.13, 5.1.14 & 5.1.15 and 5.1.18 of this permit the permittee shall maintain sufficient data including, but not limited to, (resin) production, process loss factors, and catalytic incinerator destruction efficiencies, so that emissions are verifiable upon inspection by the Director or a duly authorized representative.

**[45CSR13, R13-1886E, 4.4.7]**

- 5.4.5. Emissions from the Latex Storage Tanks identified in Tables 5.1.13, 5.1.14, and 5.1.15 and the Resin Blend Tanks identified in 5.1.18 of this permit shall be based on AP-42 tank equations.  
**[45CSR13, R13-1886~~E~~D, 4.4.8]**
- 5.4.6. The permittee shall maintain quarterly records of Butyl Acrylate usage, Polybutyl Acrylate production, and acrylonitrile-styrene-acrylate production, and any other information required to demonstrate compliance. Said records shall be maintained onsite, (or accessible electronically at the site), for a period of five years and shall be made available to the Director or his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.  
**[45CSR13, R13-2084~~C~~B, A.8. and B.4]**
- 5.4.7. The permittee shall maintain certified quarterly records listing the amount of styrene, acrylonitrile, methyl methacrylate, and total VOC emitted from (the Resin C) emission point C1 for the previous calendar quarter. Each record shall contain sufficient data (production, emission factor, destruction efficiency, etc.) so as to be verifiable by personnel of DAQ. All records shall be signed by a "Responsible Official" within 30 days of the end of the calendar quarter utilizing the attached Certification of Data Accuracy statement.  
**[45CSR13, R13-1588B, B.1.]**
- 5.4.8. With respect to the continuous process vents, the permittee shall comply with the recordkeeping requirements of 40 CFR §63.1315.  
**[45CSR34, 40 C.F.R 63.1315]**

## **5.5. Reporting Requirements**

- 5.5.1. The permittee shall submit reports as required by 40 C.F.R § 63.1335.

## **5.6. Compliance Plan**

None

**6.0 Source-Specific Requirements [Finishing ABC (Banburries)]****6.1 Limitations and Standards**

- 6.1.1. Emissions to the atmosphere from the emission points listed below shall not exceed the following hourly and annual limitations:

Table 6.1.1.

Emission Point	Source		Pollutant	Emissions	
	ID	Description		Hourly (PPH)	Annual (TPY)
FA1	11A-29000	Finishing A	Acrylonitrile	---	2.5*
	11A-29112	WA Banbury Line	VOC	15	36
	11A-29111	WC Banbury Line			
FB1	11B-29000	Finishing B	Acrylonitrile	---	2.7*
	11B-29001	WL Banbury Line	VOC	28.02	49
	11B-29007	WP Banbury Line			
FC1	11C-29000	Finishing C	Acrylonitrile	---	1.3*
	11C-29001	WM Banbury Line	VOC	23.79	39

\*State Enforceable only.

[45CSR13, R13-1886E, 4.1.7]

- 6.1.2. In accordance with the permit application and its amendments this permit is limited as follows: Emissions from the SAN/resin hopper bin vent on the "WA" (Finishing Line) shall not exceed 0.103 lb/hr or 0.45 TPY of particulate.  
[45CSR13, R13-1052, A]
- 6.1.3. The permitted facility shall not have any visible emission of particulate matter into the open air from the ("WA" finishing line) SAN/resin hopper.  
[45CSR13, R13-1052, B]
- 6.1.4. Emissions of particulate matter vented to the atmosphere from the following SAN/Resin Baghouses shall not exceed:

Point ID ( <u>SABIC Innovative Plastics</u> <del>GE</del> <u>Plastics</u> Designation)	lbm/hr
MB-14	0.15
MB-16	0.15
MA-17	0.10
MA-20	0.10

[45CSR13, R13-1118, (A)]

**6.2. Monitoring Requirements**

- 6.2.1. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr of VOC and tons/yr of Acrylonitrile based on material throughput and emission factors (AP-42 or site-specific testing) to demonstrate compliance with Section 6.1 of this permit. [45CSR§30-5.1.c.]

**6.3. Testing Requirements**

None

**6.4. Recordkeeping Requirements**

None

**6.5. Reporting Requirements**

None

**6.6. Compliance Plan**

None

## 7.0 Source-Specific Requirements [Finishing D]

### 7.1. Limitations and Standards

- 7.1.1. Particulate emissions to the atmosphere following the Preblend Fugitive Dust Collector (ID 11D-26053, emission point ID MD131) shall not exceed 0.02 pounds per hour and 0.085 tons per year. [45CSR13, R13-1635, A]
- 7.1.2. Emissions to the atmosphere from the emission points listed below shall not exceed the following hourly and annual limitations:

Emission Point ID	Pollutant	pph	Ppy
MD7	Acrylonitrile	0.235	698
	Ethyl Benzene	0.046	135
	Cumene	0.072	215
	Styrene	1.513	4487
MD8	Acrylonitrile	0.235	698
	Ethyl Benzene	0.046	135
	Cumene	0.072	215
	Styrene	1.513	4487
MD37	Acrylonitrile	0.089	530
	Ethyl Benzene	0.017	103
	Cumene	0.028	163
	Alphamethyl Styrene	0.002	15
	Styrene	0.572	3395
	NO <sub>x</sub>	4.06	24200
MD38	No emissions other than water vapor		
MD39	No emissions other than water vapor		

It should be understood that such emission rates have not been determined to meet the BAT requirements of 45CSR27 – “To Prevent and Control the Emission of Toxic Air Pollutants”.  
**[45CSR13, R13-1251C, A.1.]**

- 7.1.3. For the purposes of meeting emission rate limitations associated with non-methane hydrocarbons as contained under Section 7.1.2 of this permit, the thermal oxidizer associated with emission point MD37 shall be operated at or above a minimum temperature established through appropriate testing. Such minimum temperature shall also guarantee a minimum overall destruction efficiency of 98% for all non-methane hydrocarbons. **[45CSR13, R13-1251C, A.2; 45CSR§30-12.7.]**
- 7.1.4. ~~Reserved. Methyl Methacrylate (MMA) emissions generated from the routine operation of the MMA Tank #1 (Equipment ID 09-25009) shall be collected and routed to the Finishing D Thermal Oxidizer, Air Pollution Control Device ID 11D-01001, and vented through Emission Point MD E5 (aka MD 37) regulated under WV DAQ Permit R13-1251C, or any modifications or amendments thereto.~~  
**[45CSR13, R13-1886D, 4.1.1]**

- 7.1.5. Outlet concentration of particulate matter from emission points MD-33 (ABS resin), MD-36 (ABS resin), and MD-41 (titanium dioxide) shall not exceed 0.02 grain/ACF or the more stringent of those emission limitations set forth in Sections 7.1.7, 7.1.8 & 7.1.9 of this permit.  
[45CSR13, R13-1290, A.1]
- 7.1.6. Outlet concentration of particulate matter (titanium dioxide) from emission point MD-40 shall not exceed .022 grain/ACF or the more stringent emission limitation set forth in Section 7.1.10 of this permit.  
[45CSR13, R13-1290, A.2]
- 7.1.7. Particulate emissions from emission point MD-33 to the atmosphere shall not exceed 0.12 lb/hr or 0.53 ton/yr of ABS resin.  
[45CSR13, R13-1290, A.3]
- 7.1.8. Particulate emissions from emission point MD-36 to the atmosphere shall not exceed 0.05 lb/hr or 0.22 ton/yr of ABS resin.  
[45CSR13, R13-1290, A.4]
- 7.1.9. Particulate emissions from emission point MD-41 to the atmosphere shall not exceed 0.06 lb/hr or 0.26 ton/yr of titanium dioxide.  
[45CSR13, R13-1290, A.5]
- 7.1.10. Particulate emissions from emission point MD-40 to the atmosphere shall not exceed 0.002 lb/hr or .009 ton/yr of titanium dioxide.  
[45CSR13, R13-1290, A.6]
- 7.1.11. Gases containing particulate matter and exhausting to the atmosphere through emission points MD-36, MD-41, MD-33 and MD-40 shall not exhibit any visible particulate emissions.  
[45CSR13, R13-1290, A.8]
- 7.1.12. Emissions to the atmosphere from the emission points listed below shall not exceed the following hourly and annual limitations:

Emission Point	Source		Pollutant	Emissions	
	ID	Description		Hourly (PPH)	Annual (TPY)
FG1	11D-29017	Finishing D – Blender/Hopper Material Handling	Acrylonitrile	---	0.13*

\* State Enforceable Only

[45CSR13, R13-1886E, 4.1.7]

## 7.2. Monitoring Requirements

- 7.2.1. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr Acrylonitrile, Cumene, Styrene, Ethylbenzene, Alkylmethyl Styrene and NOx emissions based on material throughput, emission factors (AP-42 or site-specific testing) and (for acrylonitrile, cumene, styrene, ethylbenzene, alkylmethylstyrene from MD37) control system efficiency to show compliance with Section 7.1.2 of this permit. No monitoring is required for MD38 and MD39.  
[45CSR§30-5.1.c.]

- 7.2.2. Within 30 days of the end of each calendar quarter, the permittee shall calculate tons/yr of Acrylonitrile based on material throughput and emission factors (AP-42 or site-specific testing) to demonstrate compliance with Section 7.1.12 of this permit. **[45CSR§30-5.1.c.]**

### **7.3. Testing Requirements**

- 7.3.1. For the purpose of determining compliance with weight emission standards as set forth in Sections 7.1.7 to 7.1.10 of this permit, Method 5 as set forth in 40CFR 60 Appendix A is to be utilized. Realizing that such stack testing is an everchanging technology, the Director may require an alternate test methodology to the aforementioned.  
**[45CSR13, R13-1290, A.7.]**
- 7.3.2. Testing as described in Section 7.3.1 shall be done at the request of the Director.  
**[45CSR§30-5.1.c.]**

### **7.4. Recordkeeping Requirements**

- 7.4.1. The permittee shall maintain certified monthly records of production for the combination of extruders in the Finishing D building. All records shall be signed by a “Responsible Official” within 30 days of the end of the calendar month utilizing the attached Certification of Data Accuracy Statement.  
**[45CSR13, R13-1251C, B.1.]**

### **7.5. Reporting Requirements**

None

### **7.6. Compliance Plan**

None

## 8.0 Source-Specific Requirements [Technology Center Extruders – S and V lines]

### 8.1 Limitations and Standards

8.1.1. Emissions to the atmosphere from process vents of the WS and WV extrusion lines shall not exceed the following limits:

Emission Point ID Number	Source ID Number and Description	Control Device	Pollutant	Emission Limits	
				pph	tpy
WS-E1 WS-E2	WS-X1 (WS extruder) WS-S1 (WS screens)	None	Acrylonitrile Cumene Ethyl Benzene Styrene <sup>1</sup> VOC <sup>1</sup>	0.09 0.06 0.01 0.38 2.35	0.39 0.26 0.01 1.65 10.27
WS-E3	WS-F1 (resin feeder 1) WS-F2 (resin feeder 2) WS-H1 (hopper 1) WS-H2 (hopper 2) WS-H3 (hopper 3) WS-H4 (hopper 4) WS-X1 (overflow to extruder) WS-X1 (chute to extruder)	WS-DC1 (dust collector/ baghouse)	PM <sub>10</sub>	0.08	0.35
WV-E1 WV-E2	WV-X1 (WV extruder)	None	Acrylonitrile Cumene Ethyl Benzene Styrene <sup>1</sup> VOC <sup>1</sup>	0.35 0.27 0.08 3.37 5.91	1.53 1.16 0.34 14.73 25.86
WV-E2	WV-X1 (overflow to extruder)	None	PM <sub>10</sub>	0.64	2.81
WV-E3	WV-F1 (resin feeder 1) WV-F2 (resin feeder 2) WV-H1 (hopper 1) WV-H2 (hopper 2) WV-H3 (hopper 3) WV-X1 (chute to extruder)	WV-DC1 (dust collector/ baghouse)	PM <sub>10</sub>	0.08	0.34

<sup>1</sup> HAP and Non-HAP VOC.

**[45CSR13, R13-0992B, A.1.]**

8.1.2. The WS extrusion line shall not exceed a production rate of 13.6 production units per hour. The WV extrusion line shall not exceed a production rate of 9.1 production units per hour.

**[45CSR13, R13-0992B, A.2.]**

8.1.3. The permittee shall not emit particulate matter to the atmosphere from emission point WS-E3 or emission point WV-E3 without the corresponding dust collector/baghouse, WS-DC1 or WV-DC1, being in proper operating condition. **[45CSR13, R13-0992B, A.3.]**

### 8.2 Monitoring Requirements

8.2.1. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr Acrylonitrile,

Cumene, Ethyl Benzene, Styrene and VOC emissions based on material throughput, emission factors (AP-42 or site specific testing) to show compliance with Section 8.1.1 of this permit.  
[45CSR§30-5.1.c.]

### **8.3. Testing Requirements**

None

### **8.4. Recordkeeping Requirements**

8.4.1. The permittee shall maintain records of all maintenance work performed in connection with the WS-DC1 and WV-DC1 dust collectors/baghouses.  
[45CSR13, R13-0992B, B.2.]

8.4.2. For the purpose of determining compliance with permit limits based on production rates, Sections 8.1.1 and 8.1.2 of this permit, the permittee shall maintain records on a daily, monthly, and rolling twelve (12) month total basis. These documents shall record production units of product produced on the WS and WV extrusion lines.  
[45CSR13, R13-0992B, B.1.]

### **8.5. Reporting Requirements**

None

### **8.6. Compliance Plan**

None

## 9.0 Source-Specific Requirements [Labs]

### 9.1 Limitations and Standards

- 9.1.1. The permittee shall be limited to the regulated pollutants and associated emission rates from those sources and respective emission points identified in Table 9.1.1 of this permit.

Table 9.1.1.

Emission Point	Source		Pollutant	Emissions	
	ID	Description		Hourly (PPH)	Annual (TPY)
CL1	00E-02	Color Lab	Acrylonitrile	---	0.03
QC1	00E-03	Quality Control Lab	Acrylonitrile	---	0.05

[45CSR13, R13-1886E-D, 4.1.7, State-Enforceable only.]

### 9.2 Monitoring Requirements

- 9.2.1. The permittee shall calculate on an annual basis tons/yr of Acrylonitrile emissions based on material throughput, emission factors (AP-42 or site specific testing) to show compliance with Section 9.1.1 of this permit.  
[45CSR§30-5.1.c.]

### 9.3 Testing Requirements

None

### 9.4 Recordkeeping Requirements

None

### 9.5 Reporting Requirements

None

### 9.6 Compliance Plan

None

## 10.0 Source-Specific Requirements [Pilot Plant]

### 10.1. Limitations and Standards

10.1.1. The permittee shall be limited to the regulated pollutants and associated emission rates from those sources and respective emission points identified in Table 10.1.1 of this permit.

Table 10.1.1.

Emission Point	Source		Pollutant	Emissions	
	ID	Description		Hourly (PPH)	Annual (TPY)
		ABS Pilot Plant	Acrylonitrile	---	1.64
			1, 3 Butadiene	---	1.28

[45CSR13, R13-1886ED, 4.1.7.]

10.1.2. The (Soap Pilot Plant) facility shall not emit to the atmosphere, in excess of the limits noted in the following table, any of the pollutants referenced therein:

Emission Point ID	Source Description	Source ID	Control Device	Pollutant	Allowable Emissions (lb/hr)	Allowable Emissions (lb/yr)**
SP1	Feed Systems	None	Absorber	Acrylonitrile VOCs*	1.20 5.80	5,500 32,000
	Reactor #1	19A-04002	Absorber			
	Reactor #2	19A-04003	Absorber			
	Flash Chambers, Condensers, and Receivers	None	Absorber			
	Devolatilizing Extruder, Condensers, and Receivers	19A-12003	Absorber			
	Calibration Tanks	None	None			
	Trench Vent	None	None			
Fugitive	Rubber Chopping System	19A-12007	Filter	PM	0.60	700

\* VOC emissions as reported include but are not limited to Acrylonitrile, Alpha Methyl Styrene, Ethylbenzene, Methyl Ethyl Ketone, Styrene and Toluene.

\*\* As determined by mass balances and best engineering judgement.

[45CSR13, R13-2094, A.1.]

10.1.3. The (Soap Pilot Plant) absorber column designated as SPP-B, shall be designed to have a minimum collection efficiency of 85% for acrylonitrile.

[45CSR13, R13-2094, A.2.]

10.1.4. The permittee shall implement and maintain a Leak Detection and Repair (LDAR) program for the ABS Pilot Plant and the Soap Pilot Plant in order to reduce emissions of TAP in accordance with the methods of 40CFR63, Subpart H – National Emission Standards for Organic Hazardous Air Pollutants and Equipment Leaks. Compliance with the methods of 40CFR63, Subpart H shall be considered demonstration of

compliance with the provisions of 45CSR27-4.- Fugitive Emissions of Toxic Air Pollutants.  
[45CSR13, R13-2678, 5.2.1, State-Enforceable only.]

## **10.2. Monitoring Requirements**

- 10.2.1. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr Acrylonitrile, 1,3 Butadiene, VOC and PM emissions based on material throughput and emission factors (AP-42 or site specific testing) to show compliance with Sections 10.1.1 and 10.1.2 of this permit.  
[45CSR§30-5.1.c.]

## **10.3. Testing Requirements**

None

## **10.4. Recordkeeping Requirements**

- 10.4.1. The permittee shall maintain accurate records of the materials processed and the hours of operation as required to calculate emissions from the Soap Pilot Plant.  
[45CSR13, R13-2094, B.2.]

## **10.5. Reporting Requirements**

None

## **10.6. Compliance Plan**

None

## 11.0 Source-Specific Requirements [Bulk Solids (Resin/Pellet) Transfer]

### 11.1 Limitations and Standards

11.1.1. The permit shall include the production equipment and associated pollution control devices as shown in Table 11.1.1.

**Table 11.1.1**

Equipment		Pollution Control Device		Emission Point ID
Source ID	Description	ID	Description	
11A-25078	Silo #57	11A-26071	Dust Collector	55-57
12-25007	Silo #95	12-26030	Dust Collector	55-95

[45CSR13, R13-1133A, A.1.]

11.1.2. The Silo #57 and Silo #95 shall not exceed the maximum material throughputs per Table 2 - Emission Limits R13-1133A on Page 2 of 3 of the Business Confidential Engineering Evaluation.

[45CSR13, R13-1133A, A.2.]

11.1.3. The dust collectors installed on the silos (silos #57 and #95) shall be maintained and operated so to provide a guaranteed minimum control efficiency of 99.9%.

[45CSR13, R13-1133A, A.3.]

11.1.4. Particulate matter (PM) emissions shall not exceed the maximum emission limits shown in Table 11.1.4.

**Table 11.1.4**

Emission Point ID	Description	Pollution Control		Emissions	
		Type	Efficiency	Hourly (lbs/hr)	Annual (tons/year)
55-57	Silo #57	Dust Collector	99.9%	0.15	0.45
55-95	Silo #95	Dust Collector	99.9%	0.15	0.45

[45CSR13, R13-1133A, A.4.]

11.1.5. The permit shall include the production equipment and associated pollution control devices as shown in Table 11.1.5.

**Table 11.1.5**

Equipment		Pollution Control Device		Emission Point ID
Source ID	Description	ID	Description	
11D-25005	Silo #56	MD-29	Silo Baghouse	MD-28
2S	Railcar Unloading	MD-30	Unloading Baghouse	MD-31

[45CSR13, R13-1029A, A.1.]

- 11.1.6. The Silo #56 and Railcar Unloading Station shall not exceed the maximum material throughputs per Table 2 - Emission Limits R13-1029A on Page 3 of 3 of the Business Confidential Engineering Evaluation.  
[45CSR13, R13-1029A, A.2.]
- 11.1.7. The baghouses installed on the silo (Silo # 56) and railcar unloading station (2S) shall be maintained and operated so to provide a guaranteed minimum control efficiency of 99.9%.  
[45CSR13, R13-1029A, A.3.]
- 11.1.8. Particulate matter (PM) emissions shall not exceed the maximum emission limits shown in Table 11.1.8.

**Table 11.1.8**

Emission Point ID	Description	Pollution Control		Emissions	
		Type	Efficiency	Hourly (lbs/hr)	Annual (tons/year)
MD-28	Silo #56	Baghouse	99.9%	0.33	1.46
MD-31	Railcar Unloading	Baghouse	99.9%	0.33	1.46

[45CSR13, R13-1029A, A.4.]

- 11.1.9. The permit shall include the production equipment and associated pollution control devices as shown in Table 11.1.9.

Table 11.1.9

Equipment		Pollution Control Device		Emission Point ID
Source ID	Description	ID	Description	
S-1	Silo 48	C-1	Dust Collector	E-1
		C-2	Dust Collector	E-2
S-2	Mixer	C-3	Dust Collector	E-4
S-3	Weigh Hopper	C-4	Dust Collector	E-4
S-4	Rail Car	C-4	Dust Collector	E-3
		C-4	Dust Collector	E-4
S-5	Compounder	C-4	Dust Collector	E-4
		None	None	E-5
S-6	Feed Hopper	C-4	Dust Collector	E-4
S-7	Weigh Hopper	C-4	Dust Collector	E-4

[45CSR13, R13-0658A, A.1.]

- 11.1.10. The Silo 48 shall not exceed the maximum material throughputs per Table 2 - R13-0658A Emission Limits on Page 3 of 3 of the Business Confidential Engineering Evaluation.  
[45CSR13, R13-0658A, A.2.]

- 11.1.11. The dust collectors [C-1 and C-2] on Silo 48 shall be maintained and operated so to provide a guaranteed minimum control efficiency of 99.9%. [45CSR13, R13-0658A, A.3.]
- 11.1.12. Particulate emissions from Silo 48 shall be controlled by dust collectors [C-1 and C-2] and released through emission points [E-1 and E-2] at a combined rate not to exceed 0.15 pounds per hour or 0.6 tons per year. [45CSR13, R13-0658A, A.4.]
- 11.1.13. The dust collectors [C-3 and C-4] shall be maintained and operated so to provide a guaranteed minimum control efficiency of 99.95%. [45CSR13, R13-0658A, A.5.]
- 11.1.14. Emission rates from the associated Emission Point IDs shall not exceed the maximum emission limits shown in Table 11.1.14.

Table 11.1.14

Emission Point ID	Pollutant	Pollution Control		Emissions	
		Type	Efficiency	Hourly (lbs/hr)	Annual (tons/year)
E-1	PM	Dust Collector	99.9%	0.20	0.57
E-2	PM	Dust Collector	99.9%		
E-3	PM	Dust Collector	99.9%	0.10	0.35
E-4	PM	Dust Collector	99.9%	0.10	0.01
E-5	VOC	None	None	0.32	1.40

[45CSR13, R13-0658A, A.6.]

- 11.1.15. The permit shall include the production equipment and associated pollution control devices as shown in Table 11.1.15.

Table 11.1.15

Equipment		Pollution Control Device		Emission Point ID
Source ID	Description	ID	Description	
Silo 28	Product Silo	C-28	(2) Dust Collectors	SC-28
Silo 29	Product Silo	C-29	(2) Dust Collectors	SC-29
Silo 33	Product Silo	C-33	(2) Dust Collectors	SC-33
Silo 34	Product Silo	C-34	(2) Dust Collectors	SC-34
Silo 45	Product Silo	C-45	Dust Collector	SC-45
Silo 46	Product Silo	C-46	Dust Collector	SC-46
A1-1	Scale Tank	C A1-	Dust Collector	SC A1-1
A1-2	Scale Tank	C A1-	Dust Collector	SC A1-2

[45CSR13, R13-0301A, A.1.]

11.1.16. The equipment shown in Table 1 shall not exceed the maximum material throughputs per Table 2 - R13-0301A Emission Limits on Page 3 of 4 of the Business Confidential Engineering Evaluation.  
[45CSR13, R13-0301A, A.2.]

11.1.17. The dust collectors installed on the silos (Silos 28, 29, 33, 34, 45, and 46) shall be maintained and operated so to provide a guaranteed minimum control efficiency of 99.9%.  
[45CSR13, R13-0301A, A.3.]

11.1.18. Particulate matter (PM) emissions shall not exceed the maximum emission limits shown in Table 11.1.18.

**Table 11.1.18**

Source ID	Pollution Control		Emissions	
	Type	Efficiency	Hourly (lbs/hr)	Annual (tons/year)
Silo 28	Dust Collector	99.9%	0.09	0.39
Silo 29	Dust Collector	99.9%	0.09	0.39
Silo 33	Dust Collector	99.9%	0.09	0.39
Silo 34	Dust Collector	99.9%	0.09	0.39
Silo 45	Dust Collector	99.9%	0.09	0.39
Silo 46	Dust Collector	99.9%	0.09	0.39
A1-1	Dust Collector	99.9%	0.18	0.79
A1-2	Dust Collector	99.9%	0.18	0.79

[45CSR13, R13-0301A, A.4.]

11.1.19. The permittee shall not exceed the following maximum hourly and annual emission rates for emission point C-5:

Emission Point	Material	Emissions lb/hr	Emissions lb/yr
C-5	ABS Resin (PM)	0.003	26.28

[45CSR13, R13-1097, A.1]

11.1.20. The permittee shall not increase production in the ABS resin bagging process as stated on page 12 of 14 of permit application No. 1097.

[45CSR13, R13-1097, A.2]

11.1.21. Emissions from the ABS resin dust collector on the (# 3 Resin) railcar loading facility shall not exceed 0.231 lb/hr or 0.675 TPY of particulate.

[45CSR13, R13-1069, A]

- 11.1.22. Emissions of particulate matter to the atmosphere (from the following truck loading lines) shall not exceed the following:

Emission Point	Emission Rate (lb/hr)	Emission Rate (TPY)
MC-8	0.1	0.438
MA-33	0.1	0.438
MB-13	0.1	0.438
MB-14	0.1	0.438

[45CSR13, R13-1565, A.1]

- 11.1.23. Loading rates of resin pellets shall not exceed those listed in Permit Application R13-1565.

[45CSR13, R13-1565, B]

## 11.2. Monitoring Requirements

- 11.2.1. To demonstrate compliance with the control efficiency in Sections 11.1.3, 11.1.7, 11.1.11, 11.1.13, and 11.1.17, in the event visible emissions are observed during operation, the permittee shall conduct any necessary maintenance and repair and replace bags when necessary.

[45CSR§30-5.1.c.]

- 11.2.2. Within 30 days of the end of each calendar quarter, the permittee shall calculate lbs/hr and tons/yr particulate emissions based on material throughput, emission factors (AP-42 or site specific testing) and control system efficiency to show compliance with Sections 11.1.4, 11.1.8, 11.1.14, 11.1.18 and 11.1.19 of this permit.

[45CSR§30-5.1.c.]

- 11.2.3. To demonstrate compliance with 45CSR7 limits for the dust collectors listed in Appendix 3 of this permit, the permittee shall perform a one-time calculation of maximum lb/hr particulate emissions based on material throughput, emission factors (AP-42 or site-specific testing) and control or recovery equipment efficiency.

[45CSR§30-5.1.c.]

## 11.3. Testing Requirements

None

## 11.4. Recordkeeping Requirements

- 11.4.1. For the purpose of determining compliance with Sections 11.1.2 & 11.1.4 of this permit, the permittee shall maintain monthly records of the material transferred into the specified silos.

[45CSR13, R13-1133A, B.4.]

- 11.4.2. For the purpose of determining compliance with Sections 11.1.6 and 11.1.8 of this permit, the permittee shall maintain monthly records of the material transferred from the railcar unloading station into the specified silo.

[45CSR13, R13-1029A, B.4.]

- 11.4.3. For the purpose of determining compliance with Sections 11.1.16 and 11.1.18 of this permit, the permittee shall maintain certified monthly records of the material transferred into the specified silos.

[45CSR13, R13-0301A, B.4.]

11.4.4. For the purpose of determining compliance with Sections 11.1.10, 11.1.12 & 11.1.14 of this permit, the permittee shall maintain certified monthly records of the material transferred into the specified silos.

**[45CSR13, R13-0658A, B.4.]**

11.4.5. Records of maintenance and repair activities on dust collectors and baghouses shall be maintained which indicate the date and time of the response action, and including maintenance activities or bag changes conducted.

**[45CSR§30-5.1.c.]**

**11.5. Reporting Requirements**

None

**11.6. Compliance Plan**

None

## 12.0 Source-Specific Requirements [45CSR21 Requirements]

### 12.1. Limitations and Standards

12.1.1. The permittee shall be subject to all hourly and annual emission limits set forth by the affected 45CSR13 permits, for each of the sources and associated emission points subject to the requirements of 45CSR21 and identified in Attachment A of R13-2678 (Appendix 2 of this permit).

**[45CSR13, R13-2678, 4.1.1.]**

12.1.2. The permitted sources identified in Attachment A of R13-2678 (Appendix 2 of this permit) and recognized as being subject to 45CSR21 shall comply with all applicable requirements of 45CSR21 – “Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds” provided, however, that compliance with any more stringent requirements under the affected 45CSR13 permit identified in Attachment A of R13-2678 (Appendix 2 of this permit), are also demonstrated. The applicable requirements set forth by 45CSR21 shall include, but not be limited to, the following:

a. The permittee shall maintain the aggregated hourly and annual VOC control efficiency of 90% or greater, on a site-wide basis, for all existing sources listed or required to be listed as part of the original facility-wide Reasonably Available Control Measures (RACM) plan, as identified in Attachment A of R13-2678 (Appendix 2 of this permit).

b. On or after May 01, 1996, construction or modification of any emission source resulting in a maximum theoretical emissions (MTE) of VOCs equaling or exceeding six (6) pounds per hour and not listed or required to be listed in the facility-wide RACM plan shall require the prior approval by the Director of an emission control plan that meets the definition of reasonable available control technology (RACT) on a case-by-case basis for both fugitive and non-fugitive VOC emissions from such source. All sources constructed or modified on or after May 01, 1996 shall be subject to the following:

(1) The RACT control plan(s) shall be embodied in a permit in accordance ~~with~~ 45CSR13.

(2) The MTE and associated emission reductions of the constructed or modified source will not be calculated into the site-wide aggregate hourly and annual emissions reduction requirements set forth in Section 12.1.2.a. of this permit.

c. If a modification to an existing source with current MTE below the threshold of six (6) pounds per hour of VOCs causes an increase in the MTE that results in the source exceeding the six (6) pounds per hour threshold for the first time, the source shall be subject to RACT in accordance ~~with~~ Section 12.1.2.b. of this permit.

d. Physical changes to or changes in the method of operation of an existing emission source listed or required to be listed as part of the facility-wide RACM plan, that results in an increase in VOC emissions of any amount, shall require the prior approval by the Director of an emission control plan that meets the definition of RACT on a case-by-case basis for both fugitive and non-fugitive VOC emissions from the source. All sources modified on or after May 01, 1996 shall be subject to the following:

(1) The RACT control plan(s) shall be embodied in a permit in accordance ~~with~~ 45CSR13.

(2) The facility-wide RACM plan shall be modified to include the RACT analysis conducted on the modified source(s).

(3) The MTE and associated emission reductions of the modified source shall be recalculated as part of the site-wide aggregate hourly and annual emissions reduction requirements to demonstrate

compliance with the minimum 90% reduction rate as set forth in Section 12.1.2.a. of this permit.

- e. In the event the facility-wide RACM plan is modified to delete an existing emission source, and any associated pollution control equipment, due to the source being permanently removed from service, or reassigned to service not subject to the requirements of 45CSR21-40, the MTE shall be recalculated to demonstrate that the 90% facility-wide VOC reduction requirement set forth in Section 12.1.2.a. of this permit is still being met. In the event such a modification results in the site-wide aggregate hourly and annual emissions reduction being recalculated to a rate less than 90%, the RACM plan shall be revised to include all new and/or modified sources and their associated control technologies constructed on or after May 01, 1996, in order to meet the requirements set forth in Section 12.1.2.a. of this permit.
- f. In the event a source and associated emission point identified in Attachment A of R13-2678 (Appendix 2 of this permit) is subject to the New Source Performance Standards (NSPS) of 40CFR60, the National Emission Standards for Hazardous Air Pollutants (NESHAP) of 40CFR61, or the Maximum Achievable Control Technology (MACT) standards of 40CFR63, then compliance with such requirements as defined in the affected 45CSR13 permit shall demonstrate compliance with the RACT requirements set forth in this permit.

**[45CSR13, R13-2678, 4.1.2.]**

- 12.1.3. (i) No owner or operator subject to 45CSR21 shall build, erect, install, or use any article, machine, equipment, process, or other method the use of which conceals emissions that would otherwise constitute non-compliance with an applicable regulation.
- (ii) 45CSR§21-7.1 includes, but is not limited to, the use of gaseous diluents to achieve compliance, and the piecemeal carrying out of an operation to avoid coverage by a regulation that applies only to operations larger than a specified size.
- (iii) No owner or operator subject to this regulation shall discharge or dispose of VOCs or material containing VOCs to surface impoundments, pits, wastewater treatment facilities, or sewers for the purpose of circumventing any provision or requirement of 45CSR27.

**[45CSR§21-7]**

- 12.1.4. Variance. -- If the provisions of 45CSR21 cannot be satisfied due to repairs made as the result of routine maintenance or in response to the unavoidable malfunction of equipment, the Director may permit the owner or operator of a source subject to this regulation to continue to operate said source for periods not to exceed 10 days upon specific application to the Director. Such application shall be made prior to the making of repairs and, in the case of equipment malfunction, within 24 hours of the equipment malfunction. Where repairs will take in excess of 10 days to complete, additional time periods may be granted by the Director. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. During such time periods, the owner or operator shall take all reasonable and practicable steps to minimize VOC emissions.

**[45CSR§21-9.3]**

## **12.2. Monitoring Requirements**

- 12.2.1. The permittee shall implement and maintain leak detection and repair (LDAR) programs for the reduction of fugitive VOC emissions in all manufacturing process units subject to 45CSR§21-40 producing a product or products intermediate or final, in excess of 1,000 megagrams (1,100 tons) per year in accordance with the applicable methods and criteria of Subpart JJJ as the approved alternative LDAR procedure. This requirement shall apply to all units applicable to 45CSR21 and identified in Attachment A of R13-2678 (Appendix 2 of this permit), irrespective of whether or not such units produce as intermediates or final products, substances on the lists contained with 40CFR60, 40CFR61, or 40CFR63.

**[45CSR13, R13-2678, 4.2.1. State-Enforceable only]**

### 12.3. Testing Requirements

12.3.1. Manufacturing process units may be exempted upon written request of the permittee to the Director. Exempted units are exempted from the frequency of testing as described in 45CSR§21-37, however, LDAR testing of this unit or certification of emission using approved fugitive emission factors will be required every three years, or upon request by the Director or his duly authorized representative. Waiver or scheduling of LDAR testing every three years may be granted by the Director if written request and justification are submitted by the permittee. Units exempted from LDAR monitoring as required by 45CSR§21-37, are not exempted from testing which may be required under any other applicable State or Federal regulations, orders, or permits. The Director may periodically require verifications by the permittee that maintenance and repair procedures associated with approved exemptions are continued and practiced.

**[45CSR13, R13-2678, 4.3.1. State-Enforceable only]**

### 12.4. Recordkeeping Requirements

12.4.1. Unless granted a variance pursuant to 45CSR§21- 9.3 (Section 12.1.4 of this permit), or as approved by the Director as part of a required Start-up, Shutdown, and Malfunction (SSM) Plan mandated under 40 C.F.R § 63.6(e) or another applicable Section of 40CFR63, the owner or operator of the facility shall operate all emission control equipment listed in Attachment A of R13-2678 as part of the facility-wide control efficiency plan at all times the facilities are in operation or VOC emissions are occurring from these sources or activities. In the event of a malfunction, and a variance has not been granted, the production unit shall be shutdown or the activity discontinued as expeditiously as possible. The permittee shall comply with 45CSR§21- 9.3 (Section 12.1.4 of this permit) with respect to all periods of non-compliance with the emission limitations set forth in the affected 45CSR13 permits and the emissions reduction requests set forth in the facility-wide control efficiency plan resulting from unavoidable malfunctions of equipment.

**[45CSR13, R13-2678, 4.4.4]**

12.4.2. (i) Each owner or operator of a source subject to 45CSR§21-5 shall maintain up-to-date, readily accessible records of any equipment operating parameters specified to be monitored in the applicable section of 45CSR21 as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. These records shall be maintained for at least 3 years. The Director may at any time require a report of these data. Periods of operation during which the parameter boundaries established during the most recent performance tests are exceeded are defined as follows:

- A. For thermal incinerators, all 3-hour periods of operation in which the average combustion temperature was more than 28°C (50°F) below the average combustion temperature during the most recent performance test that demonstrated that the facility was in compliance.
- B. For catalytic incinerators, all 3-hour periods of operation in which the average temperature of the process vent stream immediately before the catalyst bed is more than 28°C (50°F) below the average temperature of the process vent stream during the most recent performance test that demonstrated that the facility was in compliance.
- C. For carbon adsorbers, all 3-hour periods of operation during which the average VOC concentration or reading of organics in the exhaust gases is more than 20 percent greater than the average exhaust gas concentration or reading measured by the organics monitoring device during the most recent determination of the recovery efficiency of the carbon adsorber that demonstrated that the facility was in compliance.

(ii) A log of operating time for the capture system, control device, monitoring equipment, and the associated source; and

(iii) A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

[45CSR§21-5.3.]

## 12.5. Reporting Requirements

12.5.1. The permittee shall submit to the DAQ a plan for complete, facility-wide implementation of RACT requirements within one hundred eighty (180) days of notification by the Director that a violation of the National Ambient Air Quality Standards (NAAQS) for ozone (that were in effect on or before May 01, 1996) has occurred. Such plan shall included those sources listed in Attachment A of R13-2678 (Appendix 2 of this permit) as part of the site-wide control efficiency requirement and may contain an update of existing RACT analyses. Full implementation of such plan shall be completed within two (2) years of approval of the RACT plan by the Director.

[45CSR13, R13-2678, 4.5.1]

12.5.2. Reports of excess emissions. -- Except as provided in 45CSR§21-9.3 (Section 12.1.4 of this permit), the owner or operator of any facility containing sources subject to 45CSR§21-5 shall, for each occurrence of excess emissions expected to last more than 7 days, within 1 business day of becoming aware of such occurrence, supply the Director by letter with the following information:

- a. The name and location of the facility;
- b. The subject sources that caused the excess emissions;
- c. The time and date of first observation of the excess emissions; and
- d. The cause and expected duration of the excess emissions.
- e. For sources subject to numerical emission limitations, the estimated rate of emission (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
- f. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.

[45CSR§21-5.2.]

## 12.6. Compliance Plan

None

## 13.0 Source-Specific Requirements [45CSR27 Requirements]

### 13.1. Limitations and Standards

13.1.1. The permittee shall be subject to all hourly and annual emission limits set forth by the affected 45CSR13 permits, for each of the sources and associated emission points subject to the requirements of 45CSR27 and identified in Attachment A of R13-2678 (Appendix 2 of this permit).

**[45CSR13, R13-2678, 5.1.1, State-Enforceable only.]**

13.1.2. The permitted sources identified in Attachment A of R13-2678 (Appendix 2 of this permit) and recognized as being subject to 45CSR27 shall comply with all applicable requirements of 45CSR27 – “To Prevent and Control the Emissions of Toxic Air Pollutants” provided, however, that compliance with any more stringent requirements under the affected 45CSR13 permit identified in Attachment A of R13-2678 (Appendix 2 of this permit), are also demonstrated. The applicable requirements set forth by 45CSR27 shall include, but not be limited to, the following:

a. The permittee shall employ the best available technology (BAT) for the purpose of reducing toxic air pollutants (TAP) associated with the applicable sources and emission points identified in Attachment A of R13-2678 (Appendix 2 of this permit).

b. The permittee shall employ BAT for the purpose of preventing and controlling fugitive emissions of TAP to the atmosphere as a result of routine leakage from those sources and their associated equipment identified in Attachment A of R13-2678 (Appendix 2 of this permit) as operating in TAP service.

**[45CSR27; 45CSR13, R13-2678, 5.1.2; State-Only Enforceable]**

13.1.3. In the event a source and associated emission point identified in Attachment A of R13-2678 (Appendix 2 of this permit) are subject to the MACT standards of 40CFR63, then compliance with the applicable MACT requirements identified in the affected 45CSR13 permit shall demonstrate compliance with the BAT requirements set forth in Section 13.1.2 of this permit.

**[45CSR27; 45CSR13, R13-2678, 5.1.3; State-Only Enforceable]**

13.1.4. Except as provided in 45CSR§§27-3.2 and 3.3, the owner or operator of a plant that discharges or may discharge a toxic air pollutant into the open air in excess of the amount shown in the Table A of 45CSR27 shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard.

**[45CSR§27-3.1; State Enforceable only]**

13.1.5. A BAT program for a plant containing multiple chemical processing units or emission sources may, for each chemical, consider the overall effectiveness of emissions control measures within a unit or the plant. All BAT programs shall fully consider the additive or cumulative health and environmental impacts of multiple pollutant and multiple unit emissions.

**[45CSR§27-3.2; R13-1009A, B.2; State Enforceable only]**

13.1.6. All chemical processing units shall be properly instrumented to alert the operator of process upsets, leaks, and other abnormal discharges of toxic air pollutants into the air and the operator shall record all such incidents and the associated emissions estimated from direct measurements of toxic air pollutant concentration and/or calculations using other process measurements.

**[45CSR§27-3.4; R13-1009A, B.2; State Enforceable only]**

- 13.1.7. All owners and operators subject to the requirements of this rule shall, by application of BAT, prevent and control fugitive emissions to the air of toxic air pollutants as a result of leakage from equipment in toxic air pollutant service including but not limited to, pump seals, compressor seals, valves, sampling connections, open-ended lines, safety relief valves, and flanges. In no event shall any equipment standard, program, or work practice less stringent than required under 40CFR61, Subpart V be deemed to represent BAT for control of toxic air pollutant emissions: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such federal regulation and standard. Equipment to be used in toxic air pollutant service installed after the effective date of this rule shall, to the maximum extent possible, be designed and operated so as to prevent leaks of toxic air pollutants.  
**[45CSR§27-4.1; R13-1009A, B.2; R13-2094, B.5; State Enforceable only]**
- 13.1.8. In quantifying plant or facility emissions of a toxic air pollutant pursuant to determining the applicability of 45CSR27 under Section 3.1 (Section 13.1.4 of this permit), emissions from potentially leaking equipment components which handle streams containing the toxic air pollutant shall be included. Such quantification shall be in accordance with estimation methods approved by the Director.  
**[45CSR§27-4.2; State Enforceable only]**
- 13.1.9. Owners and operators of chemical processing units or facilities subject to the requirements of 45CSR27 shall prevent and control working and filling losses of toxic air pollutants from tanks by routing such tank emissions to BAT control devices. The Director may approve the use of floating roof storage tanks as BAT, provided that such tanks are designed and operated in a manner which minimizes toxic air pollutant emissions taking into consideration the toxic air pollutant emission rate, tank size, and control efficiency associated with such tanks. On a case-by-case basis, the Director may exempt very small process or storage tanks or tanks storing material mixtures containing low mass fractions of toxic air pollutants from the BAT requirements taking into consideration the actual level of emissions control and/or the toxic air pollutant emission rate from the tank.  
**[45CSR§27-5.1; 45CSR13, R13-2094, B.5; State-Enforceable only]**
- 13.1.10. Owners and operators of chemical processing units and/or wastewater treatment systems subject to 45CSR27 shall employ BAT to remove and control or destroy toxic air pollutants from wastewater at the source and/or apply BAT at the wastewater treatment plant to prevent or control the discharge to toxic air pollutants resulting from air stripping or evaporation: Provided, that this provision shall not be more stringent than any specifically applicable federal regulation or standard.  
**[45CSR§27-6.1; State-Enforceable only]**
- 13.1.11. In quantifying total plant or facility emissions of a toxic air pollutant pursuant to determining the applicability of 45CSR7 under 45CSR§27-3.1 (Section 13.1.4 of this permit), emissions of a toxic air pollutant resulting from the discharge of the toxic air pollutant to wastewater streams and the subsequent treatment of wastewater shall be included. Emissions shall be determined by a method specified or approved by the Director.  
**[45CSR§27-6.2; State-Enforceable only]**
- 13.1.12. Owners and operators of chemical processing units or facilities subject to the requirements of 45CSR27 shall employ BAT to prevent or control toxic air pollutant discharges in the loading and unloading of railcars and tank trucks with toxic air pollutants or material mixtures containing toxic air pollutants.  
**[45CSR§27-7.1; State Enforceable only]**

## **13.2. Monitoring Requirements**

- 13.2.1. The permittee shall implement and maintain a LDAR program for the applicable sources and emission points identified in Attachment A of R13-2678 (Appendix 2 of this permit) in order to reduce the emissions of TAP in

accordance with the requirements of 40CFR63, Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks. Compliance with 40CFR63, Subpart H shall be considered demonstration of compliance with the provisions of 45CSR§27-4. - Fugitive Emissions of Toxic Air Pollutants.

**[45CSR27-4, State-Only Enforceable] [45CSR13, R13-2678, 5.2.1]**

- 13.2.2. In the event a source and associated emission point identified in Attachment A of R13-2678 (Appendix 2 of this permit) are subject to the MACT standards of 40CFR63, then compliance with any applicable LDAR program set forth by the MACT and identified in the affected 45CSR13 permit shall demonstrate compliance with the monitoring requirements set forth in R13-2678.

**[45CSR13, R13-2678, 5.2.2; State-Enforceable only]**

### **13.3. Testing Requirements**

- 13.3.1. In the event a source and associated emission point identified in Attachment A of R13-2678 (Appendix 2 of this permit) are subject to the MACT standards of 40CFR63, then compliance with the applicable LDAR testing requirements set forth by the MACT and identified in the affected 45CSR13 permit shall demonstrate compliance with the LDAR testing requirements set forth in R13-2678.

**[45CSR13, R13-2678, 5.3.1; State-Enforceable only]**

### **13.4. Recordkeeping Requirements**

- 13.4.1. The permittee shall maintain records of the results of all monitoring and inspections, emission control measures applied and the nature, timing, and results of repair efforts conducted in accordance to 45CSR§27-10 and set forth in the affected 45CSR13 permits as identified in Attachment A of R13-2678 (Appendix 2 of this permit).

**[45CSR13, R13-2678, 5.4.4, State-Enforceable only]**

- 13.4.2. Written records shall be maintained that identify all pumps, compressors, pressure relief valves, valves, sampling connections, open-ended lines, and flanges of a chemical processing unit that are in toxic air pollutant service. These records shall record the results of all monitoring and inspections, emissions control measures applied and the nature, timing, and results of repair efforts.

**[45CSR§27-10.3; 45CSR13, R13-2094, B.5; State-Enforceable only]**

### **13.5. Reporting Requirements**

- 13.5.1. For the purpose of demonstrating compliance with the requirements set forth in 45CSR27-10.4., the permittee shall file a written report with the Director documenting the emissions to the air of any toxic air pollutant resulting from an abnormal release or spill in excess of the following thresholds:

- a. Ethylene oxide - one (1) pound
- b. Vinyl chloride - one (1) pound
- c. Acrylonitrile - ten (10) pounds
- d. Butadiene - ten (10) pounds
- e. All other toxic air pollutants - fifty (50) pounds

**[45CSR§27-10; 45CSR13, R13-2678, 5.5.1; State-Only Enforceable]**

13.5.2. Any period of failure or inoperability of air pollution control equipment required by 45CSR27 shall be reported to the Director not later than 24-hours after the owner/operator has knowledge of such failure.

**[45CSR§27-10.5; State-Enforceable only]**

**13.6. Compliance Plan**

None

**APPENDIX 1**  
**CERTIFICATION OF DATA ACCURACY**

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached \_\_\_\_\_, representing the period beginning \_\_\_\_\_ and ending \_\_\_\_\_, and any supporting documents appended hereto, is true, accurate, and complete.

Signature<sup>1</sup> .....  
(Please use blue ink) Responsible Official or Authorized Representative Date

Name and Title .....  
(Please print or type) Name Title

Telephone No. .... Fax No. ....

- 
- <sup>1</sup> This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:
- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
    - (I) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
    - (ii) the delegation of authority to such representative is approved in advance by the Director;
  - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  - c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
  - d. The designated representative delegated with such authority and approved in advance by the Director.