

June 20, 2011

John Benedict  
Director, Division of Air Quality  
West Virginia Department of Environmental Protection  
601 – 57<sup>th</sup> Street  
Charleston, WV 25304

**SABIC INNOVATIVE PLASTICS US LLC; WASHINGTON, WV  
TITLE V RENEWAL APPLICATION  
PERMIT NUMBER R30-10700010-2005 (PARTS 1 THROUGH 5 OF 5)**

In 2005 and 2006 WV DAQ issued separate sections of the subject Title V Permit as “Part 1 of 5” and “Part 2 to 5 of 5.” In 2010, WV DAQ issued a renewal of Part 1 of the permit. SABIC has discussed the process of combining these permit sections with Mr. Jay Fedczak, Assistant Director for Permitting, and based on these discussions, we are submitting an application for a combined, single permit for the facility.

The Part 2 to 5 section of the SABIC Innovative Plastic US LLC Title V Operating Permit expires December 22, 2011. Pursuant to Section 2.3 of the permit, we are submitting, with this cover letter, a completed application, in both Confidential and Redacted versions, to initiate the process of renewing this permit. In addition to the signed application form, we have included signed Confidential Information forms, plot plan drawings, and two copies of all required forms on CD for each version.

This application package includes all forms for renewal of both parts of the existing Title V permit for the site; Part 1 of 5 and Parts 2-5 of 5. We are requesting that the renewed permit combine these separate pieces resulting in a single, more manageable operating permit for the facility.

SABIC will also be submitting, under separate cover, a proposed version of the combined Title V permit, with the proposed changes identified and explained.

If you have any questions regarding this application, please contact me at (304) 863-7694.

Respectfully,

Haila Buskirk  
Environmental Engineer

Enclosure

9226 Dupont Road  
P.O. Box 68  
Washington, WV 26181  
T: +1 304 863 7694  
F: +1 304 863 7712  
E: Haila.Buskirk@sabic-ip.com  
www.sabic-ip.com

**TITLE V PERMIT APPLICATION CHECKLIST  
FOR ADMINISTRATIVE COMPLETENESS**

<p>A complete application is demonstrated when all of the information required below is properly prepared, completed and attached. The items listed below are required information which must be submitted with a Title V permit application. Any submittal will be considered incomplete if the required information is not included.*</p>	
<input checked="" type="checkbox"/>	Two signed copies of the application (at least one <u>must</u> contain the original “ <i>Certification</i> ” page signed and dated in blue ink)
<input checked="" type="checkbox"/>	Correct number of copies of the application on separate CDs or diskettes, (i.e. at least one disc per copy)
<input checked="" type="checkbox"/>	*Table of Contents (needs to be included but not for administrative completeness)
<input checked="" type="checkbox"/>	Facility information
<input checked="" type="checkbox"/>	Description of process and products, including NAICS and SIC codes, and including alternative operating scenarios
<input checked="" type="checkbox"/>	Area map showing plant location
<input checked="" type="checkbox"/>	Plot plan showing buildings and process areas
<input checked="" type="checkbox"/>	Process flow diagram(s), showing all emission units, control equipment, emission points, and their relationships
<input checked="" type="checkbox"/>	Identification of all applicable requirements with a description of the compliance status, the methods used for demonstrating compliance, and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the source is not in compliance
<input checked="" type="checkbox"/>	Listing of all active permits and consent orders (if applicable)
<input checked="" type="checkbox"/>	Facility-wide emissions summary
<input checked="" type="checkbox"/>	Identification of Insignificant Activities
<input checked="" type="checkbox"/>	ATTACHMENT D - Title V Equipment Table completed for all emission units at the facility except those designated as insignificant activities
<input checked="" type="checkbox"/>	ATTACHMENT E - Emission Unit Form completed for each emission unit listed in the Title V Equipment Table (ATTACHMENT D) and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the emission unit is not in compliance
<input checked="" type="checkbox"/>	ATTACHMENT G - Air Pollution Control Device Form completed for each control device listed in the Title V Equipment Table (ATTACHMENT D)
<input checked="" type="checkbox"/>	ATTACHMENT H – Compliance Assurance Monitoring (CAM) Plan Form completed for each control device for which the “Is the device subject to CAM?” question is answered “Yes” on the Air Pollution Control Device Form (ATTACHMENT G)
<input checked="" type="checkbox"/>	General Application Forms signed by a Responsible Official
<input checked="" type="checkbox"/>	Confidential Information submitted in accordance with 45CSR31

## Confidential Information Justification

This form contains each of the required elements for the cover document required under 45 CSR 31. The person submitting this form may wish to attach an additional page(s) to provide adequate justification under the "Rationale" section of the form.

<b>Company Name</b>	SABIC Innovative Plastics US LLC	<b>Responsible Official</b>		
<b>Company Address</b>	P.O. Box 68 Washington, WV 26181	<b>Confidential Information Designee in State of WV</b>	<b>Name</b>	Allen White
			<b>Title</b>	Interim Manufacturing Manager
<b>Person/Title Submitting Confidential Information</b>	Halla Buskirk  EHS Engineer		<b>Address</b>	9226 Dupont Road Washington, WV 26181
			<b>Phone</b>	(304) 863-7722
		<b>Fax</b>	(304) 863-7712	

<p><b>Reason for Submittal of Confidential Information:</b>          SABIC is required to submit a Title V renewal permit application for the permitted facilities. Forms used to complete the permit application request information SABIC deems Business Confidential.</p>
--

Identification of Confidential Information	Rationale for Confidential Claim	Confidential Treatment Time Period
<p>Equipment design capacities in Attachment D form as noted.</p> <p>Equipment design capacities, hourly throughput rates, and annual throughput rates in Attachment E forms as noted.</p>	<p>For the reasons set forth below, the information described to the left meets the requirements for trade secrets set forth at 45 CSR §45 31-4:</p> <p><b>SABIC has undertaken reasonable efforts to maintain secrecy of the confidential information.</b> West Virginia regulations indicate that one consideration in determining whether information is a trade secret is whether the information is the subject of reasonable efforts to maintain its secrecy. The Company takes all practicable steps to insure that the confidential information is kept secret. As an initial matter, SABIC has instituted security measures at its Washington facility (the "Facility") to limit access to the Facility by unauthorized persons. These security measures include fencing around Facility grounds, controlled entry to Facility buildings, visitor sign-in, computer system password, and electronic locks to control access to key laboratory and process areas.</p> <p>In addition, the Company has implemented procedures to control the disclosure of the confidential information by employees, vendors, and customers to whom such information has been provided. These procedures include identification of confidential material, limiting of circulation of data to those with a need to know, stamping of confidential drawings or documents, and circulation of memos regarding protection of confidential information.</p> <p>SABIC also requires its employees to sign agreements stating that the employees will not use, publish, or disclose any trade secrets or confidential information except as required by the employee's duties while employed by SABIC. SABIC further limits the dissemination of confidential information within SABIC to those employees who require such information in order to carry out their duties.</p> <p>When SABIC is required to disclose the confidential information to vendors, SABIC requires its vendors to agree in writing that the vendor will not divulge such information to other parties and will return to SABIC any technical drawings containing such information at the completion of the vendor's work. It is clear, therefore, that the confidential information "is the subject of efforts that are reasonable under the circumstances to maintain its secrecy."</p>	<p>Permanent</p>

Identification of Confidential Information	Rationale for Confidential Claim	Confidential Treatment Time Period
	<p><b>The confidential information is not reasonably obtainable without consent.</b> West Virginia regulations require that the confidential information not be reasonably obtainable without the Company's consent by use of legitimate means. Legitimate means include inspection or analysis of material or goods sold by the Company to the public, or review of publicly available records. It is clear that the amount of latex produced by the Company could not be determined by inspection or analysis of the Company's product. In addition, as noted above, SABIC does not circulate outside the Company information relating to amount of material produced. Finally, no federal or state statute requires the Company to divulge to the public, and the Company does not generally submit for public inspection, such information. For these reasons, the confidential information is not reasonably obtainable without the Company's consent by use of legitimate means.</p> <p><b>The confidential information derives economic value from not being known to others.</b> The final consideration set forth in 45 CSR §45-31-4 for determining whether the confidential information constitutes trade secrets is whether the disclosure of such information is likely to cause substantial harm to the Company's competitive position. In order to understand the economic significance of the confidential information, it is important to keep in mind the fact that the resins produced by the Company compete directly with resins produced by the Company's competitors.</p> <p>Because the Company's and its competitors' products may often be interchangeable for a particular application, marketing strategy and production costs are the two principal factors that allow SABIC to compete effectively with other manufacturers. Disclosure of SABIC's marketing strategy would allow competitors to modify their strategies to more effectively compete with SABIC, thereby adversely impacting SABIC potential sales and revenues. Therefore, the nondisclosure of any information from which SABIC marketing strategy could be deduced, including production rates, has significant economic value and is clearly a trade secret. In addition, information such as product code emissions factors can be used to easily calculate production capacities. As such, product code emissions factors are confidential for the same reason as the actual production capacities.</p> <p>Accordingly, the confidential information meets the definition of "trade secret" set forth in 45 CSR §45-31-4. The confidential information derives independent economic value from not being known to other persons, is not revealed by inspection or analysis of the materials produced by SABIC, and is subject to strict security measures and confidentiality agreements to prevent unauthorized use or disclosure of such information.</p> <p><b>The Company reserves the right to supply additional information if the Division deems the above information to be insufficient to support its claim of confidentiality.</b></p>	

<b>Responsible Official Signature:</b>	
<b>Responsible Official Title:</b>	Interim Manufacturing Manager
<b>Date Signed:</b>	

**NOTE: Must be signed and dated in BLUE INK.**



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 numbered sections: 1. Name of Applicant (SABIC Innovative Plastics US LLC), 2. Facility Name or Location (Washington Facility), 3. DAQ Plant ID No. (1 0 7 — 0 0 0 1 0), 4. Federal Employer ID No. (FEIN) (3 3 1 1 6 9 2 7 3), 5. Permit Application Type (Permit Renewal), 6. Type of Business Entity (LLC), 7. Is the Applicant the: (Both), 8. Number of onsite employees (136), 9. Governmental Code (Privately owned and operated; 0), 10. Business Confidentiality Claims (Yes).

<b>11. Mailing Address</b>		
Street or P.O. Box: 9226 Dupont Road		
City: Washington	State: WV	Zip: 26181
Telephone Number: (304) 863-7231	Fax Number: (304) 863-7712	

<b>12. Facility Location</b>		
Street: 9226 Dupont Road	City: Washington	County: Wood
UTM Easting: 441.6 km	UTM Northing: 4,345.2 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions: South of Washington, WV on State Route 892, Wood County		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the affected state(s). Ohio	
Is facility located within 100 km of a Class I Area <sup>1</sup> ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, name the area(s).	
If no, do emissions impact a Class I Area <sup>1</sup> ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<sup>1</sup> Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

<b>13. Contact Information</b>		
<b>Responsible Official:</b> Allen White		<b>Title:</b> Washington Site Interim Manufacturing Mgr.
<b>Street or P.O. Box:</b> 9226 Dupont Road		
<b>City:</b> Washington	<b>State:</b> WV	<b>Zip:</b> 26181
<b>Telephone Number:</b> (304) 863-7722	<b>Fax Number:</b> (304) 863-7712	
<b>E-mail address:</b> Allen.White@SABIC-IP.com		
<b>Environmental Contact:</b> Haila Buskirk		<b>Title:</b> Environmental Engineer
<b>Street or P.O. Box:</b> 9226 Dupont Road		
<b>City:</b> Washington	<b>State:</b> WV	<b>Zip:</b> 26181
<b>Telephone Number:</b> (304) 863-7694	<b>Fax Number:</b> (304) 863-7712	
<b>E-mail address:</b> Haila.Buskirk@SABIC-IP.com		
<b>Application Preparer:</b> SABIC Innovative Plastics US LLC		<b>Title:</b>
<b>Company:</b>		
<b>Street or P.O. Box:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip:</b> -
<b>Telephone Number:</b> ( ) -	<b>Fax Number:</b> ( ) -	
<b>E-mail address:</b>		

**14. Facility Description**

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Latex Area	Polybutadiene Latex Substrate	325211	2821
Resin Area	ABS Resin	325211	2821
WS/WV Finishing Lines	ABS Pellets	325211	2821
Production Support	None	325211	2821
Tank Farm	None	325211	2821
Boiler House	None	325211	2821
Stationary Reciprocating Internal Combustion Engines	None	325211	2821
Waste Water Treatment Plant	None	325211	2821

**Provide a general description of operations.**

**Latex Processing Area:**

The Latex Area produces water-based substrates for the manufacture of thermoplastic resins. The latex can be an intermediate or a final product.

**Resins Processing Area:**

The Resins Area processes latex substrates into thermoplastic resin. The resin can be an intermediate or a final product. This area also includes equipment for product handling, packaging and loading for shipment.

**WS/WV Finishing Lines:**

These process lines use Resin Area products to produce plastic pellets.

**Support Areas:**

These areas include the Quality Control Lab and the Pilot Plant for testing and development in support of the manufacturing areas.

**Tank Farm Area:**

Process raw materials are stored in bulk storage vessels.

**Boiler House:**

The boiler house consists of three steam generating boilers and auxiliary equipment. The steam is used for process operations and building heating. Two boilers are permitted to burn either natural gas or fuel oil, and one is permitted to burn only natural gas.

**Stationary Reciprocating Internal Combustion Engines:**

These engines provide emergency power for fire fighting capability and communications in the event of a power outage.

**Wastewater Treatment Plant:**

The Plant's sanitary sewage stream is treated in a package sanitary treatment plant. The effluent from the package sanitary treatment plant is combined with the Plant's process wastewater and treated in an industrial wastewater treatment plant.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

**Section 2: Applicable Requirements**

<b>18. Applicable Requirements Summary</b>	
Instructions: Mark all applicable requirements.	
<input checked="" type="checkbox"/> . SIP	<input type="checkbox"/> . FIP
<input checked="" type="checkbox"/> . Minor source NSR (45CSR13)	<input type="checkbox"/> . PSD (45CSR14)
<input type="checkbox"/> . NESHAP (45CSR15) *	<input type="checkbox"/> . Nonattainment NSR (45CSR19)
<input checked="" type="checkbox"/> . Section 111 NSPS	<input checked="" type="checkbox"/> . Section 112(d) MACT standards
<input type="checkbox"/> . Section 112(g) Case-by-case MACT	<input checked="" type="checkbox"/> . 112(r) RMP
<input type="checkbox"/> . Section 112(i) Early reduction of HAP	<input type="checkbox"/> . Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> . Section 129 Standards/Reqts.	<input checked="" type="checkbox"/> . Stratospheric ozone (Title VI)
<input type="checkbox"/> . Tank vessel reqt., section 183(f)	<input type="checkbox"/> . Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> . NAAQS, increments or visibility (temp. sources)	<input checked="" type="checkbox"/> . 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> . 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> . Emissions Trading and Banking (45CSR28)	<input checked="" type="checkbox"/> . Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> . CAIR NO <sub>x</sub> Annual Trading Program (45CSR39)	<input type="checkbox"/> . CAIR NO <sub>x</sub> Ozone Season Trading Program (45CSR40)
<input type="checkbox"/> . CAIR SO <sub>2</sub> Trading Program (45CSR41)	

\* This rule no longer exists. It was superseded by 45 CSR 34 in 2008. The plant is subject to the asbestos rule at 40 CFR 61 Subpart M, which was part of 45 CSR 15 and is now incorporated into 45 CSR 34.

## 19. Non Applicability Determinations

**List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.**

- 40CFR60, Subpart D - Standards of Performance for Fossil-Fuel-fired Steam Generators constructed after August 17, 1971  
*Basis for Applicability Determination:* Applies to steam generation units with heat input > 250 mmBtu/hr, and were constructed, reconstructed, or modified after 8/17/71. Units at the Washington Plant are < 250 MMBtu/hr.
- 40CFR60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.  
*Basis for Applicability Determination:* Applies to steam generating units with heat input > 100 mmBtu/hr which were constructed, reconstructed, or modified after 6/19/84. Boiler #3 and Boiler #4 were constructed prior to 6/19/84 and have not been modified since; therefore, they are exempt from the requirements of this Subpart. Boiler #5 is subject to the requirements of this Subpart.
- 40CFR60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.  
*Basis for Applicability Determination:* Applies to steam generating units with heat input of 10-100 mmBtu/hr which were constructed, reconstructed, or modified after 6/9/89. No such steam generating units were constructed or modified after 6/9/89.
- 40CFR60, Subpart E - Standards of Performance for Incinerators.  
*Basis for Applicability Determination:* Applies only to burning solid waste. The facility does not have a solid waste incinerator.
- 40CFR60, 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:* No such petroleum liquid storage vessel has a capacity greater than 40,000 gallons.
- 40CFR60, 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:* No such petroleum liquid storage vessel has a capacity greater than 40,000 gallons.
- 40CFR60, 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 are exempt from the requirements of the Subpart Kb based on when they were built, their size or pressure, or material stored.
- 40CFR60, Subpart O - Standards of Performance for Sewage Treatment Plants.  
*Basis for Applicability Determination:* The facility does not operate a municipal treatment plant.
- 40CFR60, Subpart VV - Equipment Leaks of VOC for the Synthetic Organic Chemical Manufacturing Industry (SOCMI).  
*Basis for Applicability Determination:* The facility does not manufacture as an intermediate or final product any of the listed SOCMI chemicals.
- 40CFR60, Subpart DDD - Standards of Performance for VOC Emissions from the Polymer Manufacturing Industry.  
*Basis for Applicability Determination:* The facility does not operate SOCMI air oxidation unit processes.
- 40 CFR 63 Subpart G - National Emissions Standards for Organic HAPs from the SOCMI Process Vents, Storage Vessels, Transfer Operations, and Wastewater.  
*Basis for Applicability Determination:* Subpart G is not applicable to the facility, except as referenced by 40CFR63 Subpart JJJ, because it does not manufacture as an intermediate or final product any of the listed chemicals that would trigger applicability.

Permit Shield

**19. Non Applicability Determinations (Continued)** - Attach additional pages as necessary.

**List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.**

- 40CFR60, Subpart III - Standards of Performance for VOC Emissions from SOCOMI Air Oxidation Unit Processes.  
*Basis for Applicability Determination:* The facility does not manufacture as an intermediate or final product any of the listed SOCOMI chemicals.
- 40CFR60, Subpart KKK - Standards of Performance for Equipment Leaks of VOC from On-Shore Natural Gas Processing Plants.  
*Basis for Applicability Determination:* The facility operates natural gas wells but does not engage in the extraction of natural gas liquids from field gas or the fractionation of mixed natural gas liquids to natural gas products.
- 40CFR60, Subpart LLL - Standards of Performance for Onshore Natural Gas Processing; SO<sub>2</sub> Emissions.  
*Basis for Applicability Determination:* The facility operates natural gas wells but does not separate the H<sub>2</sub>S and CO<sub>2</sub> contents from the sour natural gas stream.
- 40CFR60, Subpart NNN - Standards of Performance for VOC Emissions from SOCOMI Distillation Operations.  
*Basis for Applicability Determination:* The facility does not manufacture as an intermediate or final product any of the listed SOCOMI chemicals.
- 40CFR60, Subpart RRR - - Standards of Performance for VOC Emissions from SOCOMI Reactor Process.  
*Basis for Applicability Determination:* The facility does not manufacture as an intermediate or final product any of the listed SOCOMI chemicals.
- 40CFR63, Subpart G - National Emissions Standards for Organic HAPs from the SOCOMI Process Vents, Storage Vessels, Transfer Operations, and Wastewater.  
*Basis for Applicability Determination:* Subpart G is not applicable except as referenced by 40CFR63 Subpart JJJ, because the Plant does not manufacture as an intermediate or final product any of the listed chemicals that would trigger applicability.
- 40CFR63, 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) takes precedence.
- 40CFR63, 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 rather is subject to 40CFR63, Subpart JJJ as stated in Subpart U §63.480(f)(4).
- 40CFR63, Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins - Group 1 Wastewater provisions.  
*Basis for Applicability Determination:* The facility does not have any Group 1 Wastewater streams; therefore, it is not subject to Group 1 Wastewater provisions.
- 40CFR63, Subpart FFFF - National Emission Standards for Hazardous Air Pollutant Emissions: Miscellaneous Organic Chemical Manufacturing (MON).  
*Basis for Applicability Determination:* The facility performs operations that compound solid materials with additives to produce compounded polymer plastic resin pellets. These operations are exempted from the requirements of Subpart FFFF per §63.2435(c) (fabricating operations). The facility's Finishing (or Compounding) operation does not involve processing with a HAP solvent and is not intended to remove residual HAP monomer.
- The Plant has only one operating scenario, therefore requirements of Section 2.12. "Reasonably Anticipated Operating Scenarios" are not applicable and the Plant is not required to certify compliance with them.
- The Plant is not a subject to a Compliance Plan (as per Requirement 3.6.); therefore, the requirements of Section 2.15. "Schedule of Compliance" is not applicable and the Plant is not required to certify compliance with them.
- The Plant is not subject to Title IV of the Clean Air Act; therefore, the requirements of Section 2.25. "Acid Deposition Control" is not applicable and the Plant is not required to certify compliance with them.

Permit Shield

## 20. Facility-Wide Applicable Requirements

**List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).**

- Open Burning – 45 CSR6 §3.1 and §3.2
- Asbestos – 40CFR61 and 45CSR34
- Odor – 45CSR4 §3.1 (State enforceable only)
- Permanent Shutdown – 45CSR13 §10.5
- Standby Plan for Reducing Emissions – 45CSR11 §5.2
- Emission Inventory – WV Code §22-5-4(a)(14)
- Greenhouse Gas Reporting – 45CSR42 (State enforceable only) \*
- Ozone-Depleting Substances – 40CFR82, Subpart F
- Risk Management Plan – 40CFR68
- Emissions of Toxic Air Pollutants – 45CSR13, R13-2678
- Emissions of VOCs – 45CSR13, R13-2678
- Emission of Visible Particulate Matter – 45CSR6
- Emission of Smoke and PM from Process Source Operations – 45CSR7
- Polymers and Resins Group IV MACT- 40CFR63, Subpart JJJ
- Benzene Waste Operations NESHAP – 40CFR61, Subpart FF
- Site Remediation MACT – 40CFR63, Subpart GGGGG

\* We understand this rule will be rescinded in the near future.

Permit Shield

**For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

*Monitoring Requirements*

- Monthly visible emissions monitoring for Pollution Control Devices in Appendix 3 of the Title V permit.

*Testing Requirements*

- Conduct testing in accordance with the West Virginia Code, underlying regulations, permits, and orders.

*Recordkeeping Requirements*

- Keep records of monitoring information as applicable.
- Retain records or all required monitoring data and support information for a period of 5 years.
- Maintain a record of all odor complaints received
- Maintain records of malfunctions of air pollution control equipment.
- Records required by 40CFR63, Subpart JJJ

*Reporting Requirements*

- Any application form, report, or compliance certification required to be submitted to the DAQ and/or USEPA shall contain a certification by a responsible official.
- Submit a certified emissions statement and pay fee on an annual basis in accordance with the submittal requirements of the DAQ.
- Certify compliance with conditions of the Title V permit on the forms provided by the DAQ.
- Submit semi-annual monitoring reports for any required monitoring on or before September 15 for the reporting period January 1 to June 30 and March 15 for the reporting period July 1 to December 31.
- Reporting emergency situations are in accordance of §2.17 of the Title V permit.
- Submit deviation reports resulting from an emergency or upset condition per 45CSR30 §5.7, that poses an imminent and substantial danger to public health, safety or environment, or deviations from permit requirements in accordance with DAQ rules.
- Notify the DAQ within 15 days of discovering the emissions of any TAP unknown to be occurring on the date of entry of CO-R27-92-18 on June 23, 1992 (superseded by R13-2678).
- Reports required by 40CFR63, Subpart JJJ

**Are you in compliance with all facility-wide applicable requirements?**  . Yes  . No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.**

**List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.**

See above

Permit Shield

**For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

See above

**Are you in compliance with all facility-wide applicable requirements?**  . Yes  . No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

<b>21. Active Permits/Consent Orders</b>		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit <i>(if any)</i>
R13-0009B	04/05/2010	None
R13-301A	03/07/2002	None
R13-658A	03/07/2002	None
R13-992B	10/14/2003	None
R13-1009A	10/09/2003	None
R13-1069	12/30/1988	None
R13-1097	05/09/1989	None
R13-1133A	03/07/2002	None
R13-1351A	02/22/2002	None
R13-1588B	10/23/2003	None
R13-1886E	02/19/2009	None
R13-2084C	02/18/2009	None
R13-2288C	09/14/2006	None
R13-2486A	03/15/2005	None
R13-2572B	03/31/2010	None
R13-2678	10/04/2006	None
R30-10700010	10/21/2010	None
	/ /	
	/ /	

**22. Inactive Permits/Obsolete Permit Conditions \***

Permit Number	Date of Issuance	Permit Condition Number
R13-841	04/01/1986	All
R13-1029A	03/07/2002	All
R13-1052	10/25/1988	All
R13-1118	06/06/1989	All
R13-1251C	12/09/2003	All
R13-1290	10/18/1990	All
R13-1565	03/01/1993	All
R13-1635	10/12/1993	All
R13-2094	07/15/1997	All
R13-658A	03/07/2002	A.1, A.5, A.6 (Partial)
R13-1886E	02/19/2009	4.1.7 (Partial)
R13-2678	10/04/2006	Attachment A (Partial)

\* Earlier Title V Applications listed other inactive permits and obsolete permit conditions.

**Section 3: Facility-Wide Emissions**

<b>23. Facility-Wide Emissions Summary [Tons per Year]</b>	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	163.8
Nitrogen Oxides (NO <sub>x</sub> )	444.0
Lead (Pb)	<0.2
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	119.2
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	119.2
Total Particulate Matter (TSP)	119.2
Sulfur Dioxide (SO <sub>2</sub> )	52.9
Volatile Organic Compounds (VOC)	738.6
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions
Acrylonitrile	73.7
1,3-Butadiene	28.1
Styrene	407.8
Cumene	27.1
Xylenes	3.0
Ethylbenzene	3.0
Methyl Methacrylate	44.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions
Sulfuric Acid	<0.02

<sup>1</sup>*PM<sub>2.5</sub> and PM<sub>10</sub> are components of TSP.*

<sup>2</sup>*For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.*

*\*These values represent the sum of the PTE values from the Attachment E Emission Unit forms, with the following exceptions.*

*For the potential emissions from storage tanks, when there are multiple tanks storing a single chemical, we have shown the PTE on Attachment E Emission Unit form as though each tank stores the Maximum Annual Throughput, since that is an actual option. However, for the Facility Wide PTE above, we have included the working loss emissions from one of the multiple tanks and the breathing loss emissions summed from all of the tanks used for that chemical.*

*For the BD pressure vessels, the PTE is based on maintenance activities for all the vessels combined. This value is listed on each individual Attachment E form and is included only once in the Facility Wide PTE above.*

*In addition, for the Criteria Pollutants only, when accounting for the potential emissions from Boilers 3 and 4, we have used the PTE values for burning natural gas, although values are set forth on the respective boiler's Attachment E Emission Unit form for both natural gas and #2 fuel oil.*

**Section 4: Insignificant Activities**

<b>24. Insignificant Activities (Check all that apply)</b>	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input checked="" type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO <sub>2</sub> lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input checked="" type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input checked="" type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input checked="" type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input checked="" type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO <sub>x</sub> , SO <sub>2</sub> , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:  <div style="margin-left: 40px;"> <hr/> </div>

<b>24. Insignificant Activities (Check all that apply)</b>	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input checked="" type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input checked="" type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input checked="" type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input checked="" type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input checked="" type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input checked="" type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant

<b>24. Insignificant Activities (Check all that apply)</b>	
	owners/operators must still get a permit if otherwise requested.)
<input checked="" type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input checked="" type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input checked="" type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input checked="" type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input checked="" type="checkbox"/>	54. Steam vents and safety relief valves.
<input checked="" type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input checked="" type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input checked="" type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input checked="" type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

**Section 5: Emission Units, Control Devices, and Emission Points**

<b>25. Equipment Table</b>
Fill out the <b>Title V Equipment Table</b> and provide it as <b>ATTACHMENT D</b> .
<b>26. Emission Units</b>
For each emission unit listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Emission Unit Form</b> as <b>ATTACHMENT E</b> .
For each emission unit not in compliance with an applicable requirement, fill out a <b>Schedule of Compliance Form</b> as <b>ATTACHMENT F</b> .
<b>27. Control Devices</b>
For each control device listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Air Pollution Control Device Form</b> as <b>ATTACHMENT G</b> .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the <b>Compliance Assurance Monitoring (CAM) Form(s)</b> for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as <b>ATTACHMENT H</b> .

**Section 6: Certification of Information**

**28. Certification of Truth, Accuracy and Completeness and Certification of Compliance**

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

**a. Certification of Truth, Accuracy and Completeness**

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

**b. Compliance Certification**

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

**Responsible official (type or print)**

Name: Allen White	Title: Interim Manufacturing Manager
-------------------	--------------------------------------

**Responsible official's signature:**

Signature: \_\_\_\_\_ Signature Date: \_\_\_\_\_  
 (Must be signed and dated in blue ink)

<b>Note: Please check all applicable attachments included with this permit application:</b>	
<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s) [Please note that VOC data in these forms includes any organic HAP present.]
<input checked="" type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s) [Form not needed; each emission unit is in compliance.]
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

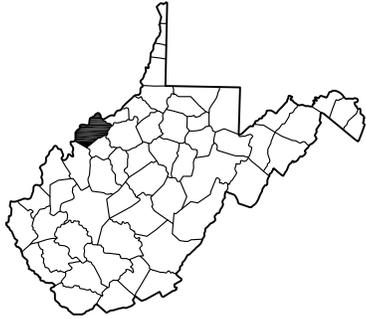
*All of the required forms and additional information can be found and downloaded from, the DEP website at [www.dep.wv.gov/dag](http://www.dep.wv.gov/dag), requested by phone (304) 926-0475, and/or obtained through the mail.*

## Table of Contents

<b>ATTACHMENT A</b>	Area Map
<b>ATTACHMENT B</b>	Plot Plan
<b>ATTACHMENT C</b>	Process Flow Diagrams
<b>ATTACHMENT D</b>	Equipment Tables
<b>ATTACHMENT E</b>	Emission Unit Forms
<b>ATTACHMENT F</b>	Schedule of Compliance
<b>ATTACHMENT G</b>	Air Pollution Control Device Forms
<b>ATTACHMENT H</b>	Compliance Assurance Monitoring

# **Attachment A**

## **Area Map**



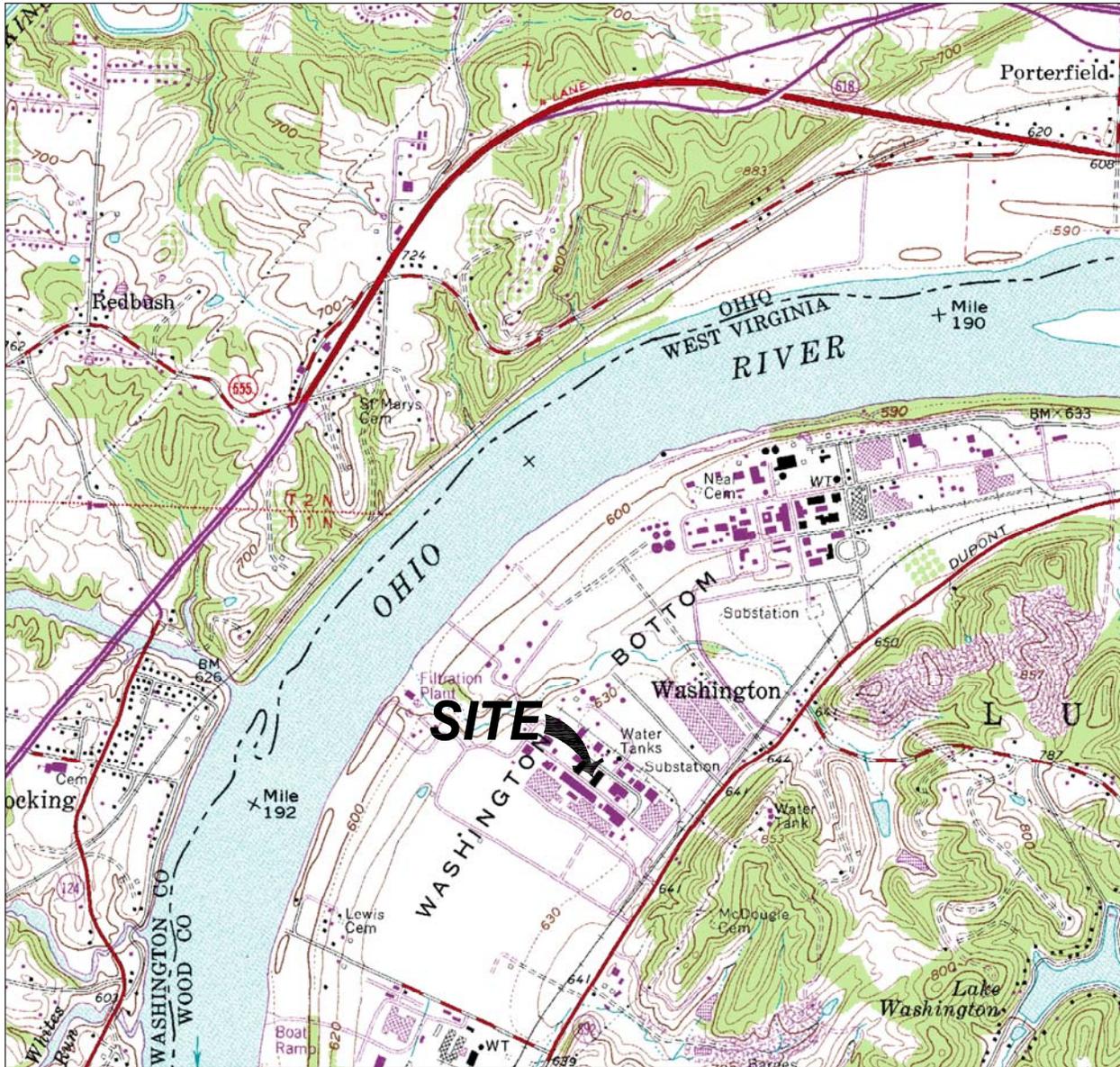
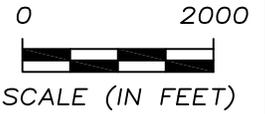
WEST VIRGINIA



WOOD COUNTY



LAT. 39.2602 LON. -81.6799  
 T - R  
 CITY OF WASHINGTON  
 WOOD COUNTY  
 WEST VIRGINIA



## SITE LOCATION MAP

ADAPTED FROM USGS  
 LITTLE HOCKING, OHIO-W. VA /PHOTO 1961 REVISED 1988

REVISIONS ARE TO BE MADE ON THE CADD FILE ONLY



**SABIC INNOVATIVE PLASTICS US LLC**

9226 DUPONT ROAD  
 WASHINGTON, WEST VIRGINIA

CADD Review D.C.

CHK'D D.C.

0103762

Drawn By  
 S.REYNOLDS

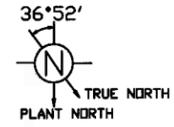
**Environmental Resources Management**

ATTACHMENT A

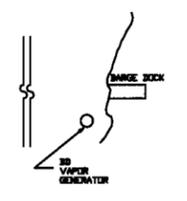
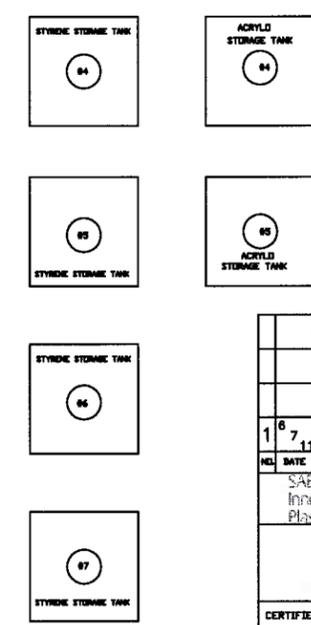
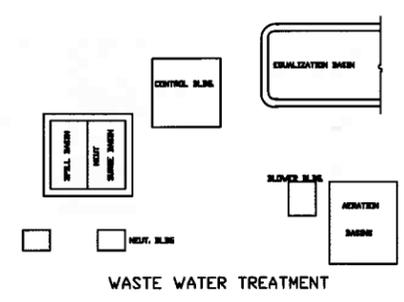
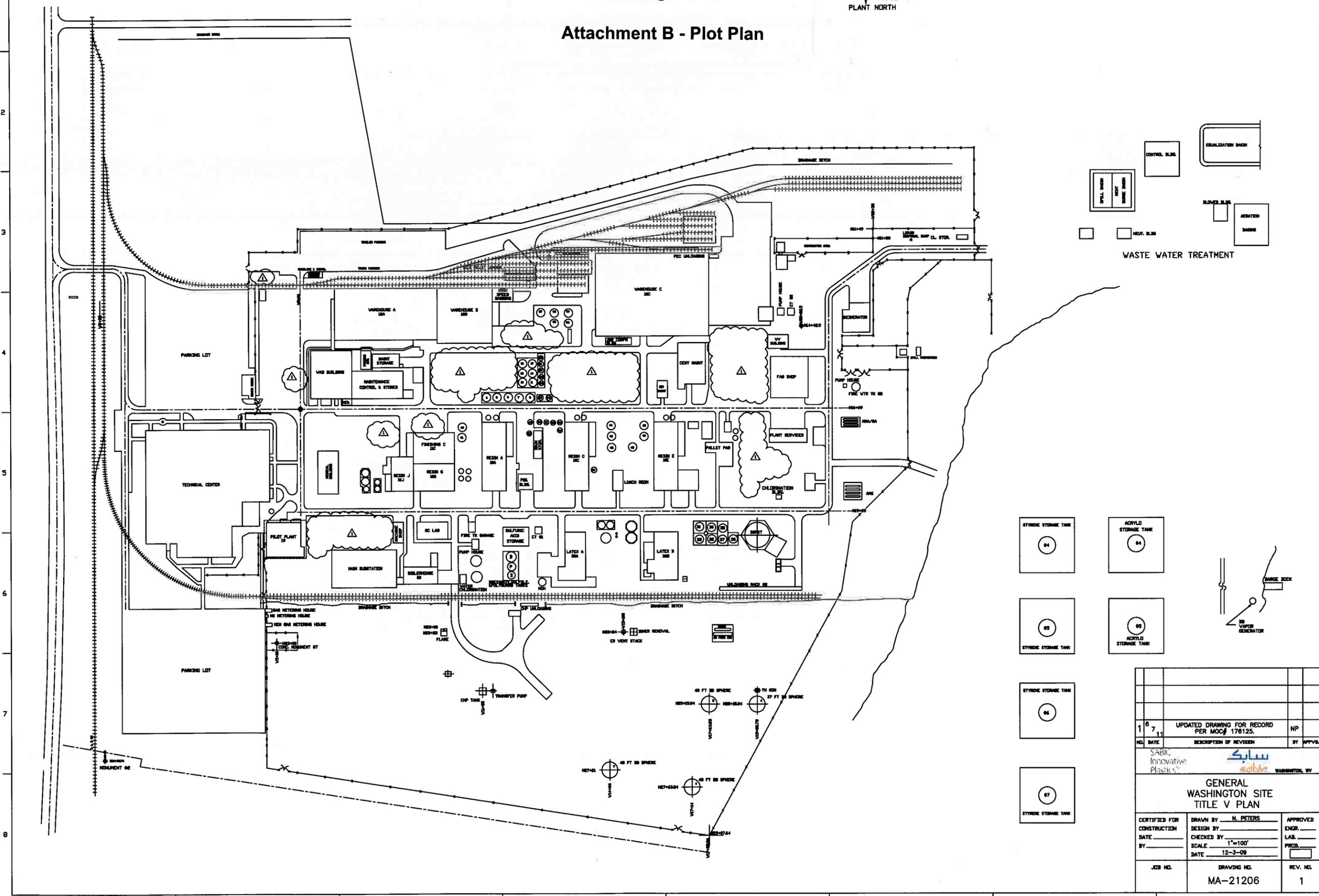
# **Attachment B**

## **Plot Plan**

SABIC Innovative Plastics US LLC  
Washington, WV



Attachment B - Plot Plan



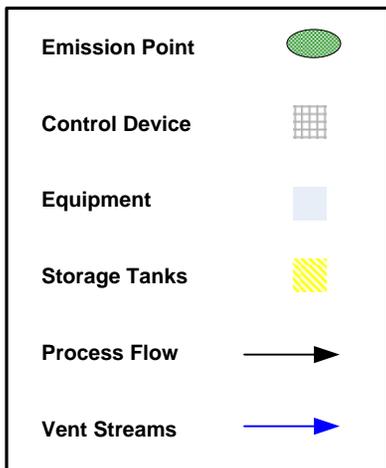
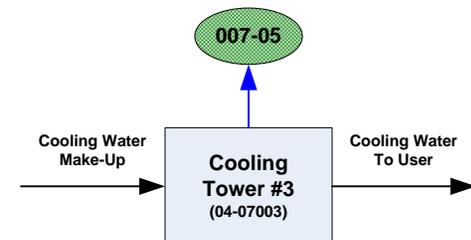
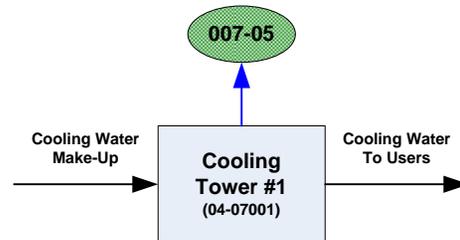
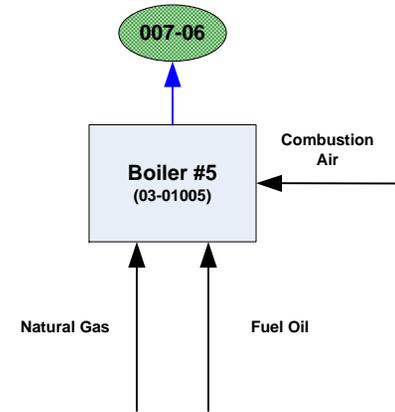
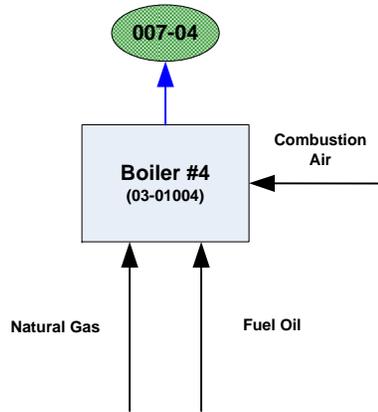
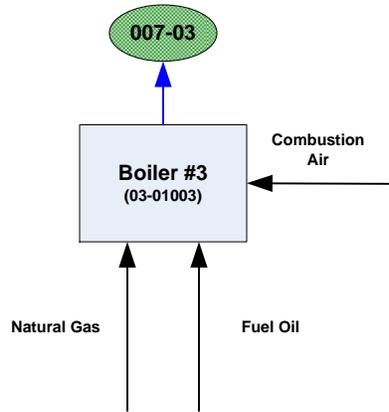
1 6 7 11			UPDATED DRAWING FOR RECORD PER MOC# 176125.	NP
NO.	DATE	DESCRIPTION OF REVISION	BY	APPROV.
GENERAL WASHINGTON SITE TITLE V PLAN				
CERTIFIED FOR CONSTRUCTION	DESIGN BY N. PETERS	ENGR.		
DATE	CHECKED BY	LAB.		
BY	SCALE 1"=100'	PRED.		
	DATE 12-3-09			
JOB NO.	DRAWING NO. MA-21206	REV. NO.	1	

# **Attachment C**

## **Process Flow Diagrams**

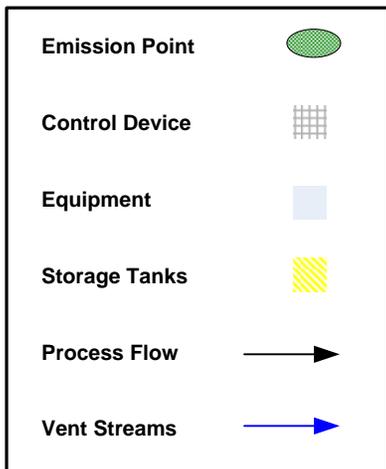
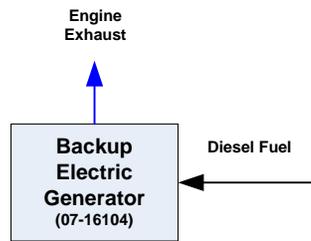
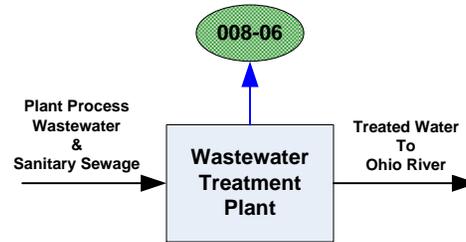
# Attachment C – Process Flow Diagram

## Boiler House – Emission Unit Group 007



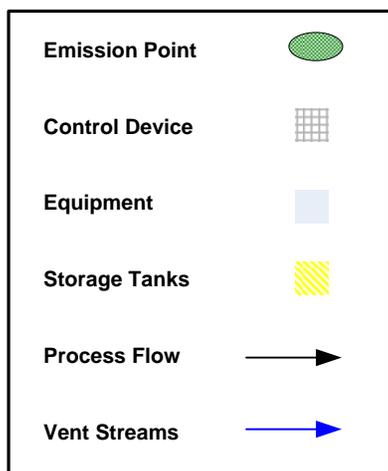
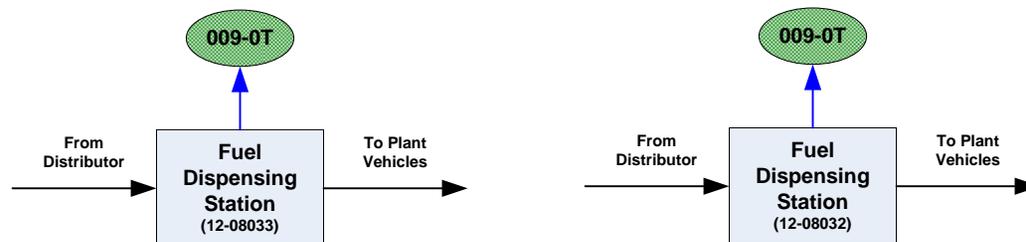
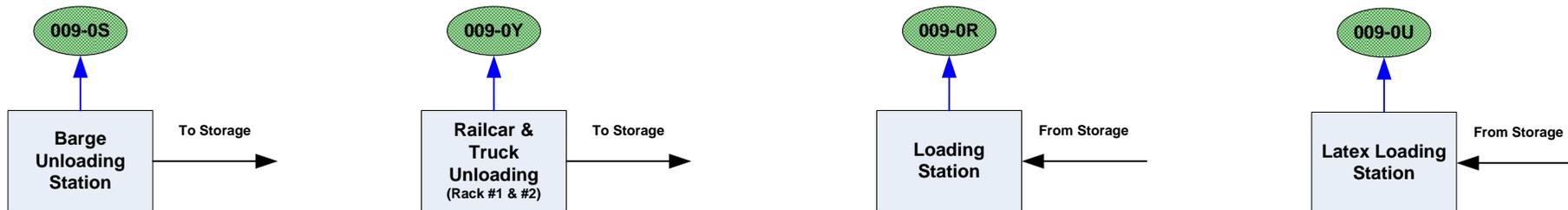
# Attachment C – Process Flow Diagram

## WWTP – Emission Unit Group 008



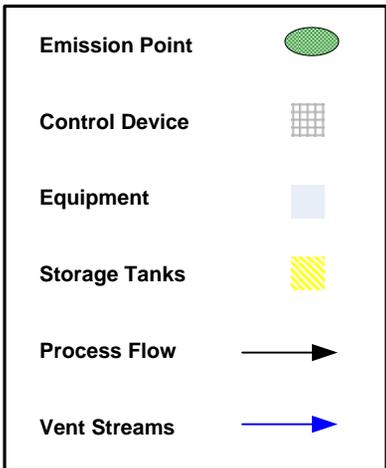
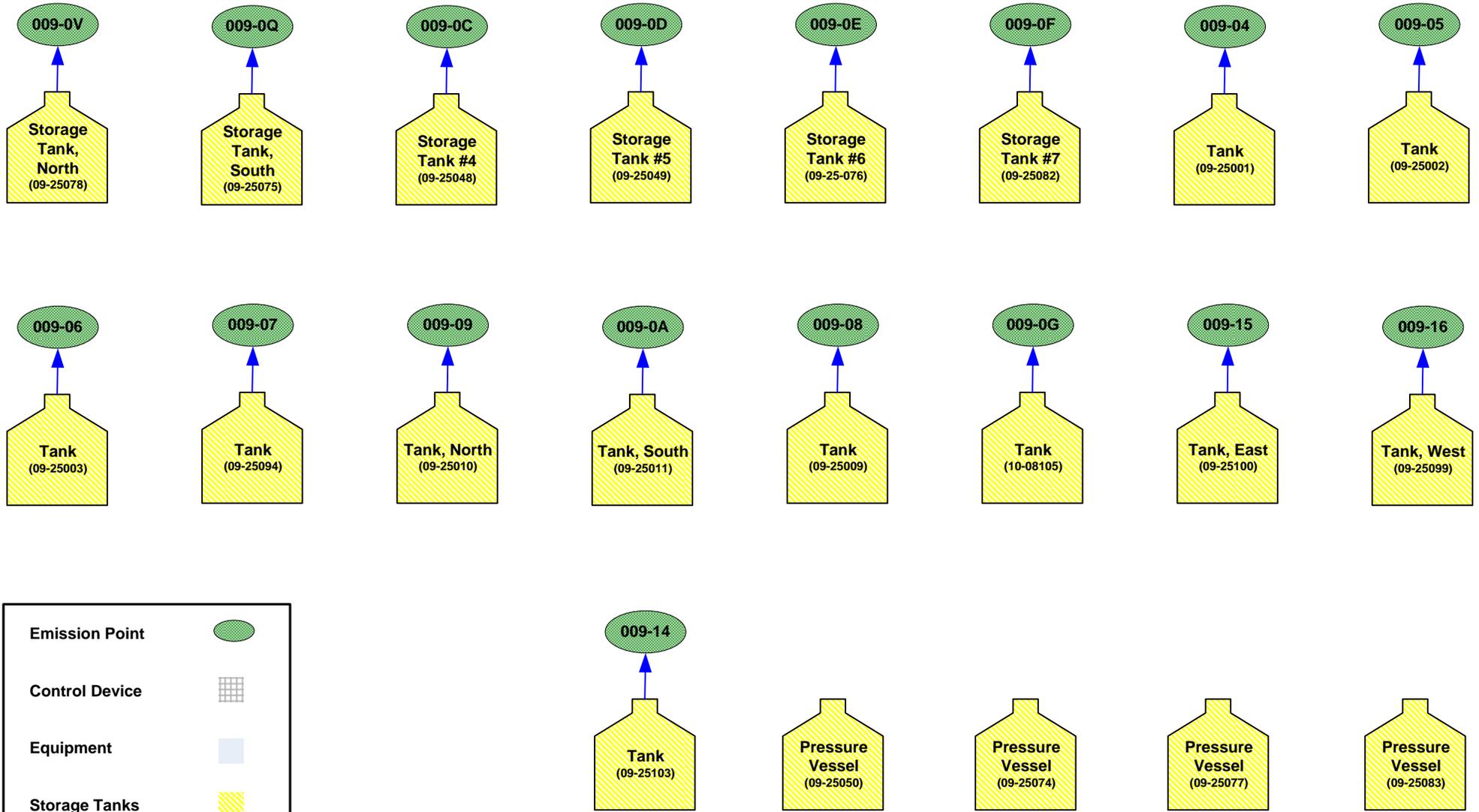
# Attachment C – Process Flow Diagram

## Bulk Loading – Emission Unit Group 009

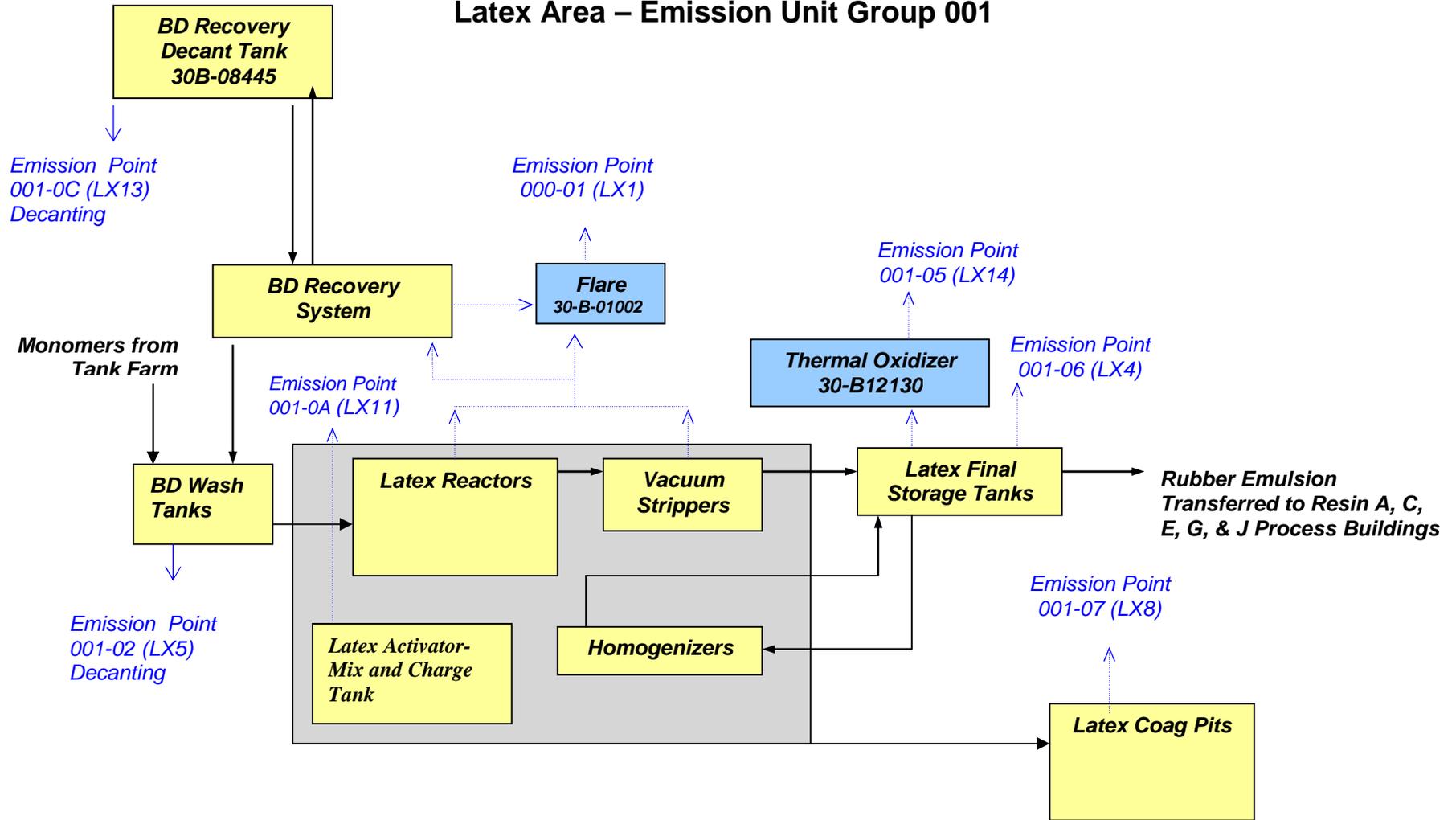


# Attachment C – Process Flow Diagram

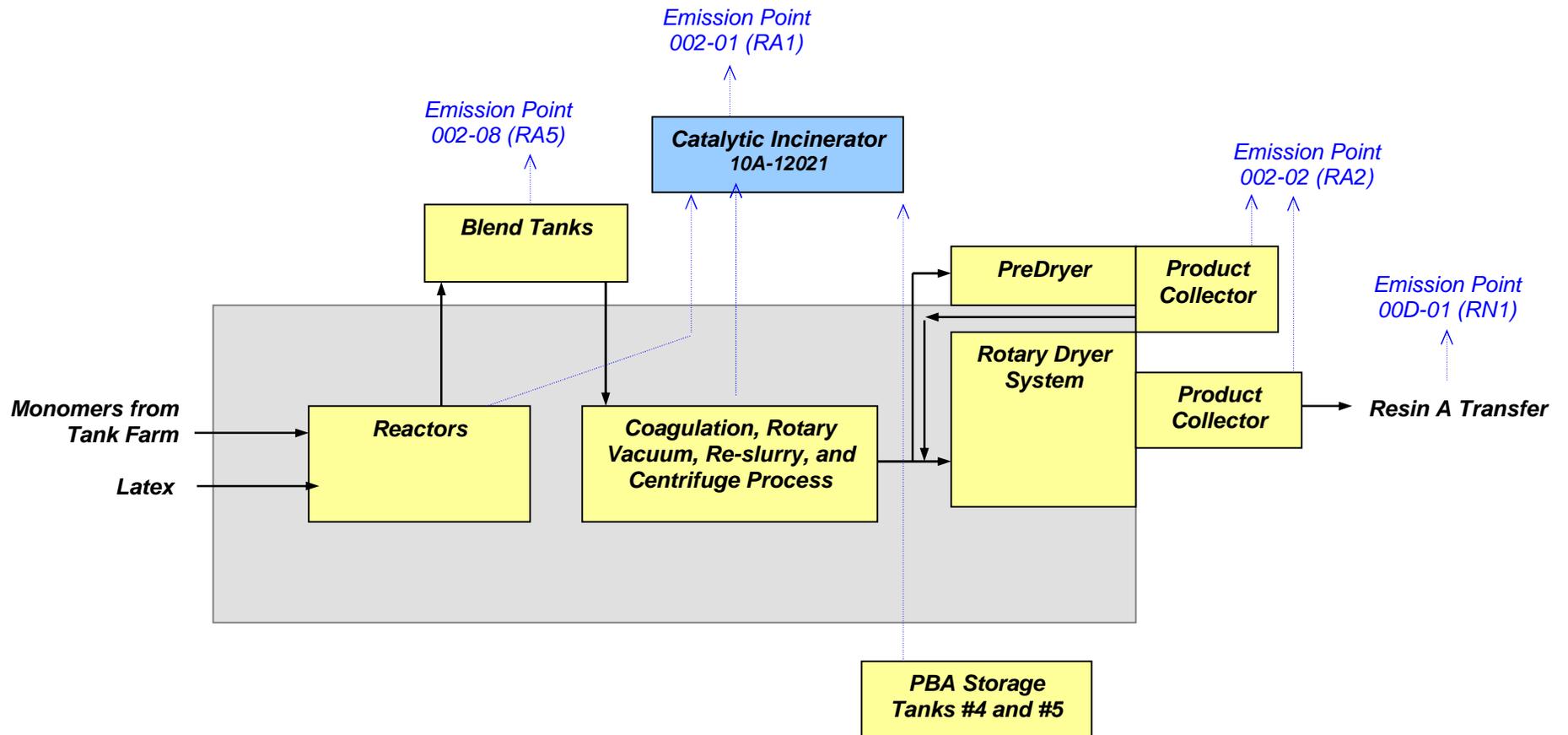
## Tank Farm – Emission Unit Group 009



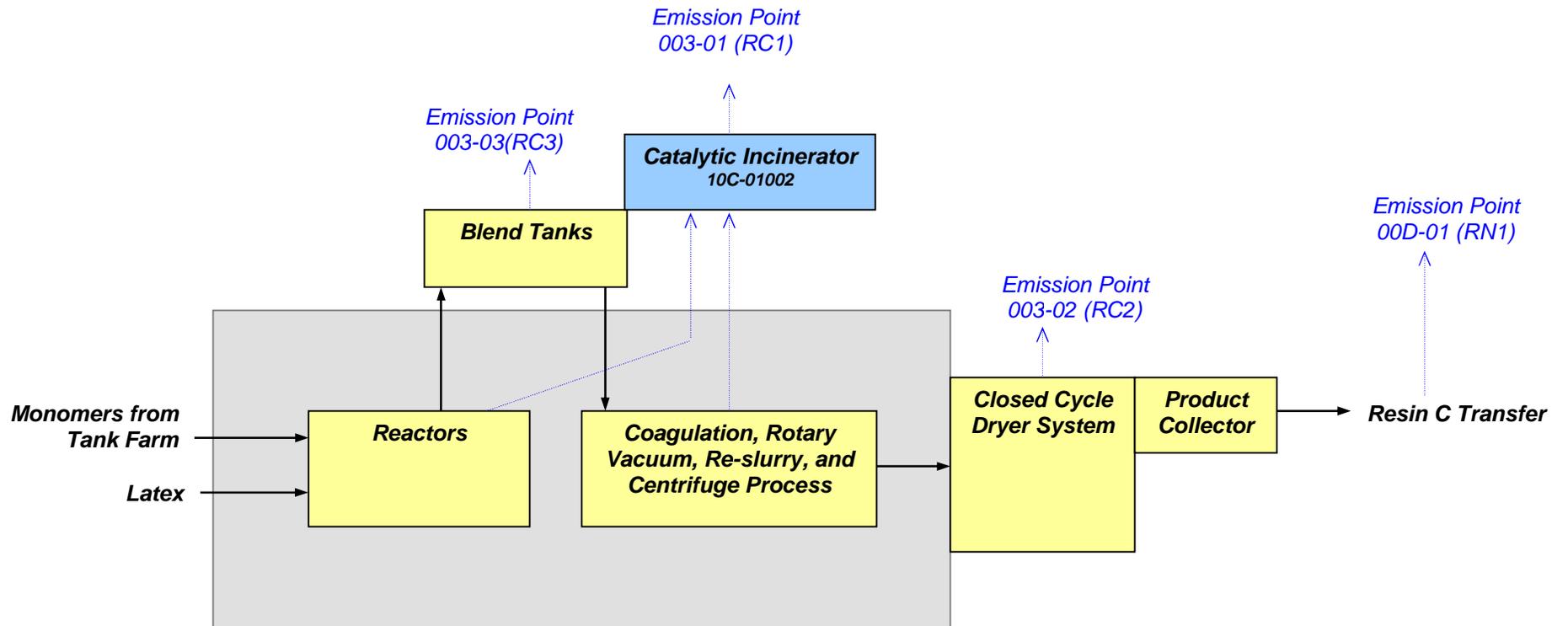
Title V Application  
Attachment C - Process Flow Diagram  
Latex Area – Emission Unit Group 001



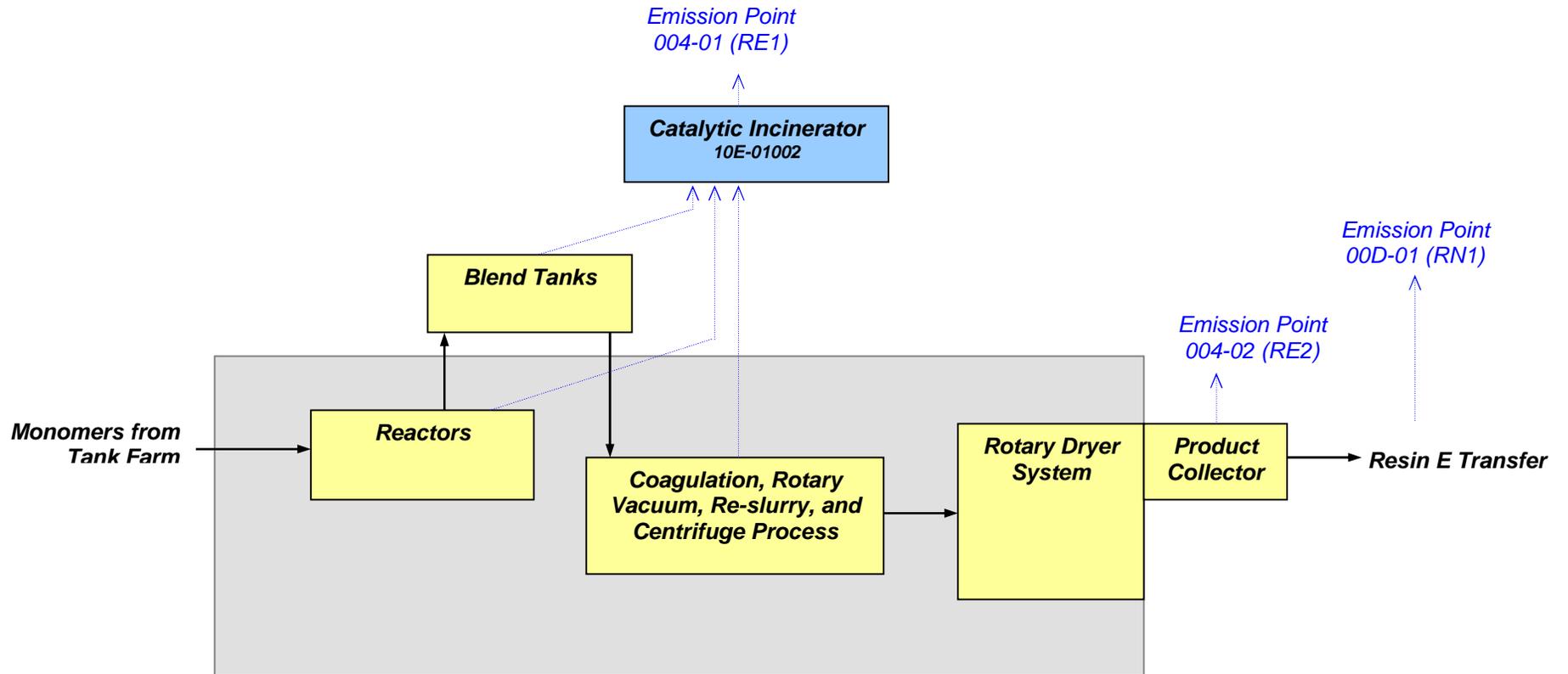
Title V Application  
Attachment C - Process Flow Diagram  
Resin A Process – Emission Unit Group 002



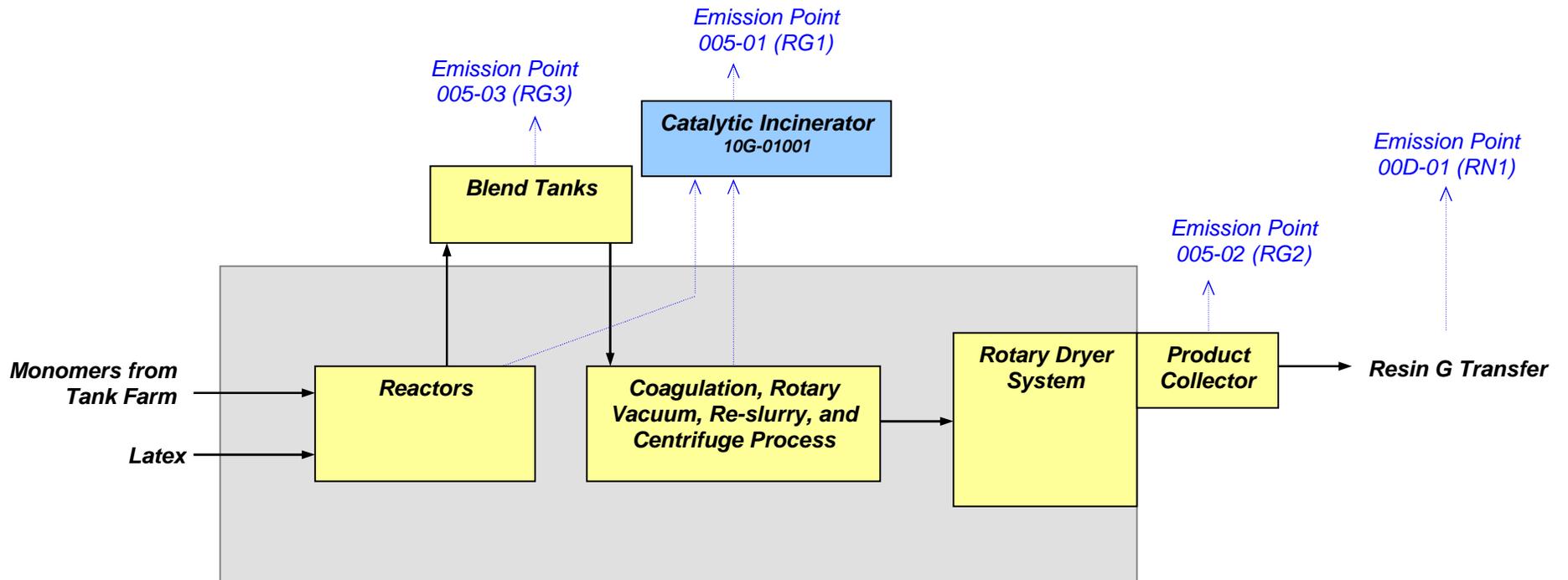
**Title V Application**  
**Attachment C - Process Flow Diagram**  
**Resin C Process – Emission Unit Group 003**



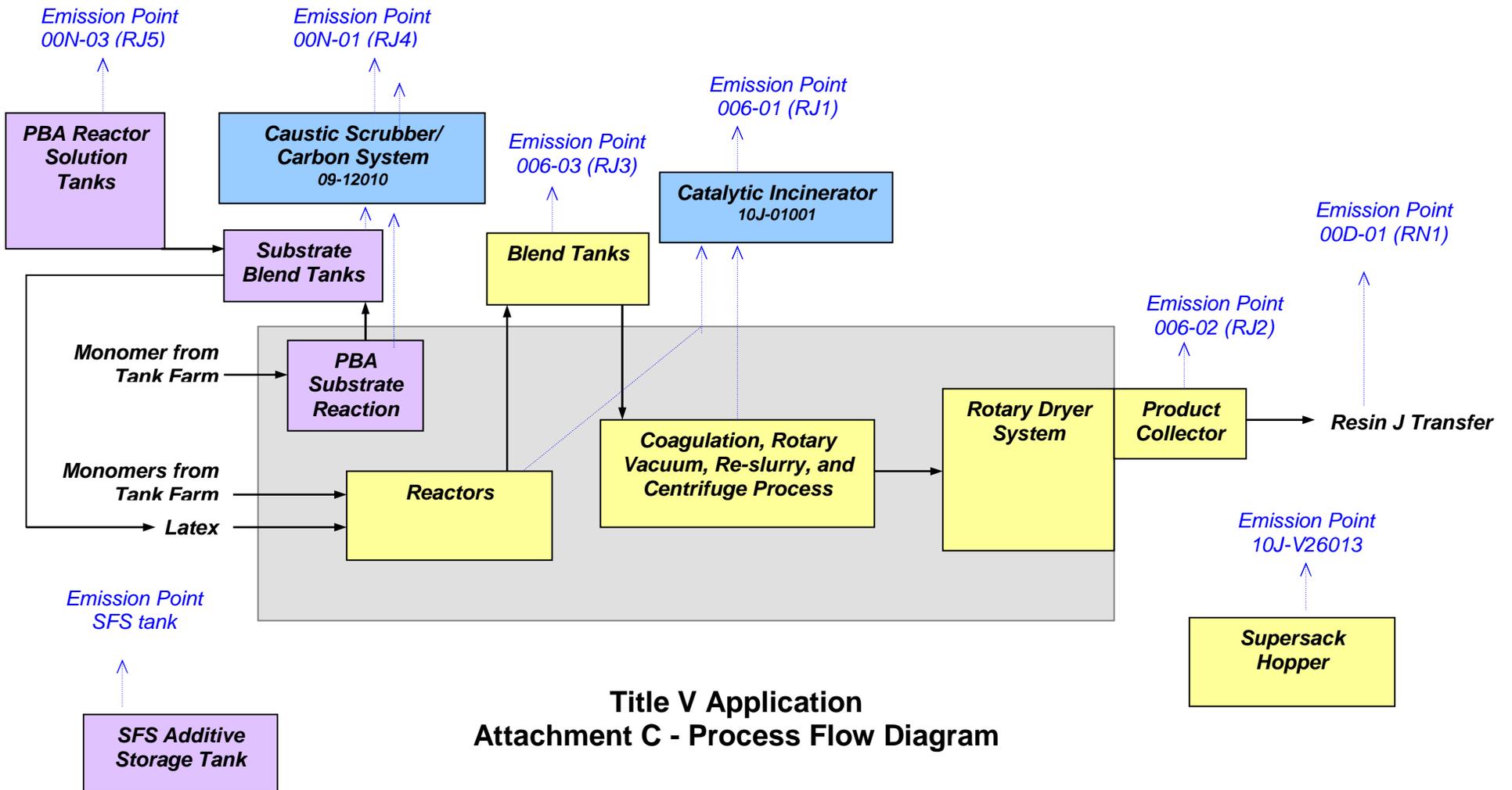
Title V Application  
Attachment C - Process Flow Diagram  
Resin E Process – Emission Unit Group 004



Title V Application  
Attachment C - Process Flow Diagram  
Resin G Process – Emission Unit Group 005

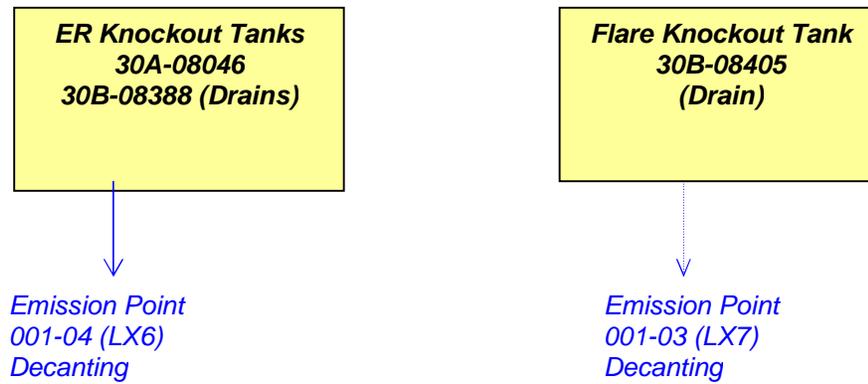


Title V Application  
Attachment C - Process Flow Diagram  
Resin J Process – Emission Unit Group 006

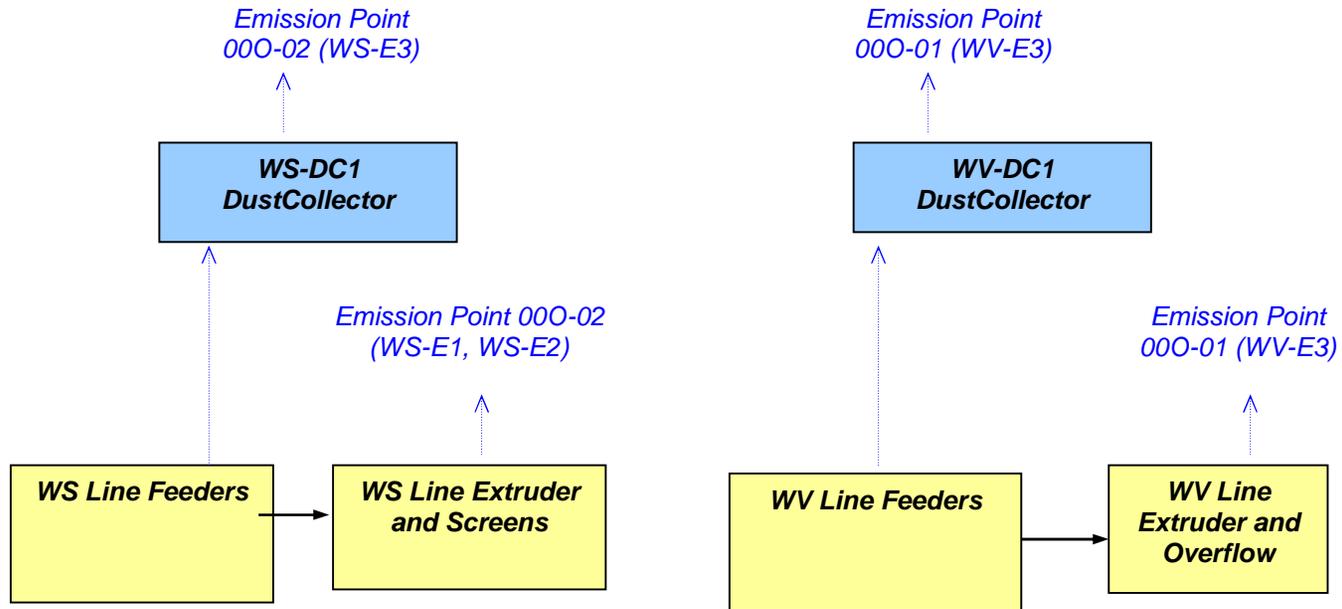


Title V Application  
Attachment C - Process Flow Diagram

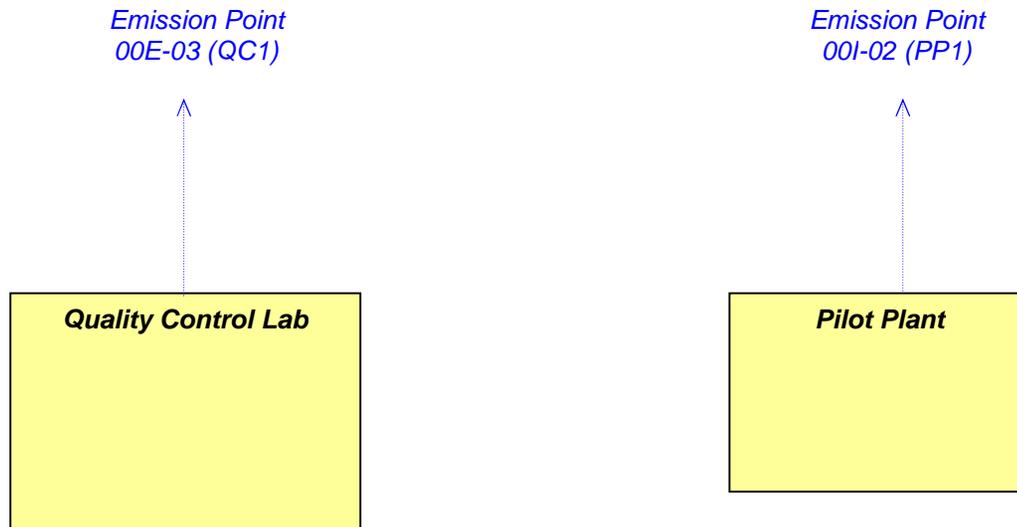
**Latex Area – Emission Unit Group 001  
Additional Emission Units**



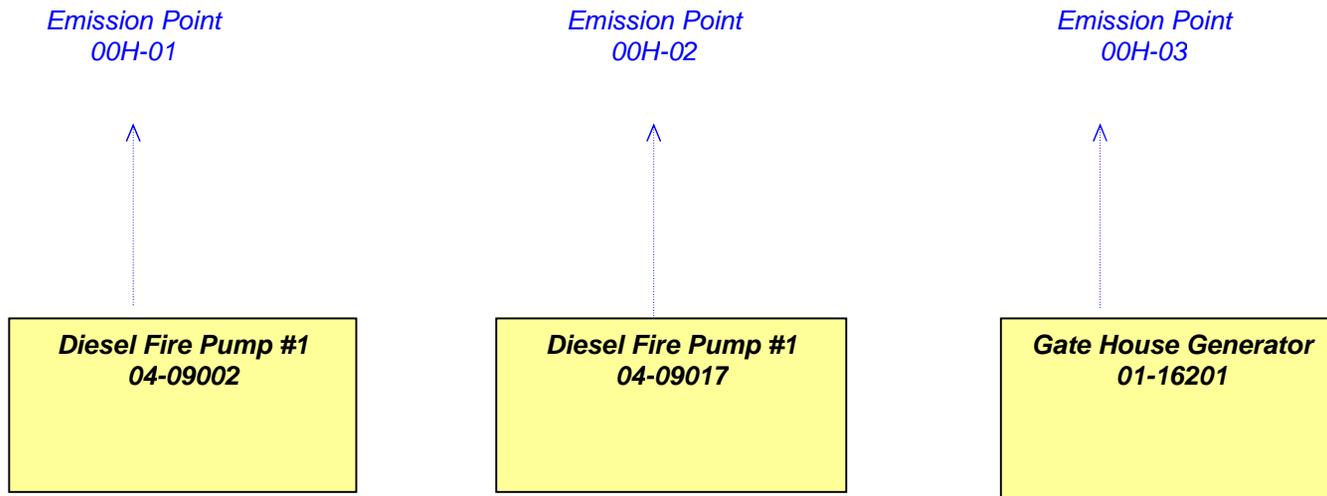
**Title V Application**  
**Attachment C - Process Flow Diagram**  
**Converting Lab Process Area**



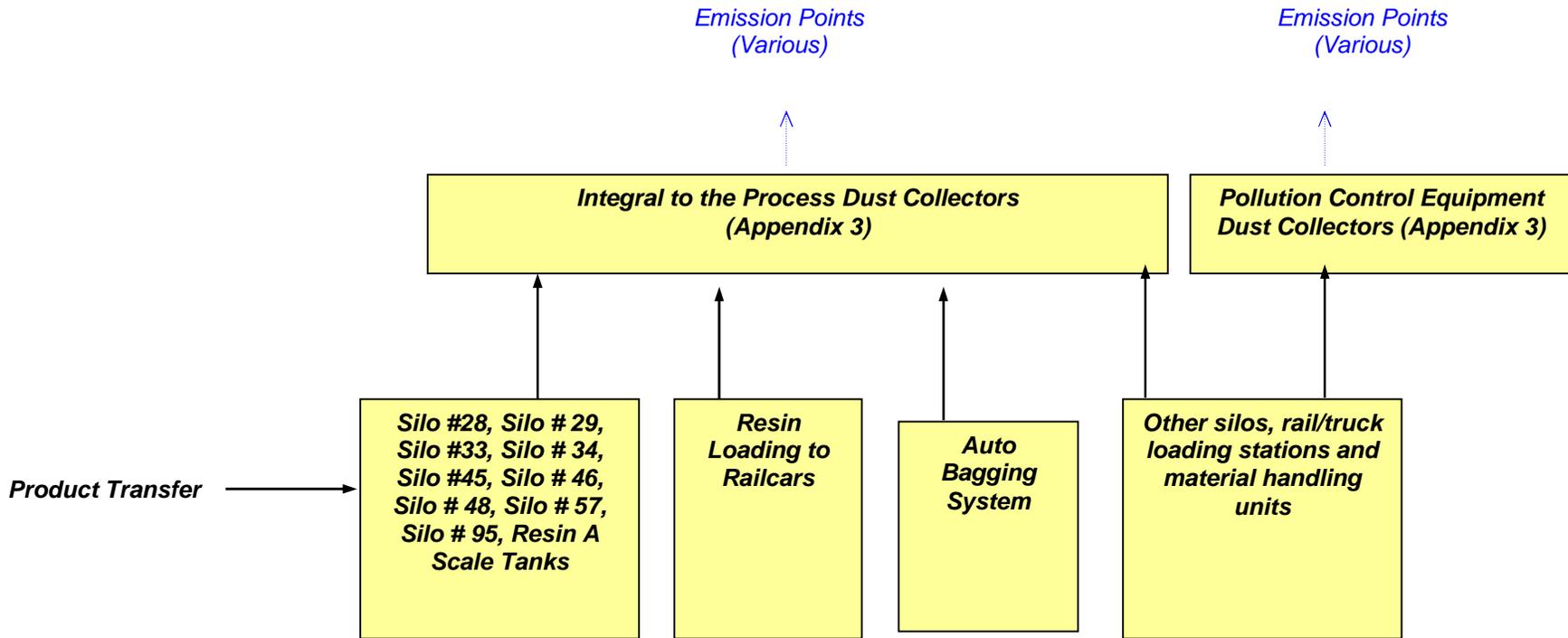
**Title V Application**  
**Attachment C - Process Flow Diagram**  
**Laboratory and Pilot Plant**



**Title V Application**  
**Attachment C - Process Flow Diagram**  
**Other Stationary Internal Combustion Engines - Emission Unit Group 00H**



**Title V Application**  
**Attachment C - Process Flow Diagram**  
**Other Dry Material Transfer Systems**



## **Attachment D**

### **Emission Units Table**

**ATTACHMENT D - Emission Units Table**  
(includes all emission units at the facility except those designated as  
insignificant activities in Section 4, Item 24 of the General Forms)

**REDACTED COPY- CLAIM OF CONFIDENTIALITY- SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

Equipment ID <sup>1</sup>	Emission Point ID	Equipment Description	Year Installed/Modified	Design Capacity	Control Device <sup>2</sup>
<i>Tank Farm / Bulk Loading - Emission Unit Group 009</i>					
None	009-0S	Barge Unloading Station	1960's	Not Available	None
None	009-0S-LDAR	Equipment located between Barge Unloading Station and Storage Tanks ID 09-25050,09-25074, 09-25077, 09-25083, 09-25048, 09-25049, 09-25076, 09-25082	1960's	Not Available	None
None	009-0Y	Railcar and Truck Unloading Stations (unloading transfer racks #1, #2)	1956	Not Available	None
None	009-0Y-LDAR	Equipment located between Railcar and Truck Unloading Stations and Storage Tanks ID 09-25078, 09-25075, 90-25009, 09-25050,09-25074, 09-25077, 09-25083, 09-25048, 09-25049, 09-25076, 09-25082	1956	Not Available	None
None	009-0R	Styrene Loading Station	1963	Not Available	None
12-08033	009-0T	Fuel Dispensing Station: Above Ground Unleaded Gasoline Tank	1991	1,130 gal	None
12-08032	009-0T	Fuel Dispensing Station: Above Ground Road Grade Diesel Fuel Tank	1991	1,130 gal	None
None	009-0U	Latex Loading Station	1992	Not Available	None
09-25078	009-0V	Acrylonitrile Storage Tank, north	1967	500,000 gal	Fixed roof + Internal floating roof
09-25075	009-0Q	Acrylonitrile Storage Tank, south	1963	500,000 gal	Fixed roof + Internal floating roof
09-25048	009-0C	Styrene Storage Tank #4	1962	500,000 gal	None
09-25049	009-0D	Styrene Storage Tank #5	1962	500,000 gal	None
09-25076	009-0E	Styrene Storage Tank #6	1970	500,000 gal	None
09-25082	009-0F	Styrene Storage Tank #7	1970	580,000 gal	None
09-25001	009-04	Alpha-Methyl Styrene Tank	1956	30,000 gal	None
09-25002	009-05	Alpha-Methyl Styrene Tank	1956	30,000 gal	None
09-25003	009-06	Alpha-Methyl Styrene Tank	1956	30,000 gal	None
09-25094	009-07	Alpha-Methyl Styrene Tank	1979	30,000 gal	None
09-25010	009-09	Butyl Acrylate Tank, north	1957	30,000 gal	30B-12130
09-25011	009-0A	Butyl Acrylate Tank, south	1957	30,000 gal	30B-12130
09-25009	009-08	Methyl Methacrylate Tank	1957	30,000 gal	30B-12130
10-08105	009-0G	Divinyl-benzene Tank	1986	3,000 gal	None
09-25100	009-15	Sulfuric Acid Tank, east	1991	20,000 gal	None

**ATTACHMENT D - Emission Units Table**

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

**REDACTED COPY- CLAIM OF CONFIDENTIALITY- SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

Equipment ID <sup>1</sup>	Emission Point ID	Equipment Description	Year Installed/Modified	Design Capacity	Control Device <sup>2</sup>
09-25099	009-16	Sulfuric Acid Tank, west	1991	20,000 gal	None
09-25103	009-14	Cumene Hydroperoxide (CHP) Tank	1997	13,000 gal	None
09-25050	Not Applicable	1,3 - Butadiene Pressure Sphere	1962	200,000 gal	None
09-25074	Not Applicable	1,3 - Butadiene Pressure Sphere	1963	400,000 gal	None
09-25077	Not Applicable	1,3 - Butadiene Pressure Sphere	1966	400,000 gal	None
09-25083	Not Applicable	1,3 - Butadiene Pressure Sphere	1969	400,000 gal	None

**ATTACHMENT D - Emission Units Table**

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

**REDACTED COPY- CLAIM OF CONFIDENTIALITY- SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

Equipment ID <sup>1</sup>	Emission Point ID <sup>1</sup>	Equipment Description	Year Installed/Modified	Design Capacity	Control Device <sup>1</sup>
<i>Wastewater Treatment Plant - Emission Unit Group 008</i>					
07-16104	None	Backup Electric Generator	2002	483 hp	None
WWTP	008-06	Wastewater Treatment Process	1970	2,500 gpm	None
<i>Boiler House - Emission Unit Group 007</i>					
03-01003	007-03	Boiler #3	1966	72 mmBtu/hr	None
03-01004	007-04	Boiler #4	1966	132 mmBtu/hr	None
03-01005	007-06	Boiler #5	2004	146 mmBtu/hr	None
04-07001	007-05	Cooling Tower #1	1967	<b>CBI</b> gpm	None
04-07003	007-05	Cooling Tower #3	1989	<b>CBI</b> gpm	None
<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	<b>CBI</b> MMlb/yr	Latex Area Flare: 30B-01002
30B-08305, 30B-08306	001-02 (LX5)	Latex Area BD Wash Tanks (Decant Losses)	1957	2 tanks x 8,000 gal	None
30B-08405	001-03 (LX7)	Flare Knockout Tank Drain	1988	2500 gal	None
30A-08046, 30B-08388	001-04 (LX6)	ER Knockout Tanks Drains	1957	2 tanks x 10,000 gal	None

**ATTACHMENT D - Emission Units Table**

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

**REDACTED COPY- CLAIM OF CONFIDENTIALITY- SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Equipment ID<sup>1</sup></b>	<b>Emission Point ID<sup>1</sup></b>	<b>Equipment Description</b>	<b>Year Installed/ Modified</b>	<b>Design Capacity</b>	<b>Control Device<sup>1</sup></b>
Various	001-05 (LX14)	Latex Blend Tanks and Screeners	1957	Various	Latex Area CTO: 30B-12130
30B-25109	001-06 (LX4)	Latex Blend Tank #38 (Latex blend tank)	1967	300,000 gal	None
None	001-07 (LX8)(CGL)	Latex Coag Pits	1957	6,000 cubic ft	None
30A-08267, 30A-08088	001-0A (LX11)	Latex Activator. Mix and Charge Tank	1957	185 gal, 800 gal	None
30B-08445	001-0C (LX13)	Latex Area BD Recovery Decant Tank	Not Available	500 gal	None
<b><i>Resin A Process area</i></b>					
Various	002-01 (RA1) aka (10A-V28)	Resin Building A Reactor-Coagulation-Vacuum System	1962	<b>CBI</b> tpy	Resin A Catalytic Incinerator: (10A-01003) <sup>2</sup>
10A27002, 10A27003	002-02 (RA2) aka (10A-V32, 10A-V34)	Resin A Predryer and Dryer	1962, 1974	<b>CBI</b> tpy	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	130,000 gal total	None
10A-25058 10A-25059	OOD-01 (RN1) aka (10A-V36, 10A-V38, 10A-V40, 10A-V42)	Resin A Transfer	1962	<b>CBI</b> tpy	Scale Tank Dust Collectors 10A-26024 and 10A-26025 - Integral to Process
<b><i>Resin C Process area</i></b>					

**ATTACHMENT D - Emission Units Table**

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

**REDACTED COPY- CLAIM OF CONFIDENTIALITY- SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

Equipment ID <sup>1</sup>	Emission Point ID <sup>1</sup>	Equipment Description	Year Installed/Modified	Design Capacity	Control Device <sup>1</sup>
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 (C-1)	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	<b>CBI</b> tpy	(Resin C Catalytic Incinerator: 10C-01002)
10C27005	003-02 (RC2) aka (C-2)	Resin C Fluidized Bed Dryer	1990	<b>CBI</b> tpy	Carbon bed
10C25026, 10C25027, 10C25028, 10C25045, 10C25046	003-03 (RC3)	Resin C Blend Tanks (5) (aka: Latex Storage Tanks)	1960; 1974	230,000 gal total	None
10C-25042 10C-25043	OOD-01 (RN1)	Resin C Transfer	1960	<b>CBI</b> tpy	Scale Tank Dust Collectors 10C-26024 and 10C-26025 - Integral to Process
<b>Resin E Process area</b>					
10E-01002	004-01 (RE1) aka (10E-V56)	Resin Building E Reactor-Coagulation-Vacuum System	1962	<b>CBI</b> tpy	(Resin E Catalytic Incinerator: 10E-01002) <sup>2</sup>
10E-27001	004-02 (RE2) aka (10E-V60)	Resin E Rotary Dryer	1963	<b>CBI</b> tpy	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	260,000 gal total	(Resin E Catalytic Incinerator: 10E-01002) <sup>2</sup>

**ATTACHMENT D - Emission Units Table**

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

**REDACTED COPY- CLAIM OF CONFIDENTIALITY- SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

Equipment ID <sup>1</sup>	Emission Point ID <sup>1</sup>	Equipment Description	Year Installed/Modified	Design Capacity	Control Device <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	1962	<b>CBI</b> tpy	Scale Tank Dust Collectors 10E-26004 and 10E-26005 - Integral to Process
<i>Resin G Process area</i>					
10G-01001	005-01 (RG1)	Resin Building G Reactor-Coagulation-Vacuum System	1965	<b>CBI</b> tpy	Resin G Catalytic Incinerator: 10G-01001
10G-27001	005-02 (RG2)	Resin G Rotary Dryer	1965	<b>CBI</b> tpy	Dryer D/C 10G-26001- Integral to Process
10G-25001, 10G-25002, 10G-25003, 10G-25004, 10G-25005, 10G25009	005-03 (RG3)	Resin G Blend Tanks (6)  (aka: Latex Storage Tanks)	1965	175,000 gal total	None
10G-25007 10G-25008	OOD-01 (RN1)	Resin G Transfer	1965	<b>CBI</b> tpy	10G-26004,10G-26005 (scale tank D/C) Integral to Process
<i>Resin J Process area</i>					
10J-01001	006-01 (RJ1) aka (10J-V14)	Resin Building J Reactor-Coagulation-Vacuum System	1965	<b>CBI</b> tpy	Resin J Catalytic Incinerator: (10J-01001)
10J27001	006-02 (RJ2) aka (10J-V20)	Resin J Rotary Dryer	1965/66	<b>CBI</b> tpy	Dryer D/C 10J-26001 - Integral to Process
10J-25003, 10J-25004, 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	140,000 gal total	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	<b>CBI</b> tpy	Caustic Scrubber/Carbon Canister: 09-12010

**ATTACHMENT D - Emission Units Table**

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

**REDACTED COPY- CLAIM OF CONFIDENTIALITY- SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

Equipment ID <sup>1</sup>	Emission Point ID <sup>1</sup>	Equipment Description	Year Installed/ Modified	Design Capacity	Control Device <sup>1</sup>
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	<b>CBI</b> tpy (PBA production)	None
10J-08097	10J-V26013	Supersack Hopper	1996	Not Available	Dust collector 10J-26015; integral to the process
10J-25013, 10J25014	(RJ6)	PBA Latex storage tanks #4 and #5 (when Resin A Cat. Ox. is not operating)	1976	<b>CBI</b> tpy (PBA production)	Resin A Catalytic Incinerator: (10A-01003) <sup>2</sup> OR Carbon Canister system (RJ6) 09-12010
10J-08083	none	SFS Additive Storage Tank	1996	Not Available	None
10J-25007, 10J-25008	OOD-01 (RN1) aka(10J-V18 10J-V22 10J-V24 10J-V26)	Resin J Transfer	1966	<b>CBI</b> tpy	10J-26004,10J-26005 (scale tank D/C) Integral to Process
<b>Converting Lab</b>					
00O-02	WS-E1 WS-E2	WS Extruder (WS-X1), WS screens (WS-S1)	1965, 1988	<b>CBI</b> lb/hr	None
00O-02	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)	1965, 1988	Not Available	WS-DC1 (Dust collector/ baghouse)
00O-01	WV-E1, WV-E2	WV Extruder (WV-X1)	1965, 1988	<b>CBI</b> lb/hr	None
00O-01	WV-E2	WV Overflow to Extruder (WV-X1)	1965, 1988	<b>CBI</b> lb/hr	None
00O-01	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)	1965, 1988	Not Available	WV-DC1 (Dust Collector/ baghouse)
<b>Laboratories</b>					
22A27006 (QCL)	00E-03 (QC1)	Quality Control Lab	1960	Not Available	None
<b>Pilot Plant</b>					

**ATTACHMENT D - Emission Units Table**

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

**REDACTED COPY- CLAIM OF CONFIDENTIALITY- SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

Equipment ID <sup>1</sup>	Emission Point ID <sup>1</sup>	Equipment Description	Year Installed/Modified	Design Capacity	Control Device <sup>1</sup>
1904006, 1904006, 1904009 (ABS)	00I-02 (PP1)	Pilot Plant	1957	Not Applicable	None
<i>Other Stationary Internal Combustion Engines</i>					
04-09002	00H-01	Diesel Fire Pump 1	1957	195 HP	None
04-09017	00H-02	Diesel Fire Pump 2	1957	255 HP	None
01-16201	00H-03	Gate House Generator	2004	120 HP	None
<i>Dry Material Transfer Systems</i>					
11B-25001	SC-28	Silo #28	1966	<b>CBI</b> lb/hr	None
11B-25002	SC-29	Silo #29	1966	<b>CBI</b> lb/hr	None
11A25076	SC-33	Silo #33	1967	<b>CBI</b> lb/hr	None
11A-25077	SC-34	Silo #34	1967	<b>CBI</b> lb/hr	None
10E-25060	SC-45	Silo #45	1971	<b>CBI</b> lb/hr	None
10E-25061	SC-46	Silo #46	1971	<b>CBI</b> lb/hr	None
10A-25058	SC A1-1	Resin A Scale Tank	1962	<b>CBI</b> lb/hr	None
10A-25059	SC A1-2	Resin A Scale Tank	1962	<b>CBI</b> lb/hr	None
10C-25047	SC-48 aka (E-1, E-2)	Silo #48 - Dust Collector C-1	1976	<b>CBI</b> lb/hr	None
12-26029	12-10035	Railcar Spot #15 (#3 resin loading)	1989	Not Available	None
11A-25078	55-57	Silo #57	1989	<b>CBI</b> lb/hr	None
12-25007	55-95	Silo #95	1989	<b>CBI</b> lb/hr	None
10C-12040	C-5	Resin C Automatic Bagging System	1989	<b>CBI</b> lb/hr	None

**All Site Dust Collectors (both Air Pollution Control Devices and Collectors/ Filters that are Integral to the Process) on Silos, Rail/Truck Loading Stations, and other emission units are listed in the Title V Appendix 3 – Dust Collector List. The Dust Collector list has been updated and is being submitted as part of Attachment D of the Application.**

SR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used on the permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For new sources, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate designation for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

**2= 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.**

**CBI = Confidential Business Information**

<b>Appendix 3: Dust Collector List</b>		
	<b>2011 Permit Application Note: This list has been updated to reflect the dust collectors removed from the facility since the last permit application.</b>	
<b>Equipment Number</b>	<b>Description (Emission Unit and Dust Collector)</b>	<b>Function*</b>
012-26001	Resin DC loading	Pollution Control
012-26008	Box & Tote Sweeper Dust Collector	Pollution Control
012-26012	HSB DUST COLLECTOR #5 (EAST UNIT)	Integral
012-26013	WM Bulk pellet fines dust collector	Pollution Control
012-26017	HSB DUST COLLECTOR #4 (CENTER UNIT)	Integral
012-26018	SPOT 16 SAN UNLOADING #1 DUST COLLECTOR	Integral
012-26019	SILO 96 SAN-BULK DUST COLLECTOR	Integral
012-26021	SPOT 10 SAN UNLOADING DUST COLLECTOR	Integral
012-26022	SPOT 12 DUST COLLECTOR	Integral
012-26023	SPOT 14 DUST COLLECTOR	Integral
012-26024	MMA SAN unloading DC	Pollution Control
012-26025	SILO 96 DUST COLLECTOR	Integral
012-26026	HSB DUST COLLECTOR #3 (WEST UNIT)	Integral
012-26027	SPOT 19 SAN UNLOADING DUST COLLECTOR	Integral
012-26028	HIPS Unloading filter receiver	Pollution Control
012-26029	SPOT 15 DUST COLLECTOR	Integral
012-26030	SILO 95 HSB DUST COLLECTOR	Integral
012-26031	RR Fines #21 Cyclone	Integral
012-26032	RR Fines #21 Cyclone	Integral
012-26033	RR Fines #22 Cyclone	Integral
012-26034	RR Fines #22 Cyclone	Integral
012-26035	Fines Dust Collector	Pollution Control
012-26040	Fine Dust Collector Bulk Building	Pollution Control
012-26041	HSB NORTH HOPPER DUST COLLECTOR	Integral
012-26042	HSB SOUTH HOPPER DUST COLLECTOR	Integral
012-26046	SILO 97 DUST COLLECTOR	Integral
012-26047	SILO 98 DUST COLLECTOR	Integral
012-26048	SILO 99 DUST COLLECTOR	Integral
015-26010	Dust Collector Color Services	Pollution Control
015-26011	Dust Collector Color Services House Vac	Pollution Control
015-26012	WS 58MM EXTRUDER DUST COLLECTOR AT TECH CENTER	Pollution Control
015-26013	WV 40MM EXTRUDER DUST COLLECTOR AT TECH CENTER	Pollution Control
015-26015	HENSHELL 5 & 20 LB DUST COLLECTOR AT TECH CENTER	Pollution Control
015-26021	Dust Collector compounding room	Pollution Control
10A26017	RESIN A FLASH DRYER (#1) DUST COLLECTOR	Integral
10A26020	SILO 47 CHIP DUST COLLECTOR	Integral
10A26021	SILO 47 CHIP TRANSFER DUST COLLECTOR	Integral
10A26022	RESIN A DUST COLLECTOR #2 (ROTARY DRYER)	Integral
10A26024	SCALE TANK #1 DUST COLLECTOR (EAST)	Integral
10A26025	SCALE TANK #2 DUST COLLECTOR (WEST)	Integral
10C26010	SILO 48 DUST COLLECTOR SOUTH TOP	Integral
10C26011	SILO 48 BOTTOM UNLOADING VACUUM DUST COLLECTOR	Integral
10C26013	BOOSTER #2 DUST COLLECTOR	Integral
10C26015	SUPERSACK HOPPER DUST COLLECTOR (SOUTH)	Integral
10C26019	RESIN C AUTO BAGGER DUST COLLECTOR	Integral

<b>Equipment Number</b>	<b>Description (Emission Unit and Dust Collector)</b>	<b>Function*</b>
10C26022	RESIN C BAGGER HOPPER DUST COLLECTOR	Integral
10C26023	RESIN C SUPERSACK HOPPER DUST COLLECTOR (NORTH)	Integral
10C26024	SCALE TANK DUST COLLECTOR (EAST)	Integral
10C26025	SCALE TANK DUST COLLECTOR (WEST)	Integral
10C26026	RESIN C SWECO SYSTEM DUST COLLECTOR	Pollution Control
10C26027	SILO 48B DUST COLLECTOR EAST TOP	Integral
10C28055	RESIN C PLUG FLOW DUST COLLECTOR	Integral
10C28056	RESIN C DRYER / COOLER / DEVOLITIZER DUST COLLECTOR	Integral
10C28058	RESIN C PRODUCT RECEIVER TRANSFER DUST COLLECTOR	Integral
10E26004	RESIN E SCALE TANK DUST COLLECTOR (EAST)	Integral
10E26005	RESIN E SCALE TANK DUST COLLECTOR (WEST)	Integral
10E26008	BAG HOPPER DUST COLLECTOR 1st floor	Pollution Control
10E26009	CPS DC Blendex Grinding Low Roof	Pollution Control
10E26010	Blendex Bagging Hopper DC	Pollution Control
10E26013	Blendex Boxing DC	Pollution Control
10E26016	CPS CHARGE DUST COLLECTOR (EAST)	Pollution Control
10E26017	CPS CHARGE DUST COLLECTOR (WEST)	Pollution Control
10E26019	SILO 45 DUST COLLECTOR	Integral
10E26020	SILO 46 DUST COLLECTOR	Integral
10E26021	RESIN E DRYER DUST COLLECTOR	Integral
10F26008	BOOSTER #3 DUST COLLECTOR	Integral
10G26001	RESIN G DRYER DUST COLLECTOR	Integral
10G26004	SCALE TANK #1 DUST COLLECTOR (NORTHEAST)	Integral
10G26005	SCALE TANK #2 DUST COLLECTOR (SOUTH EAST)	Integral
10J26001	RESIN J DRYER DUST COLLECTOR	Integral
10J26004	RESIN J SCALE TANK #1 DUST COLLECTOR (SOUTH WEST)	Integral
10J26005	RESIN J SCALE TANK #2 DUST COLLECTOR (NORTH WEST)	Integral
10J26007	BOOSTER #4 DUST COLLECTOR	Integral
10J26010	BOOSTER #0 DUST COLLECTOR	Integral
10J26011	BOOSTER #1 DUST COLLECTOR	Integral
10J26015	RESIN J SUPERSACK HOPPER DUST COLLECTOR	Integral
10J26016	Rework DC Resin J	Pollution Control
11A26036	SILO 04 DUST COLLECTOR	Integral
11A26037	SILO 05 DUST COLLECTOR	Integral
11A26038	SILO 06 DUST COLLECTOR	Integral
11A26039	SILO 07 DUST COLLECTOR	Integral
11A26053	SILO 33 DUST COLLECTOR NW	Integral
11A26054	SILO 34 DUST COLLECTOR NW	Integral
11A26071	SILO 57 DUST COLLECTOR	Integral
11A26087	SILO 08 DUST COLLECTOR	Integral
11A26088	SILO 10 DUST COLLECTOR	Integral
11A26089	SILO 11 DUST COLLECTOR	Integral
11A26090	SILO 13 DUST COLLECTOR	Integral
11A26091	SILO 14 DUST COLLECTOR	Integral
11A26092	SILO 16 DUST COLLECTOR	Integral
11A26093	SILO 17 DUST COLLECTOR	Integral
11A26100	SILO 33 DUST COLLECTOR East	Integral
11A26101	SILO 34 DUST COLLECTOR SE	Integral
11B26021	SILO 28 DUST COLLECTOR NORTH	Integral
11B26022	SILO 29 DUST COLLECTOR SOUTH	Integral

<b>Equipment Number</b>	<b>Description (Emission Unit and Dust Collector)</b>	<b>Function*</b>
11B26050	SILO 28 DUST COLLECTOR SOUTH	Integral
11B26051	SILO 29 DUST COLLECTOR NORTH	Integral
11B26057	SILO 42 DUST COLLECTOR	Integral
11B26058	SILO 43 DUST COLLECTOR	Integral
11B26059	SILO 44 DUST COLLECTOR	Integral
11B26074	SILO 30 DUST COLLECTOR	Integral
11B26075	SILO 31 DUST COLLECTOR	Integral
11B26076	SILO 32 DUST COLLECTOR	Integral
11C26001	Vertical Blender DC #2	Pollution Control
11C26002	Vertical Blender DC #1	Pollution Control
11C26003	WC Banbury DC	Pollution Control
11C26004	PRIMARY BUILDING VACUUM DUST COLLECTOR	Pollution Control
11C26005	SECONDARY BUILDING VACUUM DUST COLLECTOR	Pollution Control
11C26010	WE Surge Hopper DC	Pollution Control
11C26017	Box Charging DC Fin C	Pollution Control
11C26018	WM BLACK WEIGH-UP DUST COLLECTOR	Pollution Control
11C26020	WC Chop Surge DC	Pollution Control
11C26021	WM Pigment DC	Pollution Control
11C26022	WM NAPAX Banbury Cyclone	Pollution Control
11C26023	WM TIO2 WEIGHBIN DUST COLLECTOR	Pollution Control
11C26024	WC DC Blender #1	Pollution Control
11C26025	WC DC Blender #2	Pollution Control
11C26026	WC DC SAN Hopper #1	Pollution Control
11C26027	WC DC SAN Hopper #2	Pollution Control
11C26028	DC for Vacuum Blower	Pollution Control
11C26029	Reject Cyclone	Pollution Control
11C26030	SILO 40 DUST COLLECTOR	Integral
11C26031	SILO 41 DUST COLLECTOR	Integral
15-26013	40MM EXTRUDER DUST COLLECTOR AT TECH CENTER	Pollution Control
15-26014	CMT WEIGH-UP ROOM DUST COLLECTOR	Pollution Control
24-26001	Vacuum Seperator/Filter	Pollution Control
30A26001	LATEX A TSPP DUST COLLECTOR	Pollution Control
30A26002	LATEX A TSPP CHARGE HOPPER DUST COLLECTOR	Pollution Control
30B26102	SFS Dust Collector	Pollution Control

\* The function of the dust collector refers to the determination regarding the unit functioning as Integral to the Process or as Pollution Control equipment

# **Attachment E**

## **Emission Unit Forms**

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25078	<b>Emission unit name:</b> North Acrylonitrile Storage Tank	<b>List any control devices associated with this emission unit:</b> Fixed roof and internal floating roof	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  500,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	1.2	0.44
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	1.2	0.44
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

<p><b><i>Applicable Requirements</i></b></p> <p><b>List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.</b></p> <p><b>R13-1886E 4.1.7 and R13-2678 §4.1.1, §5.1.2</b></p> <ul style="list-style-type: none"><li>• VOC and acrylonitrile emissions limits as specified above.</li></ul> <p><b>40CFR63 Subpart JJJ; R13-2678 §5.1.2</b></p> <ul style="list-style-type: none"><li>• Install and maintain a fixed roof and internal floating roof system</li></ul>
<p><u>X</u> Permit Shield</p>
<p><b>For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)</b></p> <p><i>Testing Requirements</i></p> <ul style="list-style-type: none"><li>• Visually inspect the internal floating roof and secondary seal through manholes and roof hatches on the fixed roof every 12 months.</li><li>• Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every ten years.</li></ul> <p><i>Recordkeeping Requirements</i></p> <ul style="list-style-type: none"><li>• Perform quarterly emission calculations. Hourly rate determined based on monthly average emission rate. Annual rate determined using a 12-month rolling total.</li></ul>
<p><b>Are you in compliance with all applicable requirements for this emission unit? <u>X</u> Yes ___No</b></p> <p>If no, complete the <b>Schedule of Compliance Form</b> as <b>ATTACHMENT F</b>.</p>

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25075	<b>Emission unit name:</b> South Acrylonitrile Storage Tank	<b>List any control devices associated with this emission unit:</b> Fixed roof and internal floating roof	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1963	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  500,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	1.2	0.44
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	1.2	0.44
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

<p><b><i>Applicable Requirements</i></b></p> <p>List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <b>construction permit</b> with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.</p> <p><b>R13-1886E 4.1.7 and R13-2678 §4.1.1, §5.1.2</b></p> <ul style="list-style-type: none"><li>• VOC and acrylonitrile emissions limits as specified above.</li></ul> <p><b>40CFR63 Subpart JJJ; R13-2678 §5.1.2</b></p> <ul style="list-style-type: none"><li>• Install and maintain a fixed roof and internal floating roof system</li></ul>
<p><u>X</u> Permit Shield</p>
<p><b>For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)</b></p> <p><i>Testing Requirements</i></p> <ul style="list-style-type: none"><li>• Visually inspect the internal floating roof and secondary seal through manholes and roof hatches on the fixed roof every 12 months.</li><li>• Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every ten years.</li></ul> <p><i>Recordkeeping Requirements</i></p> <ul style="list-style-type: none"><li>• Perform quarterly emission calculations. Hourly rate determined based on monthly average emission rate. Annual rate determined using a 12-month rolling total.</li></ul>
<p><b>Are you in compliance with all applicable requirements for this emission unit?</b> <u>X</u> Yes ___No</p> <p>If no, complete the <b>Schedule of Compliance Form</b> as <b>ATTACHMENT F</b>.</p>

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25001	<b>Emission unit name:</b> AMS Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Alpha-Methyl Styrene Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1956	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  30,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gph	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the date of construction, this tank is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25002	<b>Emission unit name:</b> AMS Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Alpha-Methyl Styrene Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1956	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  30,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gph	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the date of construction, this tank is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25003	<b>Emission unit name:</b> AMS Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Alpha-Methyl Styrene Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1956	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  30,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gph	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the date of construction, this tank is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25094	<b>Emission unit name:</b> AMS Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Alpha-Methyl Styrene Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1979	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  30,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gph	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
<b>Fuel Type</b>	<b>Max. Sulfur Content</b>	<b>Max. Ash Content</b>	<b>BTU Value</b>
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the date of construction, this tank is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25010	<b>Emission unit name:</b> BA Storage Tank (North)	<b>List any control devices associated with this emission unit:</b> 13B-12130	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Butyl Acrylate Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  30,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.0007	0.003
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate. VOC emissions represent emissions from the storage tank after control by Catalytic Thermal Oxidizer 30B-1213.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2084C §A.2.

- Tank shall be vented to the Catalytic Thermal Oxidizer 30B-1213.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations using TANKS modeling, tank throughputs and control efficiency.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25011	<b>Emission unit name:</b> BA Storage Tank (South)	<b>List any control devices associated with this emission unit:</b> 13B-12130	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Butyl Acrylate Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  30,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.0007	0.003
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

AP-42/Engineering Estimate. VOC emissions represent emissions from the storage tank after control by Catalytic Thermal Oxidizer 30B-1213.

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2084C §A.2.

- Tank shall be vented to the Catalytic Thermal Oxidizer 30B-1213.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations using TANKS modeling, tank throughputs and control efficiency.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b> 009-0S	<b>Emission unit name:</b> Barge Unloading Station	<b>List any control devices associated with this emission unit:</b> None
---	---	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Barge unloading station

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 1960's	<b>Modification date(s):</b> 2006
--	-------------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

Not Available

<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> Not Available	<b>Maximum Operating Schedule:</b> 365 days/yr
--	--	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No	<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired
--	--

<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable	<b>Type and Btu/hr rating of burners:</b> Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Not Applicable

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	2.0	0.5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-Butadiene	2.0	0.11
Styrene	2.0	0.5
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering estimate used to calculate emissions while disconnecting valves between the barge and dock. Emissions from the barge unloading station are extremely low and are inconsequential when added to the disconnecting emissions.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

**R13-1886E §4.1.7 and R13-2678 §5.1.1**

- 1,3-butadiene emission limits as specified above.
- VOC emission limits as specified above.

**R13-2678 §5.1.2**

- Maintain unloading valves and procedures.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

*Recordkeeping Requirements*

- Perform quarterly emission calculations. Hourly rate determined based on monthly average emission rate. Annual rate determined using a 12-month rolling total.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

*Emission Unit Description*

<b>Emission unit ID number:</b> 03-01003	<b>Emission unit name:</b> Boiler #3	<b>List any control devices associated with this emission unit:</b> None
---	---	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Boiler

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 1966	<b>Modification date(s):</b> None
--	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

72 mmBtu/hr

<b>Maximum Hourly Throughput:</b> 533 gal/hr (fuel oil)	<b>Maximum Annual Throughput:</b> 4,669,080 gal/year (fuel oil)	<b>Maximum Operating Schedule:</b> 365 days/yr
--	--	---

*Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> 72 mmBtu/hr	<b>Type and Btu/hr rating of burners:</b> Not Available
---	--

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Natural Gas – Max hourly: 68,600 scf/hr, Max annual usage: 600, 936,000 scf/yr  
 No. 2 Fuel Oil – Max hourly usage: 533 gal/hr, Max annual usage: 4,669,080 gal/year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Normal	Normal	1,050 Btu/scf
No. 2 Fuel Oil	Normal	Normal	135,100 Btu/gal

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH (Natural gas/Fuel Oil)	TPY (Natural gas/Fuel Oil)
Carbon Monoxide (CO)	5.8/2.7	25.2/11.7
Nitrogen Oxides (NO <sub>x</sub> )	6.9/10.7	30.1/46.7
Lead (Pb)	<0.0001/0.7	0.0002/3.1
Particulate Matter (PM <sub>2.5</sub> )	0.5/1.1	2.3/4.7
Particulate Matter (PM <sub>10</sub> )	0.5/1.1	2.3/4.7
Total Particulate Matter (TSP)	0.5/1.1	2.3/4.7
Sulfur Dioxide (SO <sub>2</sub> )	0.04/37.9	0.2/165.8
Volatile Organic Compounds (VOC)	0.4/0.2	1.7/0.5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42 – Based on burning Natural Gas/No. 2 fuel oil.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

**R13-0009A §4.1.1**

- Emission limits as specified above for fuel oil only.

**R13-0009A §4.1.3**

- Maximum No. 2 fuel oil consumption limited to 533 gal/hr and 4,669,080 gal/yr.

**R13-0009A §4.1.5; 45CSR2 §3.1, §4.1, §8.3 and §9.3**

- Opacity not to exceed 10% based on a six minute block average.
- Regulation 2 maximum allowable particulate matter emission rate is 6.48 lb/hr when burning natural gas.
- Record operating schedule and the quantity and quality of fuel burned.
- Malfunction reporting of excess particulate matter emissions or opacity.

**R13-0009A §4.1.6; 45CSR10 §3.1**

- Regulation 10 total allowable SO<sub>2</sub> emission rate is 223.2 lb/hr when burning natural gas.

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

*Monitoring Requirements*

- Perform monthly Method 22 reading *when burning fuel oil*. If emissions observed, investigate, take corrective action, and repeat Method 22. If emissions observed during repeat test, perform Method 9 reading within 3 days.

[SABIC Note: Due to the Boiler's age and/or capacity it is exempt from the particulate and opacity standards of 40CFR60, Subpart Db. However, if the Boiler had been subject to Subpart Db, the opacity monitoring requirements in §60.48b would have only been applicable when the Boiler burned fuel oil. To be more consistent with the federal Subpart Db requirements and with other West Virginia permitted facilities which burn natural gas in similar age and size boilers and do not have the same opacity monitoring requirements when burning natural gas as SABIC, SABIC is requesting that the phrase "when burning fuel oil" be added to the existing opacity permit language.]"

*Recordkeeping Requirements*

- Maintain records of operating schedule and the quantity and quality of No. 2 fuel oil consumed. Hourly combustion limit is determined on a per month basis. Annual combustion limit is determined on a 12-month rolling total. Compliance with the combustion limits demonstrates compliance with the emission limits.
- Maintain records of visible emission observations and opacity evaluations.

*Reporting Requirements*

- Report malfunctions that result in excess particulate matter emissions or opacity in the time frame and manner specified in 45CSR2 §9.3.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b> 03-01004	<b>Emission unit name:</b> Boiler #4	<b>List any control devices associated with this emission unit:</b> None
---	---	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Boiler

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 1966	<b>Modification date(s):</b> None
--	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

132 mmBtu/hr

<b>Maximum Hourly Throughput:</b> 978 gal/hr (fuel oil)	<b>Maximum Annual Throughput:</b> 8,567,280 gal/year (fuel oil)	<b>Maximum Operating Schedule:</b> 365 days/yr
--	--	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b> <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> 132 mmBtu/hr	<b>Type and Btu/hr rating of burners:</b> Not Available
--	--

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Natural Gas – Max hourly usage: 125,720 scf/hr , Max annual usage: 1,101,307,200 scf/yr  
 No. 2 Fuel Oil – Max hourly usage: 978 gal/hr, Max annual usage: 8,567,280 gal/year

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Normal	Normal	1,050 Btu/scf
No. 2 Fuel Oil	Normal	Normal	135,100 Btu/gal

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH (Natural Gas/Fuel Oil)	TPY (Natural Gas/Fuel Oil)
Carbon Monoxide (CO)	10.6/4.9	46.2/21.5
Nitrogen Oxides (NO <sub>x</sub> )	35.3/23.5	154.1/102.9
Lead (Pb)	<0.0001/1.2	0.0003/5.4
Particulate Matter (PM <sub>2.5</sub> )	1.0/2.0	2.3/8.6
Particulate Matter (PM <sub>10</sub> )	1.0/2.0	2.3/8.6
Total Particulate Matter (TSP)	1.0/2.0	2.3/8.6
Sulfur Dioxide (SO <sub>2</sub> )	0.08/69.5	0.3/304.2
Volatile Organic Compounds (VOC)	0.7/0.2	3.0/0.9
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42 – Based on burning Natural Gas /No. 2 fuel oil.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

**R13-0009A §4.1.1**

- Emission limits as specified above for fuel oil only.

**R13-0009A §4.1.3**

- Maximum No. 2 fuel oil consumption is limited to 533 gal/hr and 4,669,080 gal/yr.

**R13-0009A §4.1.5; 45CSR2 §3.1, §4.1, §8.3 and §9.3**

- Opacity not to exceed 10% based on a six minute block average.
- Regulation 2 maximum allowable particulate matter emission rate is 11.88 lb/hr when burning natural gas.
- Record operating schedule and the quantity and quality of fuel burned.
- Malfunction reporting of excess particulate matter emissions or opacity.

**R13-0009A §4.1.6; 45CSR10 §3.1**

- Regulation 10 total allowable SO<sub>2</sub> emission rate is 409.2 lb/hr when burning natural gas.

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

***Monitoring Requirements***

- Perform monthly Method 22 reading *when burning fuel oil*. If emissions observed, investigate, take corrective action, and repeat Method 22. If emissions observed during repeat test, perform Method 9 reading within 3 days.

[SABIC Note: Due to the Boiler's age and/or capacity it is exempt from the particulate and opacity standards of 40CFR60, Subpart Db. However, if the Boiler had been subject to Subpart Db, the opacity monitoring requirements in §60.48b would have only been applicable when the Boiler burned fuel oil. To be more consistent with the federal Subpart Db requirements and with other West Virginia permitted facilities which burn natural gas in similar age and size boilers and do not have the same opacity monitoring requirements when burning natural gas as SABIC, SABIC is requesting that the phrase "when burning fuel oil" be added to the existing opacity permit language.]"

***Recordkeeping Requirements***

- Maintain records of operating schedule and the quantity and quality of No. 2 fuel oil consumed. Hourly combustion limit is determined on a per month basis. Annual combustion limit is determined on a 12-month rolling total. Compliance with the combustion limits demonstrates compliance with the emission limits.
- Maintain records of visible emission observations and opacity evaluations.

*Reporting Requirements*

- Report malfunctions that result in excess particulate matter emissions or opacity in the time frame and manner per 45CSR2 §9.3.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 03-01005	<b>Emission unit name:</b> Boiler #5	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Boiler			
<b>Manufacturer:</b> Rentech	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 2004	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  146 mmBtu/hr			
<b>Maximum Hourly Throughput:</b> 139,000 scf/hour	<b>Maximum Annual Throughput:</b> 1,218 MMscf/year	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>If yes, is it?</b>  <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  146 mmBtu/hr		<b>Type and Btu/hr rating of burners:</b>  Not Available	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Natural Gas – Max hourly usage: 139,000 scf/hr, Max annual usage: 1,218,000,000 scf/yr			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Normal	Normal	1,050 Btu/scf

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	16.1	70.3
Nitrogen Oxides (NO <sub>x</sub> )	5.3	23
Lead (Pb)	---	0.6 lb/yr
Particulate Matter (PM <sub>2.5</sub> )	1.1	5
Particulate Matter (PM <sub>10</sub> )	1.1	5
Total Particulate Matter (TSP)	1.1	5
Sulfur Dioxide (SO <sub>2</sub> )	0.1	0.4
Volatile Organic Compounds (VOC)	0.8	3.6
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42 and manufacturer's specifications.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

**R13-2572A §A.1**

- Emission limits as specified above.

**R13-2572A §A.2**

- Maximum natural gas consumption limited to 139,000 scf/hr and 1,218,000 scf/yr.

**R13-2572A §A.3; 45CSR2 §3.1, §4.1, §8.3 and §9.3**

- Opacity not to exceed 10% based on a six minute block average.
- Regulation 2 maximum allowable particulate matter emission rate.
- Record operating schedule and the quantity and quality of fuel burned.
- Malfunction reporting of excess particulate matter emissions or opacity.

**R13-0009A §4.1.6; 45CSR10 §3.1**

- Regulation 10 total allowable SO<sub>2</sub> emission rates.

**40CFR60, Subpart Db**

- NO<sub>2</sub> emissions limited to 0.2 lbs/mmBtu heat input based on a high release rate boiler.

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

***Monitoring Requirements***

- Perform monthly Method 22 reading. If emissions observed, investigate, take corrective action, and repeat Method 22. If emissions observed during repeat test, perform Method 9 reading within 3 days.

[SABIC Note: Boiler 5 is subject to the provisions of 40CFR60, Subpart Db. However, since the Boiler burns only natural gas, it is not subject to the particulate matter emission or opacity standards of §60.43b. Therefore, the opacity monitoring requirements in §60.48b requiring the installation of a COM or performing visible emission readings are not applicable to this boiler. To be more consistent with the federal Subpart Db requirements and with other West Virginia permitted facilities which burn natural gas in similar age and size boilers and do not have the same opacity monitoring requirements when burning natural gas as SABIC, SABIC is requesting that this visible emission opacity monitoring requirement be removed.]

- Install, calibrate, maintain, and operate a continuous monitoring system (CEM) for measuring nitrogen oxides in accordance with the applicable provisions of 40CFR §60.48b (b), (c), (e), (f) and (g).

***Recordkeeping Requirements***

- Maintain records of visible emission observations and opacity evaluations.

SABIC Innovative Plastics US LLC; Washington, WV

- Maintain records of the amount of natural gas burned each day and calculate the annual capacity factor for each calendar quarter. Annual capacity factor is determined on a 12-month rolling average based on a calendar month.
- Maintain records of the boiler's operating day including the information contained in 40CFR §60.49b(g) (1) – (10).
- Compliance with the hourly fuel usage limit is determined on a per month basis. Compliance with the annual fuel usage limit is determined on a 12-month rolling total. Compliance with the fuel usage limits demonstrates compliance with the emission limits for PM10, SO2 and VOC.
- NOx emission limit (0.2 lb/mmBtu) established under 40CFR60, Subpart Db is based on a 30-day rolling average. Compliance with this limit will demonstrate compliance with the NOx hourly emission limit. The annual limit is determined based on a 12-month rolling total.

*Reporting Requirements*

- Report malfunctions that result in excess particulate matter emissions or opacity in the time frame and manner per 45CSR2 §9.3.
- Submit excess emission reports when the NOx 30-day rolling average is greater than the 0.2 lb/mmBtu emission limit.
- The reporting period for reports required under 40CFR60, Subpart Db is each six month period and postmarked by the 30<sup>th</sup> day following the end of the reporting period.

**Are you in compliance with all applicable requirements for this emission unit?** \_\_\_Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25103	<b>Emission unit name:</b> CHP Storage Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Cumene Hydroperoxide storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1997	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  13,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Cumene	---	<0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the capacity of the tank it is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X  Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?**  X  Yes   No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 12-08032	<b>Emission unit name:</b> Diesel Fuel Storage Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Diesel Fuel Storage Tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1991	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  1,130 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	<0.001
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

None

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

None

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10C-08105	<b>Emission unit name:</b> Divinyl Benzene Storage Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1986	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  3,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	0.16
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the capacity of the tank it is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b> 30A-08046, 30B-08382	<b>Emission unit name:</b> Emergency Relief Knockout Tank Drains	<b>List any control devices associated with this emission unit:</b> None
---	--	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Flare Knockout Tank drains. Emissions are generated while decanting water from the bottom of the tanks.

<b>Manufacturer:</b> Not Available	<b>Model number:</b> None	<b>Serial number:</b> None
---------------------------------------	------------------------------	-------------------------------

<b>Construction date:</b> Not Applicable	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None
---	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

Tanks are 10,000 gal capacity each; emissions are from drains.

<b>Maximum Hourly Throughput:</b> Not applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr
---	---	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No	<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired
--	--

<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable	<b>Type and Btu/hr rating of burners:</b> Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**  
N/A

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.01	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-butadiene	0.01	0.02
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.7

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emissions calculation based on site emission factors and maintenance of equipment.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 00H-01	<b>Emission unit name:</b> Diesel Fire Pump #1 (04-09002)	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Diesel pump at Fire House provides emergency firewater service in the event of a power outage.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> 1974	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 500 hours/yr* *Will be limited to 100 hours/yr after 10/19/2013 per 40 CFR 63, Subpart ZZZZ	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> 195 HP		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> No. 2 Diesel Fuel Maximum 3.73 gallons/hour and 1865 gallons/year (based on 500 operating hours/yr)			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
No. 2 Diesel Fuel	Normal	Normal	Normal

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.47	0.12
Nitrogen Oxides (NO <sub>x</sub> )	2.19	0.55
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.15	0.04
Particulate Matter (PM <sub>10</sub> )	0.15	0.04
Total Particulate Matter (TSP)	0.15	0.04
Sulfur Dioxide (SO <sub>2</sub> )	0.14	0.04
Volatile Organic Compounds (VOC) <i>(Reported as TOC from AP-42, Table 3.3-1, Diesel Fuel Exhaust Emission Factor)</i>	0.17	0.04
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42; Annual emissions based on 500 hrs/year of operation.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR 63, Subpart ZZZZ (The compliance date for this unit is 10/19/2013)

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Recordkeeping per 40 CFR 63.6602 and Table 2c.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 00H-02	<b>Emission unit name:</b> Diesel Fire Pump #2 (04-09017)	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Diesel pump at Fire House provides emergency firewater service in the event of a power outage.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 500 hours/yr* *Will be limited to 100 hours/yr after 10/19/2013 per 40 CFR 63, Subpart ZZZZ	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> 255 HP		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> No. 2 Diesel Fuel Maximum 4.88 gallons/hour and 2440 gallons/year (at 500 operating hrs/yr)			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
No. 2 Diesel Fuel			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.62	0.15
Nitrogen Oxides (NO <sub>x</sub> )	2.86	0.72
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.20	0.05
Particulate Matter (PM <sub>10</sub> )	0.20	0.05
Total Particulate Matter (TSP)	0.20	0.05
Sulfur Dioxide (SO <sub>2</sub> )	0.19	0.05
Volatile Organic Compounds (VOC) <i>(Reported as TOC from AP-42, Table 3.3-1, Diesel Fuel Exhaust Emission Factor)</i>	0.23	0.06
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42; Annual emissions based on 500 hrs/year of operation.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

40 CFR 63, Subpart ZZZZ (The compliance date for this unit is 10/1/2013)

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Recordkeeping per 40 CFR 63.6602 and Table 2c.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b> 30B-08405	<b>Emission unit name:</b> Flare Knockout Tank Drain	<b>List any control devices associated with this emission unit:</b> None
--	---	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Flare Knockout Tank drain. Emissions are generated while decanting water from the bottom of the tank.

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 1988	<b>Modification date(s):</b> None
--	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
Tank capacity is 2,500 gallons; emissions are from drain.

<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Available	<b>Maximum Operating Schedule:</b> 365 days/yr
---	--	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No	<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired
--	--

<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable	<b>Type and Btu/hr rating of burners:</b> Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**  
Not Applicable

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.01	0.09
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-butadiene	0.01	0.09
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None	None	None
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.7

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emissions calculation based on site emission factor and maintenance of equipment.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 12-08033	<b>Emission unit name:</b> Gasoline Fuel Storage Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Gasoline Fuel Storage Tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1991	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1,130 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.13	0.55
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

None

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit? X Yes \_\_\_No**

**If no, complete the Schedule of Compliance Form as ATTACHMENT F.**

<b>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> 00H-02	<b>Emission unit name:</b> Gatehouse Generator	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  40 KW natural gas generator at the Gatehouse provides back-up power for site communications equipment in the event of a power outage.			
<b>Manufacturer:</b> Caterpillar/ Olympian	<b>Model number:</b> G40F3	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 2004	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 500 hours/yr* *Will be limited to 100 hours/yr after 10/19/2013 per 40 CFR 63, Subpart ZZZZ	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  120 HP		<b>Type and Btu/hr rating of burners:</b>  0.52 mmBtu/hr	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Natural Gas; max 510 lb/hr and 255,000 lb/yr (at 500 operating hrs/yr)			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	2000 grains/mmscf (AP-42)	Not Available	1020 Btu/scf

<b><i>Emissions Data – Annual emissions based on operating 100 hours per year.</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.1	0.5
Nitrogen Oxides (NO <sub>x</sub> )	1.9	0.5
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.0	0.001
Particulate Matter (PM <sub>10</sub> )	0.0	0.001
Total Particulate Matter (TSP)	0.0	0.001
Sulfur Dioxide (SO <sub>2</sub> )	0.0	0.00008
Volatile Organic Compounds (VOC)	0.1	0.02
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Manufacturer's specifications, AP-42.

Annual PTE emissions are based on 500 hrs/year of operation.

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

40 CFR 63, Subpart ZZZZ (The compliance date for this unit is 10/19/2013)

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Recordkeeping per 40 CFR 63.6602 and Table 2c.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b> 30A-08088 and 30A-08267	<b>Emission unit name:</b> Latex Activator; Mix and Charge Tanks	<b>List any control devices associated with this emission unit:</b> None
--	---	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Latex Activator; Mix and Charge Tanks – SO2 emissions are generated during the mixing of SFS.

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None
--	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
Mix tank = 800 gallons; Charge tank = 185 gallons.

<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr
---	---	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No	<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired
--	--

<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable	<b>Type and Btu/hr rating of burners:</b> Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**  
None

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.24	0.02
Particulate Matter (PM <sub>10</sub> )	0.24	0.02
Total Particulate Matter (TSP)	0.24	0.02
Sulfur Dioxide (SO <sub>2</sub> )	1.20	0.11
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3 Butadiene	None	None
Acrylonitrile	None	None
Styrene	None	None
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering estimates</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

None

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

None

Are you in compliance with all applicable requirements for this emission unit? X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b> 30B-25109	<b>Emission unit name:</b> Latex Blend Tank #38	<b>List any control devices associated with this emission unit:</b> None
--	--	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Latex Blend Tank #38- This is the only uncontrolled blend tank in the Latex Area

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None
--	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

300,000 gallons

<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> Not Available	<b>Maximum Operating Schedule:</b> 365 days/yr
--	--	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No	<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired
--	--

<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable	<b>Type and Btu/hr rating of burners:</b> Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Not Applicable

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.9	2.1
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3 Butadiene	0.29	0.71
Acrylonitrile	0.01	0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering estimates</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-2288C; A.1

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emissions calculated quarterly using site emission factors and production throughput.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 001-05	<b>Emission unit name:</b> Latex Blend Tanks and Screeners	<b>List any control devices associated with this emission unit:</b> Latex Area Catalytic Thermal Oxidizer (CTO) 30B-12130	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  The emission units include the Latex Final Storage Tanks and the Latex Screeners. These sources are vented to the Latex Area CTO. Additionally, emissions from the BA and MMA tanks are vented to the CTO. Information regarding the Latex Area CTO is also included below.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Total for 30 tanks is 1.33 million gallons.			
<b>Maximum Hourly Throughput:</b> NA	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> lb/yr (Latex Process)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <input checked="" type="checkbox"/> No The CTO combusts fuel, the tanks and screeners do not.		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data – The pollutants listed are emitted from the outlet of the CTO and include products of combustion.</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.00	9.00
Nitrogen Oxides (NO <sub>x</sub> )	8.00	32.00
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	1.0	2.0
Particulate Matter (PM <sub>10</sub> )	1.0	2.0
Total Particulate Matter (TSP)	1.0	2.0
Sulfur Dioxide (SO <sub>2</sub> )	0.50	1.00
Volatile Organic Compounds (VOC)	9.1	2.4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-butadiene	6.42	1.65
Styrene	0.01	0.03
Acrylonitrile	0.15	0.09
HAPS	6.58	1.77
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Performance stack test (9/19/2007) Continuous temperature monitor, Engineering Estimates</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-2288C, A.1, a.2, A.3, A.4, B.2, B.3, B.4, B.5

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emissions calculation based on site emission factor and production throughput.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 001-07	<b>Emission unit name:</b> Latex Coag Pits	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Latex Coag Pits			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  6,000 cubic feet (total estimated volume for four coag pits)			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> Not Available	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u>X</u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	2.14	1.46
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3 Butadiene	1.0	0.90
Acrylonitrile	0.01	0.04
Styrene	0.39	0.26
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering estimates</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.7

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit? X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 009-0U	<b>Emission unit name:</b> Latex Loading Station	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Latex Loading Station (Poly BD Loading)			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1992	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  Not Available			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> Not Available	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired    ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	37	2.8
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-Butadiene	11	1
Cumene	<0.01	<0.01
Ethylbenzene	0.07	0.10
Styrene	0.43	0.01
Xylene	<0.01	0.03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate. Butadiene emissions are based on Regulation 27 calculations and include railcar and truck loading.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E 4.1.7

Emissions of VOC from the loading of PBD latex to railcars and tank trucks are limited to 37 PPH and 2.8 tpy

Emissions of butadiene from the loading of PBD latex to railcars and tank trucks are limited to 11 PPH and 1.0 tpy.

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emissions limit – annual engineering calculation of emissions based on throughput and latex storage tank emissions factors.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 001-01	<b>Emission unit name:</b> Latex Process and Recovery	<b>List any control devices associated with this emission unit:</b> Latex Area Flare – 30B-01002	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Latex Building A and Building B Process Equipment and Recovery System – includes the latex reactor systems, BD recovery system and emergency relief system. Additionally, emissions from maintenance of process equipment, including the BD spheres, are also vented to the flare to minimize releases to the atmosphere. All emissions from this equipment are sent to the latex flare. Information for the flare is included below.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1963-69 1972	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (Capacity of Latex Area)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> x </u> No  The Latex process does not combust fuel, the flare does.		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data- The pollutants listed are emitted from the outlet of the flare and include products of combustion.</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	12.47	7.86
Nitrogen Oxides (NO <sub>x</sub> )	5.00	3.00
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	2.45	1.54
Particulate Matter (PM <sub>10</sub> )	2.45	1.54
Total Particulate Matter (TSP)	2.45	1.54
Sulfur Dioxide (SO <sub>2</sub> )	Not Available	Not Available
Volatile Organic Compounds (VOC)	50.00	31.50
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3 Butadiene	40.00	21.50
Styrene	0.24	0.05
Acrylonitrile	1.00	0.10
HAPS (total)	41.24	21.65
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Initial performance test, engineering estimates.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1009A, A.1  
Subpart JJJ

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Initial performance test  
Certification of Compliance with Subpart JJJ  
Maintain sensor to detect presence of pilot flame, alarm  
Emissions calculated quarterly using site emission factors and production throughput

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b>  30B-08445	<b>Emission unit name:</b>  BD Recovery Tank	<b>List any control devices associated with this emission unit:</b>  N/A
--	--	--

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
  
BD Recovery Decant Tank

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Applicable	<b>Installation date:</b> Not Available	<b>Modification date(s):</b> None
---	--	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
500 gallons

<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr
---	---	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No	<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired
--	--

<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable	<b>Type and Btu/hr rating of burners:</b>  Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**  
Not Applicable

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxides (NO <sub>x</sub> )	N/A	N/A
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	N/A	N/A
Particulate Matter (PM <sub>10</sub> )	N/A	N/A
Total Particulate Matter (TSP)	N/A	N/A
Sulfur Dioxide (SO <sub>2</sub> )	N/A	N/A
Volatile Organic Compounds (VOC)	0.01	0.27
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3 Butadiene	0.01	0.27
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.7

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b> 30B-08305 and 30B-08306	<b>Emission unit name:</b> Latex/BD Wash Tanks	<b>List any control devices associated with this emission unit:</b> None
--	---	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Latex Wash Tanks (Latex Decant Losses) BD Wash Tank drains. Emissions are generated while decanting water from the bottom of the tanks.

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None
--	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

16,000 gallons total

<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr
---	---	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No	<b>If yes, is it?</b>  ___ Indirect Fired    ___ Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable	<b>Type and Btu/hr rating of burners:</b> Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Not Applicable

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.04	0.21
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-butadiene	0.04	0.21
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.7

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and maintenance of equipment.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25009	<b>Emission unit name:</b> MMA Storage Tank	<b>List any control devices associated with this emission unit:</b> 13B-12130	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Methyl Methacrylate storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  30,000 gallons			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	0.012
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methyl Methacrylate	---	0.012
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate. VOC emissions represent emissions from the storage tank after control by Catalytic Thermal Oxidizer 30B-1213.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2084C §A.2.

- Tank shall be vented to the Catalytic Thermal Oxidizer 30B-1213.

45CSR34 and 40CFR63, Subpart JJJ, §§63.1313 and 63.1314

- Compliance with the Group 2 storage vessel provisions.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations using TANKS modeling, tank throughputs and control efficiency.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10J-25013, 10J-25014	<b>Emission unit name:</b> Polybutyl Acrylate (PBA) Latex Storage Tanks #4 and #5	<b>List any control devices associated with this emission unit:</b> Resin A Catalytic Oxidizer (10A-01001) or, when Resin A Catalytic Oxidizer is not operating, Carbon Canister System (10J-12023)	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  The emission unit is two PBA Latex Storage Tanks			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1996	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (Production capacity of the PBA process)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.1	0.1
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2084B, A.3, A.4, B.1, B.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10J-04007 00N-03	<b>Emission unit name:</b> Polybutyl Acrylate (PBA) Production Equipment	<b>List any control devices associated with this emission unit:</b> Caustic Scrubber (09-12010)/ Carbon Canisters (09-12011, 09-12012, 09-12013)	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  The emission unit consists of the Mix Tank, Feed Tank, Reactor Mix Pot, Reactor, Latex Hold Tank, Startup Tank and Latex Storage Tanks #1, 2, 3, and 6.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1996	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (Production capacity of the PBA process)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.4	0.7
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-2084B, A.3, A.5, B.1

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10J-08011 00N-03	<b>Emission unit name:</b> PBA Reactor Solution Tanks	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  The emission unit includes the Activator Make-up Tank, Activator Feed Tank, Solution Make-up Tank, PBA Make-up tank, Solution Feed Tank, Solution Feed Tank, and TSP Solution Feed Tank.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1996	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (production capacity of Polybutyl acrylate)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.13	0.58
Particulate Matter (PM <sub>10</sub> )	0.13	0.58
Total Particulate Matter (TSP)	0.13	0.58
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	None	None
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2084B, A.6, A.8, B.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10J-08097	<b>Emission unit name:</b> Supersack Hopper	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  The emission unit is the Supersack Hopper in Resin J. Dust Collector 10J-26015 is integral to the process			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1996	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (Production capacity of PBA process)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.2	0.8
Particulate Matter (PM <sub>10</sub> )	0.2	0.8
Total Particulate Matter (TSP)	0.2	0.8
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-2084B, A.6, B.2, B.4

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 00I-02	<b>Emission unit name:</b> Pilot Plant	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Pilot Plant			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1957	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	4.46
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	---	1.64
1,3-Butadiene	---	1.28
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.7  
R13-2678, 5.2.1

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and material throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> Various	<b>Emission unit name:</b> Title V Appendix 3 PM Sources with Air Pollution Control Devices	<b>List any control devices associated with this emission unit:</b> See Attached List	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Facility-wide Particulate Matter (PM) sources with air pollution control devices.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Applicable	<b>Serial number:</b> Not Applicable	
<b>Construction date:</b> Not Applicable	<b>Installation date:</b> Various	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Various			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	Various	Various
Particulate Matter (PM <sub>10</sub> )	Various	Various
Total Particulate Matter (TSP)	Various	Various
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	Various	Various
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HAP	Various	Various
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Not Applicable</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 7

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

R30-10700010-2005 Condition 3.2.1 Visible Emissions Monitoring

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

<b>Appendix 3: Dust Collector List - Pollution Control Equipment</b>		
	<b>2011 Permit Application Note: This list has been updated to reflect the dust collectors removed from the facility since the last permit application.</b>	
<b>Equipment Number</b>	<b>Description (Emission Unit and Dust Collector)</b>	<b>Function*</b>
15-26013	40MM EXTRUDER DUST COLLECTOR AT TECH CENTER	Pollution Control
10E26008	BAG HOPPER DUST COLLECTOR 1st floor	Pollution Control
10E26010	Blendex Bagging Hopper DC	Pollution Control
10E26013	Blendex Boxing DC	Pollution Control
012-26008	Box & Tote Sweeper Dust Collector	Pollution Control
11C26017	Box Charging DC Fin C	Pollution Control
15-26014	CMT WEIGH-UP ROOM DUST COLLECTOR	Pollution Control
10E26016	CPS CHARGE DUST COLLECTOR (EAST)	Pollution Control
10E26017	CPS CHARGE DUST COLLECTOR (WEST)	Pollution Control
10E26009	CPS DC Blendex Grinding Low Roof	Pollution Control
11C26028	DC for Vacuum Blower	Pollution Control
015-26010	Dust Collector Color Services	Pollution Control
015-26011	Dust Collector Color Services House Vac	Pollution Control
015-26021	Dust Collector compounding room	Pollution Control
012-26040	Fine Dust Collector Bulk Building	Pollution Control
012-26035	Fines Dust Collector	Pollution Control
015-26015	HENSHELL 5 & 20 LB DUST COLLECTOR AT TECH CENTER	Pollution Control
012-26028	HIPS Unloading filter receiver	Pollution Control
30A26002	LATEX A TSP CHARGE HOPPER DUST COLLECTOR	Pollution Control
30A26001	LATEX A TSP DUST COLLECTOR	Pollution Control
012-26024	MMA SAN unloading DC	Pollution Control
11C26004	PRIMARY BUILDING VACUUM DUST COLLECTOR	Pollution Control
10C26026	RESIN C SWECO SYSTEM DUST COLLECTOR	Pollution Control
11C26029	Reject Cyclone	Pollution Control
012-26001	Resin DC loading	Pollution Control
10J26016	Rework DC Resin J	Pollution Control
11C26005	SECONDARY BUILDING VACUUM DUST COLLECTOR	Pollution Control
30B26102	SFS Dust Collector	Pollution Control
24-26001	Vacuum Seperator/Filter	Pollution Control
11C26002	Vertical Blender DC #1	Pollution Control
11C26001	Vertical Blender DC #2	Pollution Control
11C26003	WC Banbury DC	Pollution Control
11C26020	WC Chop Surge DC	Pollution Control
11C26024	WC DC Blender #1	Pollution Control
11C26025	WC DC Blender #2	Pollution Control
11C26026	WC DC SAN Hopper #1	Pollution Control
11C26027	WC DC SAN Hopper #2	Pollution Control
11C26010	WE Surge Hopper DC	Pollution Control
11C26018	WM BLACK WEIGH-UP DUST COLLECTOR	Pollution Control
012-26013	WM Bulk pellet fines dust collector	Pollution Control
11C26022	WM NAPAX Banbury Cyclone	Pollution Control
11C26021	WM Pigment DC	Pollution Control
11C26023	WM TIO2 WEIGHBIN DUST COLLECTOR	Pollution Control
015-26012	WS 58MM EXTRUDER DUST COLLECTOR AT TECH CENTER	Pollution Control
015-26013	WV 40MM EXTRUDER DUST COLLECTOR AT TECH CENTER	Pollution Control

\* The function of the dust collector refers to the determination regarding the unit functioning as Integral to the Process or as Pollution Control equipment

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25050	<b>Emission unit name:</b> 1,3-Butadiene Sphere	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Pressure vessel			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1962	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  200,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC) (Maintenance activities)	2.0	0.3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-Butadiene (Maintenance activities)	2.0	0.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering estimate for maintenance emissions from sphere. This is a pressure vessel without an emission point.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

**R13-1886E §4.1.7**

- 1,3-butadiene emission limits for sphere maintenance as specified above.

**R13-2678 §5.1.2**

- Requirement to empty vessels via vacuum.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

***Recordkeeping Requirements***

- Perform quarterly emission calculations. Hourly rate determined based on monthly average emission rate. Annual rate determined using a 12-month rolling total.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25074	<b>Emission unit name:</b> 1,3-Butadiene Sphere	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Pressure vessel			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1963	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  400,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC) (Maintenance activities)	2.0	0.3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-Butadiene (Maintenance activities)	2.0	0.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering estimate for maintenance emissions from sphere. This is a pressure vessel without an emission point.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

**R13-1886E §4.1.7**

- 1,3-butadiene emission limits for sphere maintenance as specified above.

**R13-2678 §5.1.2**

- Requirement to empty vessels via vacuum.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

*Recordkeeping Requirements*

- Perform quarterly emission calculations. Hourly rate determined based on monthly average emission rate. Annual rate determined using a 12-month rolling total.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25077	<b>Emission unit name:</b> 1,3-Butadiene Sphere	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Pressure vessel			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1966	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  400,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC) (Maintenance activities)	2.0	0.3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-Butadiene (Maintenance activities)	2.0	0.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering estimate for maintenance emissions from sphere. This is a pressure vessel without an emission point.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

**R13-1886E §4.1.7**

- 1,3-butadiene emission limits for sphere maintenance as specified above.

**R13-2678 §5.1.2**

- Requirement to empty vessels via vacuum.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

***Recordkeeping Requirements***

- Perform quarterly emission calculations. Hourly rate determined based on monthly average emission rate. Annual rate determined using a 12-month rolling total.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25083	<b>Emission unit name:</b> 1,3-Butadiene Sphere	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Pressure vessel			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1969	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  400,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC) (Maintenance activities)	2.0	0.3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
1,3-Butadiene (Maintenance activities)	2.0	0.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering estimate for maintenance emissions from sphere. This is a pressure vessel without an emission point.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

**R13-1886E §4.1.7**

- 1,3-butadiene emission limits for sphere maintenance as specified above.

**R13-2678 §5.1.2**

- Requirement to empty vessels via vacuum.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

***Recordkeeping Requirements***

- Perform quarterly emission calculations. Hourly rate determined based on monthly average emission rate. Annual rate determined using a 12-month rolling total.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 03-07001	<b>Emission unit name:</b> Process Cooling Tower #1	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Process cooling tower			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> gpm			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	9.77	42.80
Particulate Matter (PM <sub>10</sub> )	9.77	42.80
Total Particulate Matter (TSP)	9.77	42.80
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

None

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit? X Yes \_\_\_No**

**If no, complete the Schedule of Compliance Form as ATTACHMENT F.**

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 03-07003	<b>Emission unit name:</b> Process Cooling Tower #3	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Process cooling tower			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1989	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> gpm			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	9.77	42.80
Particulate Matter (PM <sub>10</sub> )	9.77	42.80
Total Particulate Matter (TSP)	9.77	42.80
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

None

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

None

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> QCL	<b>Emission unit name:</b> Quality Control Lab	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Quality Control Lab			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1960	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile (State Enforceable Only)	---	0.05
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.7

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

***Emission Unit Description***

<b>Emission unit ID number:</b> 009-0Y	<b>Emission unit name:</b> Railcar and Truck Unloading Stations (racks #1 and #2)	<b>List any control devices associated with this emission unit:</b> None
---	--	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Unloading stations

<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
---------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 1956	<b>Modification date(s):</b> None
--	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

Not Available

<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> Not Available	<b>Maximum Operating Schedule:</b> 365 days/yr
--	--	---

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No	<b>If yes, is it?</b>  ___ Indirect Fired    ___ Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable	<b>Type and Btu/hr rating of burners:</b> Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Not Applicable

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.03	0.13
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.02	0.10
1,3-Butadiene	0.007	0.03
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate. HAP and VOC emissions are based on Regulation 27 emission calculations.</p>		

<p><b><i>Applicable Requirements</i></b></p> <p><b>List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.</b></p> <p><b>R13-1886E §4.1.7 and R13-2678 §5.1.1</b></p> <ul style="list-style-type: none"><li>• 1,3-butadiene emission limits as specified above.</li><li>• Acrylonitrile emission limits as specified above.</li></ul> <p><b>R13-2678 §5.1.2</b></p> <ul style="list-style-type: none"><li>• Maintain unloading valves, railcar drip-less connectors, and procedures.</li></ul> <p><b>40CFR63, Subpart EEEE</b></p> <ul style="list-style-type: none"><li>• Applicable sections of Subpart EEEE.</li></ul>
<p><input checked="" type="checkbox"/> Permit Shield</p>
<p><b>For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)</b></p> <p><i>Recordkeeping Requirements</i></p> <ul style="list-style-type: none"><li>• Perform quarterly emission calculations. Hourly rate determined based on monthly average emission rate. Annual rate determined using a 12-month rolling total.</li><li>• Maintain the applicable records in 40CFR §63.2390(a) and (c) and §63.2394.</li></ul> <p><i>Reporting Requirements</i></p> <ul style="list-style-type: none"><li>• Applicable reporting requirements in 40CFR §63.2386.</li></ul>
<p><b>Are you in compliance with all applicable requirements for this emission unit?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If no, complete the <b>Schedule of Compliance Form</b> as <b>ATTACHMENT F</b>.</p>

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> Loading System #3	<b>Emission unit name:</b> Railcar Spot #15	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Resin railcar direct loading facility; #3 resin loading. Dust Collector 12-26029 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1989	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.231	0.675
Particulate Matter (PM <sub>10</sub> )	0.231	0.675
Total Particulate Matter (TSP)	0.231	0.675
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1069, A

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Records of materials loaded.

Are you in compliance with all applicable requirements for this emission unit? X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10A-25019, 10A-25020, 10A-25046, 10A-25060, 10A-25062	<b>Emission unit name:</b> Resin A Blend Tanks	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes five (5) Blend tanks, also referred to as Latex Storage Tanks.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1963, 1974	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Total capacity for five tanks is 130,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (Capacity of Resin A Process)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	6.10	1.20
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	4.50	1.00
Cumene	0.30	0.10
Ethyl Benzene	0.30	0.10
MMA	0.20	0.10
Styrene	0.30	0.10
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.2  
40CFR63, Subpart JJJ

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10A-27002, 10A-27003	<b>Emission unit name:</b> Resin A Predryer and Dryer	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Resin A predryer and dryer are exhausted through separate stacks. Emission limits are the combined emissions of both stacks. Dryer Dust Collectors 10A-26017 and 10A-26022 are integral to the process.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1962, 1974	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> tpy (Production capacity for Resin A)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.40	0.80
Particulate Matter (PM <sub>10</sub> )	0.40	0.80
Total Particulate Matter (TSP)	0.40	0.80
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	32.36	133.01
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.85	2.38
Cumene	1.40	4.53
Ethyl Benzene	0.21	0.75
MMA	12.84	20.38
Styrene	23.47	77.28
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Stack test (7/1999), Engineering calculations.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.2  
40CFR63, Subpart JJJ

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 002-01	<b>Emission unit name:</b> Resin A Reactor-Coagulation-Vacuum System	<b>List any control devices associated with this emission unit:</b> Resin A Catalytic Incinerator 10A-12021	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Resin A Reactor-Coagulation-Vacuum System Resin A batch reactors, coag system and vacuum system emissions. Routed to Resin A Catalytic Incinerator. Information for the incinerator is included below.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1962	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> tpy (Capacity of Resin A process)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No  The Resin A process does not combust fuel, the catalytic incinerator does.		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data - The pollutants listed are emitted from the outlet of the catalytic incinerator and include products of combustion.</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.25	1.10
Nitrogen Oxides (NO <sub>x</sub> )	6.10	17.30
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.02	0.07
Particulate Matter (PM <sub>10</sub> )	0.02	0.07
Total Particulate Matter (TSP)	0.02	0.07
Sulfur Dioxide (SO <sub>2</sub> )	1.90	8.40
Volatile Organic Compounds (VOC)	1.76	7.37
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.82	2.31
Cumene	<0.01	<0.01
Ethyl Benzene	<0.01	<0.01
MMA	1.27	2.39
Styrene	0.60	2.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Organic/HAP emissions from a Stack test (7/1999). Products of combustion from AP-42 emission factors.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.2, 4.1.5, 4.1.6, 4.4.4, 4.4.5, 4.4.6, 4.4.7  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10A-25058	<b>Emission unit name:</b> Resin A Scale Tank A1-1	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Weighing of ABS Resin product. Dust Collector 10A-26024 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.18	0.79
Particulate Matter (PM <sub>10</sub> )	0.18	0.79
Total Particulate Matter (TSP)	0.18	0.79
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-0301A, A.4, B.4

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Records of materials transferred into the vessel.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10A-25059	<b>Emission unit name:</b> Resin A Scale Tank A1-2	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Weighing of ABS Resin product. Dust Collector 10A-26025 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.18	0.79
Particulate Matter (PM <sub>10</sub> )	0.18	0.79
Total Particulate Matter (TSP)	0.18	0.79
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-0301A, A.4, B.4

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Records of materials transferred into the vessel.

Are you in compliance with all applicable requirements for this emission unit? X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10A-25058, 10A-25059 (Scale Tanks) and others.	<b>Emission unit name:</b> Resin A Transfer	<b>List any control devices associated with this emission unit:</b> See Title V Appendix 3 Dust Collector List	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes the transfer of resin from the Resin A production building to various storage silos and transfer facilities including loading into transport vessels and vehicles.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1962	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy (production capacity for Resin A)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	1.20	1.00
Particulate Matter (PM <sub>10</sub> )	1.20	1.00
Total Particulate Matter (TSP)	1.20	1.00
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	1.64	1.68
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.02	0.02
MMA	0.62	0.64
Styrene	0.62	0.64
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.2

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit? X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10C-12040	<b>Emission unit name:</b> Resin C Automatic Bagging System	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Product handling system. Dust Collector 10C-26019 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1989	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.231	0.675
Particulate Matter (PM <sub>10</sub> )	0.231	0.675
Total Particulate Matter (TSP)	0.231	0.675
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1097, A.1, A.2

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Records of materials transferred into the bagging system.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10C-25026, 10C-25027, 10C-25028, 10C-25045, 10C-25046	<b>Emission unit name:</b> Resin C Blend Tanks	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes five (5) Blend tanks, also referred to as Latex Storage Tanks.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1960, 1974	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Total capacity for five tanks is 230,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (production capacity for Resin C)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	2.26	3.34
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	1.47	0.80
Cumene	0.04	0.07
Ethyl Benzene	0.01	0.02
Styrene	0.08	0.13
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.7  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10C-27005	<b>Emission unit name:</b> Resin C Fluidized Bed Dryer	<b>List any control devices associated with this emission unit:</b> Carbon bed	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Resin C Fluidized Bed Dryer is used to dry resin from the Resin C building in a closed system nitrogen environment.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1990	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> tpy (Production capacity for Resin C)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.08	0.20
Particulate Matter (PM <sub>10</sub> )	0.08	0.20
Total Particulate Matter (TSP)	0.08	0.20
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	1.79	4.70
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.28	0.74
Cumene	0.04	0.18
Ethyl Benzene	<0.01	0.02
MMA	0.42	1.11
Styrene	0.95	2.49
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Stack test (7/1999), Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1351A, A.1, A.2, A.3, A.4, A.5, B.3  
40CFR63, Subpart JJJ

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 003-01	<b>Emission unit name:</b> Resin C Reactor-Coagulation-Vacuum System	<b>List any control devices associated with this emission unit:</b> Resin C Catalytic Incinerator 10C-01002	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Resin C Reactor-Coagulation-Vacuum System Resin C batch reactors, coag system and vacuum system emissions. Routed to Resin C Catalytic Incinerator. Information for the incinerator is included below.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1960	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> tpy (Capacity of Resin C process)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <input checked="" type="checkbox"/> No The Resin C process does not combust fuel, the catalytic incinerator does.		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

***Emissions Data – The pollutants listed are emitted from the outlet of the catalytic incinerator and include products of combustion.***

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.17	0.74
Nitrogen Oxides (NO <sub>x</sub> )	17.00	74.30
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.02	0.07
Particulate Matter (PM <sub>10</sub> )	0.02	0.07
Total Particulate Matter (TSP)	0.02	0.07
Sulfur Dioxide (SO <sub>2</sub> )	3.06	12.73
Volatile Organic Compounds (VOC)	3.70	9.50
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	1.95	8.54
Cumene	0.01	0.02
Ethyl Benzene	0.01	0.02
MMA	2.20	5.00
Styrene	2.00	4.00
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Organic/HAP emissions from a Stack test (7/1999). Products of combustion from AP-42 emission factors.

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1588B, A.1, A.2, B.1, B.2  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10C-25042, 10C-25043 (Scale Tanks) and others.	<b>Emission unit name:</b> Resin C Transfer	<b>List any control devices associated with this emission unit:</b> See Title V Appendix 3 Dust Collector List	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes the transfer of resin from the Resin C production building to various storage silos and transfer facilities including loading into transport vessels and vehicles.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1960	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy (production capacity for Resin C)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	1.20	1.00
Particulate Matter (PM <sub>10</sub> )	1.20	1.00
Total Particulate Matter (TSP)	1.20	1.00
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	1.64	1.68
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.02	0.3 (Combined limit for Resin C transfer and Resin G transfer)
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.18

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit? X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY –CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10E-25051, 10E-25052, 10E-25053, 10E-25054, 10E-25055, 10E-25064, 10E-25066	<b>Emission unit name:</b> Resin E Blend Tanks	<b>List any control devices associated with this emission unit:</b> Resin E Catalytic Incinerator 10E-01002	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes seven (7) Blend tanks, also referred to as Latex Storage Tanks. The Resin E blend tank emissions are controlled by the catalytic incinerator.			
<b>Manufacturer:</b> Not available	<b>Model number:</b> Not available	<b>Serial number:</b> Not available	
<b>Construction date:</b> Not available	<b>Installation date:</b> 1962	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Total capacity for seven tanks is 230,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (production capacity for Resin E)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No  The Resin E Blend tanks do not combust fuel, the Resin E Incinerator does.		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	5.00	2.43
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	1.00	0.90
Cumene	0.01	0.06
Ethyl Benzene	0.01	0.02
Styrene	0.03	0.11
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.3, 4.1.5, 4.1.6, 4.4.4, 4.4.5, 4.4.6, 4.4.7  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 004-03	<b>Emission unit name:</b> Resin E Reactor-Coagulation-Vacuum System	<b>List any control devices associated with this emission unit:</b> Resin E Catalytic Incinerator 10E-01002	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Resin E Reactor-Coagulation-Vacuum System Resin E batch reactors, coag system, vacuum system emissions. Routed to Resin A Catalytic Incinerator. Information for the incinerator is included below.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1962	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> tpy (Capacity of Resin E process)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <input checked="" type="checkbox"/> No The Resin E process does not combust fuel, the catalytic incinerator does.		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

***Emissions Data- The pollutants listed are emitted from the outlet of the catalytic incinerator and include products of combustion.***

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.24	1.05
Nitrogen Oxides (NO <sub>x</sub> )	20.00	34.40
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.02	0.09
Particulate Matter (PM <sub>10</sub> )	0.02	0.09
Total Particulate Matter (TSP)	0.02	0.09
Sulfur Dioxide (SO <sub>2</sub> )	3.06	8.16
Volatile Organic Compounds (VOC)	13.00	24.00
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	3.00	4.80
Cumene	0.02	0.04
Ethyl Benzene	<0.01	<0.01
Styrene	0.05	0.13
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Organic/HAP emissions from a Stack test (7/1999). Products of combustion from AP-42 emission factors.

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.3, 4.1.5, 4.1.6, 4.4.4, 4.4.5, 4.4.6, 4.4.7  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10E-27001	<b>Emission unit name:</b> Resin E Rotary Dryer	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Resin E Rotary Dryer. Dryer Dust Collector 10E-26021 is integral to the process			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1963	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy (Production capacity for Resin E)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	1.00	0.64
Particulate Matter (PM <sub>10</sub> )	1.00	0.64
Total Particulate Matter (TSP)	1.00	0.64
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	35.00	45.00
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	8.00	7.90
Cumene	1.77	4.72
Ethyl Benzene	0.11	0.28
Xylene	0.32	0.84
Styrene	15.09	40.24
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Stack test (7/1999), Engineering calculations.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.3, 4.1.5, 4.1.6, 4.4.4, 4.4.5, 4.4.6, 4.4.7  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10E-25056, 10E-25057 (Scale Tanks) and others.	<b>Emission unit name:</b> Resin E Transfer	<b>List any control devices associated with this emission unit:</b> See Title V Appendix 3 Dust Collector List	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes the transfer of resin from the Resin E production building to various storage silos and transfer facilities including loading into transport vessels and vehicles.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1962	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy (production capacity for Resin E)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	1.00	1.92
Particulate Matter (PM <sub>10</sub> )	1.00	1.92
Total Particulate Matter (TSP)	1.00	1.92
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	2.00	1.75
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	1.00	0.05
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.3, 4.1.7

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10G-25002, 10G-25003, 10G-25004, 10G-25005, 10G-25009	<b>Emission unit name:</b> Resin G Blend Tanks	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes five (5) Blend tanks, also referred to as Latex Storage Tanks.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Total design capacity for five tanks is 156,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (production capacity for Resin G)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	0.33	1.27
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.28	1.00
Cumene	0.01	0.04
Ethyl Benzene	<0.01	0.01
Styrene	0.02	0.07
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.3, 4.4.8  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 005-01	<b>Emission unit name:</b> Resin G Reactor-Coagulation-Vacuum System	<b>List any control devices associated with this emission unit:</b> Resin G Catalytic Incinerator 10G-01001	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Resin G Reactor-Coagulation-Vacuum System Resin G batch reactors, coag system and vacuum system emissions. Routed to Resin G Catalytic Incinerator. Information for the incinerator is included below.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy Capacity of Resin G process)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No The catalytic incinerator combusts fuel, the Resin G process does not.		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

***Emissions Data – The pollutants listed are emitted from the outlet of the catalytic incinerator and include products of combustion.***

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.16	0.72
Nitrogen Oxides (NO <sub>x</sub> )	60.27	39.00
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.01	0.07
Particulate Matter (PM <sub>10</sub> )	0.01	0.07
Total Particulate Matter (TSP)	0.01	0.07
Sulfur Dioxide (SO <sub>2</sub> )	1.94	6.12
Volatile Organic Compounds (VOC)	2.00	6.00
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	2.00	1.00
Cumene	<0.01	<0.01
Ethyl Benzene	<0.01	<0.01
Styrene	0.12	0.38
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Organic/HAP emissions from a Stack test (7/1999). Products of combustion from AP-42 emission factors.

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.7, 4.4.7  
40CFR63, Subpart JJJ

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10G-27001	<b>Emission unit name:</b> Resin G Rotary Dryer	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Resin E Rotary Dryer. Dryer Dust Collector 10G-26001 is integral to the process.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy (Production capacity of Resin G)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.12	0.38
Particulate Matter (PM <sub>10</sub> )	0.12	0.38
Total Particulate Matter (TSP)	0.12	0.38
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	25.00	80.00
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	5.00	4.50
Cumene	0.54	1.71
Ethyl Benzene	0.02	0.06
Xylene	0.07	0.21
Styrene	15.63	49.35
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Stack test (7/1999), Engineering calculations.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.7, 4.4.7  
40CFR63, Subpart JJJ

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY –CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10G-25007, 10G-25008 (Scale Tanks) and others.	<b>Emission unit name:</b> Resin G Transfer	<b>List any control devices associated with this emission unit:</b> See Title V Appendix 3 Dust Collector List	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes the transfer of resin from the Resin G production building to various storage silos and transfer facilities including loading into transport vessels and vehicles.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy (production capacity for Resin G)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	1.20	1.00
Particulate Matter (PM <sub>10</sub> )	1.20	1.00
Total Particulate Matter (TSP)	1.20	1.00
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	1.64	1.68
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.02	0.3 (Combined limit for Resin C transfer and Resin G transfer)
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-1886E, 4.1.17, 4.4.7

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10J-25003, 10J-25004, 10J-25005, 10J-25011	<b>Emission unit name:</b> Resin J Blend Tanks	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes four (4) Blend tanks, also referred to as Latex Storage Tanks.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1966	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Total design capacity for four tanks is 159,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (Capacity of Resin J process)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	5.00	2.90
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	1.00	1.20
Cumene	0.12	0.03
Ethyl Benzene	0.03	0.01
Styrene	0.25	0.06
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.4, 4.4.7, 4.4.8  
40CFR63, Subpart JJJ

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 006-01	<b>Emission unit name:</b> Resin J Reactor-Coagulation-Vacuum System	<b>List any control devices associated with this emission unit:</b> Resin J Catalytic Incinerator 10J-01001	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Resin J Reactor-Coagulation-Vacuum System Resin J batch reactors, coag system and vacuum system emissions. Routed to Resin J Catalytic Incinerator. Information for the incinerator is included below.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> tpy (Capacity of Resin J process)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> __ Yes <u> X </u> No The Resin J process does not combust fuel, the catalytic incinerator does.		<b>If yes, is it?</b> __ Indirect Fired __ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

**Emissions Data- The pollutants listed are emitted from the outlet of the catalytic incinerator and include products of combustion.**

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.19	0.83
Nitrogen Oxides (NO <sub>x</sub> )	14.00	35.00
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.02	0.08
Particulate Matter (PM <sub>10</sub> )	0.02	0.08
Total Particulate Matter (TSP)	0.02	0.08
Sulfur Dioxide (SO <sub>2</sub> )	4.08	15.30
Volatile Organic Compounds (VOC)	15.00	12.00
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	6.00	5.10
Cumene	0.02	0.03
Ethyl Benzene	0.01	0.02
Styrene	0.59	1.17
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Organic/HAP emissions from a Stack test (7/1999). Products of combustion from AP-42 emission factors.

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.4, 4.1.5, 4.1.6, 4.4.4, 4.4.5, 4.4.6, 4.4.7  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> 10J-27001	<b>Emission unit name:</b> Resin J Rotary Dryer	<b>List any control devices associated with this emission unit:</b>	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Resin J Rotary Dryer. Dryer Dust Collector 10J-26001 is integral to the process.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965/66	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy (Production capacity for Resin J)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	1.00	0.96
Particulate Matter (PM <sub>10</sub> )	1.00	0.96
Total Particulate Matter (TSP)	1.00	0.96
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	222.00	230.00
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	15.00	12.00
Cumene	2.60	8.45
Ethyl Benzene	0.40	1.30
Xylene	0.60	1.95
Styrene	58.84	191.23
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Stack test (7/1999), Engineering calculations.</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.4, 4.4.6, 4.4.7  
40CFR63, Subpart JJJ

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10J-25007, 10J-25008 (Scale Tanks) and others.	<b>Emission unit name:</b> Resin J Transfer	<b>List any control devices associated with this emission unit:</b> See Title V Appendix 3 Dust Collector List	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Emission unit includes the transfer of resin from the Resin J production building to various storage silos and transfer facilities including loading into transport vessels and vehicles.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1966	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> <b>CONFIDENTIAL</b> tpy (production capacity for Resin J)			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	1.00	1.92
Particulate Matter (PM <sub>10</sub> )	1.00	1.92
Total Particulate Matter (TSP)	1.00	1.92
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	2.00	1.75
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	1.00	0.05
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1886E, 4.1.4, 4.4.7

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10J-08083	<b>Emission unit name:</b> Sodium Formaldehyde Sulfoxalate Storage Tank	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  The emission unit is the Sodium Formaldehyde Sulfoxalate Storage Tank.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1996	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> tpy (Production capacity of PBA process)	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	0.03	0.13
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-2084B, A.7, B.3

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 11B-25001	<b>Emission unit name:</b> Silo #28	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collectors 11B-26050 and 11B-26021 are integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1966	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.09	0.39
Particulate Matter (PM <sub>10</sub> )	0.09	0.39
Total Particulate Matter (TSP)	0.09	0.39
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-0301A, A.4, B.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Records of materials transferred into the silo.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 11B-25002	<b>Emission unit name:</b> Silo #29	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collector 11B-26051 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1966	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.09	0.39
Particulate Matter (PM <sub>10</sub> )	0.09	0.39
Total Particulate Matter (TSP)	0.09	0.39
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-0301A, A.4, B.4

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Records of materials transferred into the silo.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 11A-25076	<b>Emission unit name:</b> Silo #33	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collector 11A-26100 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.09	0.39
Particulate Matter (PM <sub>10</sub> )	0.09	0.39
Total Particulate Matter (TSP)	0.09	0.39
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-0301A, A.4, B.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Records of materials transferred into the silo.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 11A-25077	<b>Emission unit name:</b> Silo #34	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collector 11A-26101 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.09	0.39
Particulate Matter (PM <sub>10</sub> )	0.09	0.39
Total Particulate Matter (TSP)	0.09	0.39
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-0301A, A.4, B.4

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Records of materials transferred into the silo.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 11E-25060	<b>Emission unit name:</b> Silo #45	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collector 10E-26019 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.09	0.39
Particulate Matter (PM <sub>10</sub> )	0.09	0.39
Total Particulate Matter (TSP)	0.09	0.39
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-0301A, A.4, B.4

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Records of materials transferred into the silo.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 11E-25061	<b>Emission unit name:</b> Silo #46	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collector 10E-26020 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1967	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.09	0.39
Particulate Matter (PM <sub>10</sub> )	0.09	0.39
Total Particulate Matter (TSP)	0.09	0.39
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-0301A, A.4, B.4

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Records of materials transferred into the silo.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 10C-25047	<b>Emission unit name:</b> Silo #48	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collectors 10C-26010 and 10C-26011 are integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1976	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.20	0.57
Particulate Matter (PM <sub>10</sub> )	0.20	0.57
Total Particulate Matter (TSP)	0.20	0.57
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-0658A, A.1, A.2, A.3, A.4, B.4

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Records of materials transferred into the silo.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 11A-25078	<b>Emission unit name:</b> Silo #57	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collector 11A-26071 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1989	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.15	0.45
Particulate Matter (PM <sub>10</sub> )	0.15	0.45
Total Particulate Matter (TSP)	0.15	0.45
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1133A, A.1, A.2, A.3, A.4, B.4

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Records of materials transferred into the silo.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 12-25007	<b>Emission unit name:</b> Silo #95	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Storage of ABS Resin product. Dust Collector 012-26030 is integral to the process.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1989	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.15	0.45
Particulate Matter (PM <sub>10</sub> )	0.15	0.45
Total Particulate Matter (TSP)	0.15	0.45
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-1133A, A.1, A.2, A.3, A.4, B.4

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Records of materials transferred into the silo.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> Various	<b>Emission unit name:</b> Title V Appendix 3 PM Sources with Integral-to-the-Process fabric filters	<b>List any control devices associated with this emission unit:</b> See Attached List	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Facility-wide Particulate Matter (PM) sources using fabric filters that are integral to the process and not considered pollution control devices.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Applicable	<b>Serial number:</b> Not Applicable	
<b>Construction date:</b> Not Applicable	<b>Installation date:</b> Various	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Various			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	Various	Various
Particulate Matter (PM <sub>10</sub> )	Various	Various
Total Particulate Matter (TSP)	Various	Various
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	Various	Various
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
HAP	Various	Various
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Not Applicable</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 7

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The site maintains records of maintenance performed on this process equipment.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

### Appendix 3: Dust Collector List- Intergral to the Process Equipment

**2011 Permit Application Note: This list has been updated to reflect the dust collectors removed from the facility since the last permit application.**

Equipment Number	Description (Emission Unit and Dust Collector)	Function*
10J26010	BOOSTER #0 DUST COLLECTOR	Integral
10J26011	BOOSTER #1 DUST COLLECTOR	Integral
10C26013	BOOSTER #2 DUST COLLECTOR	Integral
10F26008	BOOSTER #3 DUST COLLECTOR	Integral
10J26007	BOOSTER #4 DUST COLLECTOR	Integral
012-26026	HSB DUST COLLECTOR #3 (WEST UNIT)	Integral
012-26017	HSB DUST COLLECTOR #4 (CENTER UNIT)	Integral
012-26012	HSB DUST COLLECTOR #5 (EAST UNIT)	Integral
012-26041	HSB NORTH HOPPER DUST COLLECTOR	Integral
012-26042	HSB SOUTH HOPPER DUST COLLECTOR	Integral
10A26022	RESIN A DUST COLLECTOR #2 (ROTARY DRYER)	Integral
10A26017	RESIN A FLASH DRYER (#1) DUST COLLECTOR	Integral
10C26019	RESIN C AUTO BAGGER DUST COLLECTOR	Integral
10C26022	RESIN C BAGGER HOPPER DUST COLLECTOR	Integral
10C28056	RESIN C DRYER / COOLER / DEVOLITIZER DUST COLLECTOR	Integral
10C28055	RESIN C PLUG FLOW DUST COLLECTOR	Integral
10C28058	RESIN C PRODUCT RECEIVER TRANSFER DUST COLLECTOR	Integral
10C26023	RESIN C SUPERSACK HOPPER DUST COLLECTOR (NORTH)	Integral
10E26021	RESIN E DRYER DUST COLLECTOR	Integral
10E26004	RESIN E SCALE TANK DUST COLLECTOR (EAST)	Integral
10E26005	RESIN E SCALE TANK DUST COLLECTOR (WEST)	Integral
10G26001	RESIN G DRYER DUST COLLECTOR	Integral
10J26001	RESIN J DRYER DUST COLLECTOR	Integral
10J26004	RESIN J SCALE TANK #1 DUST COLLECTOR (SOUTH WEST)	Integral
10J26005	RESIN J SCALE TANK #2 DUST COLLECTOR (NORTH WEST)	Integral
10J26015	RESIN J SUPERSACK HOPPER DUST COLLECTOR	Integral
012-26031	RR Fines #21 Cyclone	Integral
012-26032	RR Fines #21 Cyclone	Integral
012-26033	RR Fines #22 Cyclone	Integral
012-26034	RR Fines #22 Cyclone	Integral
10A26024	SCALE TANK #1 DUST COLLECTOR (EAST)	Integral
10G26004	SCALE TANK #1 DUST COLLECTOR (NORTHEAST)	Integral
10G26005	SCALE TANK #2 DUST COLLECTOR (SOUTH EAST)	Integral
10A26025	SCALE TANK #2 DUST COLLECTOR (WEST)	Integral
10C26024	SCALE TANK DUST COLLECTOR (EAST)	Integral
10C26025	SCALE TANK DUST COLLECTOR (WEST)	Integral
11A26036	SILO 04 DUST COLLECTOR	Integral
11A26037	SILO 05 DUST COLLECTOR	Integral
11A26038	SILO 06 DUST COLLECTOR	Integral
11A26039	SILO 07 DUST COLLECTOR	Integral
11A26087	SILO 08 DUST COLLECTOR	Integral
11A26088	SILO 10 DUST COLLECTOR	Integral
11A26089	SILO 11 DUST COLLECTOR	Integral

<b>Equipment Number</b>	<b>Description (Emission Unit and Dust Collector)</b>	<b>Function*</b>
11A26090	SILO 13 DUST COLLECTOR	Integral
11A26091	SILO 14 DUST COLLECTOR	Integral
11A26092	SILO 16 DUST COLLECTOR	Integral
11A26093	SILO 17 DUST COLLECTOR	Integral
11B26021	SILO 28 DUST COLLECTOR NORTH	Integral
11B26050	SILO 28 DUST COLLECTOR SOUTH	Integral
11B26051	SILO 29 DUST COLLECTOR NORTH	Integral
11B26022	SILO 29 DUST COLLECTOR SOUTH	Integral
11B26074	SILO 30 DUST COLLECTOR	Integral
11B26075	SILO 31 DUST COLLECTOR	Integral
11B26076	SILO 32 DUST COLLECTOR	Integral
11A26100	SILO 33 DUST COLLECTOR East	Integral
11A26053	SILO 33 DUST COLLECTOR NW	Integral
11A26054	SILO 34 DUST COLLECTOR NW	Integral
11A26101	SILO 34 DUST COLLECTOR SE	Integral
11C26030	SILO 40 DUST COLLECTOR	Integral
11C26031	SILO 41 DUST COLLECTOR	Integral
11B26057	SILO 42 DUST COLLECTOR	Integral
11B26058	SILO 43 DUST COLLECTOR	Integral
11B26059	SILO 44 DUST COLLECTOR	Integral
10E26019	SILO 45 DUST COLLECTOR	Integral
10E26020	SILO 46 DUST COLLECTOR	Integral
10A26020	SILO 47 CHIP DUST COLLECTOR	Integral
10A26021	SILO 47 CHIP TRANSFER DUST COLLECTOR	Integral
10C26010	SILO 48 DUST COLLECTOR SOUTH TOP	Integral
10C26011	SILO 48 BOTTOM UNLOADING VACUUM DUST COLLECTOR	Integral
10C26027	SILO 48B DUST COLLECTOR EAST TOP	Integral
11A26071	SILO 57 DUST COLLECTOR	Integral
012-26030	SILO 95 HSB DUST COLLECTOR	Integral
012-26025	SILO 96 DUST COLLECTOR	Integral
012-26019	SILO 96 SAN-BULK DUST COLLECTOR	Integral
012-26046	SILO 97 DUST COLLECTOR	Integral
012-26047	SILO 98 DUST COLLECTOR	Integral
012-26048	SILO 99 DUST COLLECTOR	Integral
012-26021	SPOT 10 SAN UNLOADING DUST COLLECTOR	Integral
012-26022	SPOT 12 DUST COLLECTOR	Integral
012-26023	SPOT 14 DUST COLLECTOR	Integral
012-26029	SPOT 15 DUST COLLECTOR	Integral
012-26018	SPOT 16 SAN UNLOADING #1 DUST COLLECTOR	Integral
012-26027	SPOT 19 SAN UNLOADING DUST COLLECTOR	Integral
10C26015	SUPERSACK HOPPER DUST COLLECTOR (SOUTH)	Integral

\* The function of the dust collector refers to the determination regarding the unit functioning as Integral to the Process or as Pollution Control equipment

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 009-0R	<b>Emission unit name:</b> Styrene Loading Station	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Styrene Loading Station			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1963	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gph	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	2.23	9.76
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Styrene	2.23	9.76
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

**40 CFR 63, Subpart EEEE**

- Applicable sections of Subpart EEEE.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

*Recordkeeping Requirements*

- Maintain the applicable records in 40CFR §63.2390(a) and (c) and §63.2394.

*Reporting Requirements*

- Applicable reporting requirements in 40CFR §63.2386.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25048	<b>Emission unit name:</b> Styrene Storage Tank #4	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1962	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  500,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	1.3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Styrene	---	1.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the date of construction, this tank is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25049	<b>Emission unit name:</b> Styrene Storage Tank #5	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1962	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  500,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	1.3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Styrene	---	1.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the date of construction, this tank is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25076	<b>Emission unit name:</b> Styrene Storage Tank #6	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1970	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  500,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	1.3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Styrene	---	1.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the date of construction, this tank is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25082	<b>Emission unit name:</b> Styrene Storage Tank #7	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1970	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  580,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	---	1.5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Styrene	---	1.5
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42/Engineering Estimate</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Due to the date of construction, this tank is not subject to the NSPS requirements for tanks. Therefore, there are no applicable requirements.

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

None

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25099	<b>Emission unit name:</b> Sulfuric Acid Tank (West)	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1991	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  20,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	<0.01	<0.01
Particulate Matter (PM <sub>10</sub> )	<0.01	<0.01
Total Particulate Matter (TSP)	<0.01	<0.01
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
Sulfuric Acid	<0.01	<0.01
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate</p>		

*Applicable Requirements*

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45CSR7 §4.2

- Sulfuric acid mist is limited to an in-stack concentration of 35 mg per dry standard cubic meter.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

*Recordkeeping Requirements*

- Maintain an engineering calculation of the sulfuric acid concentration at the tank's maximum capacity.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 09-25100	<b>Emission unit name:</b> Sulfuric Acid Tank (East)	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Storage tank			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1991	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  20,000 gallons			
<b>Maximum Hourly Throughput:</b> Not Available	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	<0.01	<0.01
Particulate Matter (PM <sub>10</sub> )	<0.01	<0.01
Total Particulate Matter (TSP)	<0.01	<0.01
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
Sulfuric Acid	<0.01	<0.01
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate</p>		

*Applicable Requirements*

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45CSR7 §4.2

- Sulfuric acid mist is limited to an in-stack concentration of 35 mg per dry standard cubic meter.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

*Recordkeeping Requirements*

- Maintain an engineering calculation of the sulfuric acid concentration at the tank's maximum capacity.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 008-01	<b>Emission unit name:</b> Wastewater Treatment Process	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Wastewater treatment plant purifies process wastewater from production buildings prior to being discharged into the Ohio River.			
<b>Manufacturer:</b> Not Applicable	<b>Model number:</b> Not Applicable	<b>Serial number:</b> Not Applicable	
<b>Construction date:</b> Not Applicable	<b>Installation date:</b> 1970	<b>Modification date(s):</b> None	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>  <b>CONFIDENTIAL</b> gpm			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> gal/hr	<b>Maximum Annual Throughput:</b> <b>CONFIDENTIAL</b> gal/yr	<b>Maximum Operating Schedule:</b> 365 day/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	15.7	68.90
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	3.54	15.5
Cumene	1.32	5.79
MMA	1.98	8.68
Styrene	1.86	8.15
1,3-Butadiene	---	0.3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering Estimate and WWTP emission study. Butadiene emissions based on Regulation 27 calculations.</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

**R13-2678 §5.1.2 and R13-1886E §4.1.7**

- 1,3-Butadiene emissions are limited to 600 lbs/year (0.3 tpy).

**R13-1886E §4.1.7**

- Acrylonitrile emissions are limited to 15.5 TPY

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

***Recordkeeping Requirements***

- For acrylonitrile emissions, perform monthly emission calculations. Annual rate determined using a 12-month rolling total.
- For 1,3-butadiene emissions, perform monthly emission calculations.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 00O-02	<b>Emission unit name:</b> WS Line Extruder (WS-X1), WS Line Screens (WS-S1)	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Technical Center Converting Lab WS, Extruder Line and Screens. Includes WS-E1 and WS-E2.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> 1988	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr (WS line production)	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	2.35	10.27
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.09	0.39
Cumene	0.06	0.26
Ethylbenzene	0.01	0.01
Styrene	0.38	1.65
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-0992B, A.1, A.2, B.1

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 000-02	<b>Emission unit name:</b> WS Line Feeders (WS-E3)	<b>List any control devices associated with this emission unit:</b> WS-DC1 Dust Collector/ Baghouse	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Technical Center Converting Lab WS Line, 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)			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> 1988	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.08	0.35
Particulate Matter (PM <sub>10</sub> )	0.08	0.35
Total Particulate Matter (TSP)	0.08	0.35
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-0992B, A.1, A.2, B.1

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 00O-01	<b>Emission unit name:</b> WV Line Extruder (WV-X1)	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Technical Center Converting Lab WV Line, extruder.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> 1988	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	None	None
Particulate Matter (PM <sub>10</sub> )	None	None
Total Particulate Matter (TSP)	None	None
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	5.91	25.86
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acrylonitrile	0.35	1.53
Cumene	0.27	1.16
Ethylbenzene	0.08	0.34
Styrene	3.37	14.73
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-0992B, A.1, A.2

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission calculations based on site emission factors and production throughputs.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 000-01	<b>Emission unit name:</b> WV Line Feeders	<b>List any control devices associated with this emission unit:</b> WV-DC1 Dust Collector/ Baghouse	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Technical Center Converting Lab WV Line, 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)			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> 1988	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr (WV line production)	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>  Not Applicable		<b>Type and Btu/hr rating of burners:</b>  Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>  Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.08	0.34
Particulate Matter (PM <sub>10</sub> )	0.08	0.34
Total Particulate Matter (TSP)	0.08	0.34
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-0992B, A.1, A.3, B.2

Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?**  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

**ATTACHMENT E - Emission Unit Form**

**REDACTED COPY – CLAIM OF CONFIDENTIALITY – SABIC INNOVATIVE PLASTICS US LLC – 6/20/2011**

<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> 00O-01	<b>Emission unit name:</b> WV Line Overflow to Extruder (WV-X1)	<b>List any control devices associated with this emission unit:</b> None	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Technical Center Converting Lab WV Line, overflow to the extruder.			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available	
<b>Construction date:</b> Not Available	<b>Installation date:</b> 1965	<b>Modification date(s):</b> 1988	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Not Applicable			
<b>Maximum Hourly Throughput:</b> <b>CONFIDENTIAL</b> lb/hr (WV line production)	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 365 days/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u> X </u> No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> Not Applicable		<b>Type and Btu/hr rating of burners:</b> Not Applicable	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b> Not Applicable			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
None			

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	None	None
Nitrogen Oxides (NO <sub>x</sub> )	None	None
Lead (Pb)	None	None
Particulate Matter (PM <sub>2.5</sub> )	0.64	2.81
Particulate Matter (PM <sub>10</sub> )	0.64	2.81
Total Particulate Matter (TSP)	0.64	2.81
Sulfur Dioxide (SO <sub>2</sub> )	None	None
Volatile Organic Compounds (VOC)	None	None
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Engineering calculations</p>		

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

R13-0992B, A.1, A.2, B.1

X Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Emission calculations based on site emission factors and production throughputs.

**Are you in compliance with all applicable requirements for this emission unit?** X Yes \_\_\_No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

***Emission Unit Description***

<b>Emission unit ID number:</b> 07-16104	<b>Emission unit name:</b> WWTP Backup Diesel Generator	<b>List any control devices associated with this emission unit:</b> None
---	--	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Backup diesel generator at the site waste water treatment plant (WWTP)

<b>Manufacturer:</b> Caterpillar	<b>Model number:</b> Not Available	<b>Serial number:</b> Not Available
-------------------------------------	---------------------------------------	--

<b>Construction date:</b> Not Available	<b>Installation date:</b> 2002	<b>Modification date(s):</b> None
--	-----------------------------------	--------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

483 HP

<b>Maximum Hourly Throughput:</b> Not Applicable	<b>Maximum Annual Throughput:</b> Not Applicable	<b>Maximum Operating Schedule:</b> 500 hours/yr* *Will be limited to 100 hours/yr after 10/19/2013 per 40 CFR 63, Subpart ZZZZ
---	---	--

***Fuel Usage Data (fill out all applicable fields)***

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

<b>Maximum design heat input and/or maximum horsepower rating:</b> 483 Hp	<b>Type and Btu/hr rating of burners:</b> Not Applicable
--	---

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

No. 2 Diesel Fuel – Maximum hourly and annual fuel usage is not available.

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
No. 2 Diesel Fuel	Normal	Normal	Normal

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	3.23	0.81
Nitrogen Oxides (NO <sub>x</sub> )	15.0	3.74
Lead (Pb)	N/A	N/A
Particulate Matter (PM <sub>2.5</sub> )	1.06	0.27
Particulate Matter (PM <sub>10</sub> )	1.06	0.27
Total Particulate Matter (TSP)	1.06	0.27
Sulfur Dioxide (SO <sub>2</sub> )	1.21	0.25
Volatile Organic Compounds (VOC)	1.21	0.30
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A	N/A	N/A
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>AP-42; Annual emissions based on 500 hrs/year of operation.</p>		

*Applicable Requirements*

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

R13-2486A §A.1., §A.2. and §A.4.

- Emergency generator specifications – Maximum rating of 483 Hp
- Operating hours – Maximum of 500 hrs/yr
- Fuel – Use No. 2 diesel fuel

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

*Monitoring Requirements*

- Monitor generator operating hours.

*Recordkeeping Requirements*

- Daily record of generator operating hours and maintenance/repair activities performed. Compliance with annual operating limit based on 12-month rolling total.
- Maintain records of the type of fuel purchased for the generator.

Are you in compliance with all applicable requirements for this emission unit?  Yes  No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## **Attachment F**

### **Schedule of Compliance**

SABIC Innovative Plastics US LLC, Washington, WV

**Attachment F -**

The emission units associated with this renewal application are in compliance with their applicable requirements. The completion of this Attachment is not necessary.

## **Attachment G**

### **Air Pollution Control Device Forms**

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> 30B-12130	<b>List all emission units associated with this control device.</b> Tanks 09-25009, 09-25010, and 09-25011 and the Latex Blend Tanks and Screeners.	
<b>Manufacturer:</b> Met-Pro Corporation	<b>Model number:</b> CXP-6-G	<b>Installation date:</b> 2006
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input checked="" type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
VOC	All EUs are hard-piped to the control device,	99 %
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Design heat input of 3.0 mmBtu/hr		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b> The PSEUs controlled by this incinerator are subject to emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1, and therefore 40 CFR 64 does not apply per §64.2(b)(1)(vi).		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
<i>Combustion temperature</i> - Operate and maintain a device that continuously measures and records the combustion temperature at least once every fifteen (15) minutes.		

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> 30B-01002	<b>List all emission units associated with this control device.</b> Latex Building A and Building B Process Equipment and BD Recovery System	
<b>Manufacturer:</b> John Zink Co.	<b>Model number:</b> B703-1	<b>Installation date:</b> 1988
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input checked="" type="checkbox"/> Flare	<input type="checkbox"/> Other
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Styrene, 1,3-Butadiene, Acrylonitrile, VOCs	All EUs are hard-piped to the control device	97 %
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Waiting for design information from manufacturer.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</b>		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b> See Attachment H.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Flare is continuously monitored for the presence of a pilot flame.		

<b>ATTACHMENT G - Air Pollution Control Device Form</b>																				
<b>Control device ID number:</b> 09-12010 (Wet Scrubber); 09-12011, 09-12012, 09-12013 (Carbon)	<b>List all emission units associated with this control device.</b> All vessels in the PBA Production Process Emission Unit																			
<b>Manufacturer:</b> Not Available	<b>Model number:</b> Not Available	<b>Installation date:</b> 1996																		
<b>Type of Air Pollution Control Device:</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><input type="checkbox"/> Baghouse/Fabric Filter</td> <td style="width: 33%;"><input type="checkbox"/> Venturi Scrubber</td> <td style="width: 33%;"><input type="checkbox"/> Multiclone</td> </tr> <tr> <td><input checked="" type="checkbox"/> Carbon Bed Adsorber</td> <td><input type="checkbox"/> Packed Tower Scrubber</td> <td><input type="checkbox"/> Single Cyclone</td> </tr> <tr> <td><input checked="" type="checkbox"/> Carbon Drum(s)</td> <td><input checked="" type="checkbox"/> Other Wet Scrubber</td> <td><input type="checkbox"/> Cyclone Bank</td> </tr> <tr> <td><input type="checkbox"/> Catalytic Incinerator</td> <td><input type="checkbox"/> Condenser</td> <td><input type="checkbox"/> Settling Chamber</td> </tr> <tr> <td><input type="checkbox"/> Thermal Incinerator</td> <td><input type="checkbox"/> Flare</td> <td><input type="checkbox"/> Other</td> </tr> <tr> <td><input type="checkbox"/> Wet Plate Electrostatic Precipitator</td> <td></td> <td><input type="checkbox"/> Dry Plate Electrostatic Precipitator</td> </tr> </table>			<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone	<input checked="" type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone	<input checked="" type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank	<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber	<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other	<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone																		
<input checked="" type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone																		
<input checked="" type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank																		
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber																		
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other																		
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator																		
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>																				
Pollutant	Capture Efficiency	Control Efficiency																		
VOCs	All EUs are hard-piped to the control device	97% (scrubber + carbon)																		
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b> Designed to operate at the PBA process production rate of 4800 lb/hr. The scrubber is a wet caustic solution scrubber, with the discharge of the scrubber vented to a primary carbon absorber and then to either of two carbon canisters before discharging to the atmosphere.																				
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, <b>Complete ATTACHMENT H</b> If No, <b>Provide justification.</b> The PSEUs controlled by this scrubber are subject to emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1, and therefore 40 CFR 64 does not apply per §64.2(b)(1)(vi).																				
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b> The caustic scrubber pH is tested and recorded monthly. The scrubber liquor is replaced when its pH drops below a value of 9. The purpose of the carbon is workplace odor control.																				

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> 10A-01003	<b>List all emission units associated with this control device.</b> Resin Building A Reactor-Coagulation-Vacuum System	
<b>Manufacturer:</b> Met-Pro	<b>Model number:</b> Not available	<b>Installation date:</b> 1986
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input checked="" type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Styrene, 1,3-Butadiene, Acrylonitrile, VOCs	All EUs are hard-piped to the control device,	98 %
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Designed to operate with a minimum inlet temperature of 744 degrees F and a minimum volumetric flow of 1500 cfm.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b> The PSEUs controlled by this incinerator are subject to either (1) emission limits proposed by the Administrator after November 15, 1990 pursuant to Section 112 of the Act and therefore 40 CFR 64 does not apply per §64.2(b)(1)(i), or (2) emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1, and therefore 40 CFR 64 does not apply per §64.2(b)(1)(vi).		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
The temperature and flow rate are continuously monitored.		

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> 10C-01002	<b>List all emission units associated with this control device.</b> Resin Building C Reactor-Coagulation-Vacuum System	
<b>Manufacturer:</b> Met-Pro	<b>Model number:</b> Not available	<b>Installation date:</b> 1985
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input checked="" type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Styrene, 1,3-Butadiene, Acrylonitrile, VOCs	All EUs are hard-piped to the control device,	98 %
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Designed to operate with a minimum inlet temperature of 736 degrees F and a minimum volumetric flow of 1000 cfm		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b> The PSEUs controlled by this incinerator are subject to either (1) emission limits proposed by the Administrator after November 15, 1990 pursuant to Section 112 of the Act and therefore 40 CFR 64 does not apply per §64.2(b)(1)(i), or (2) emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1, and therefore 40 CFR 64 does not apply per §64.2(b)(1)(vi).		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
The temperature and flow rate are continuously monitored.		

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> 10E-01002	<b>List all emission units associated with this control device.</b> Resin Building E Reactor-Coagulation-Vacuum System, and RE Blend Tanks	
<b>Manufacturer:</b> Met-Pro	<b>Model number:</b> Not available	<b>Installation date:</b> 1986
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input checked="" type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Styrene, 1,3-Butadiene, Acrylonitrile, VOCs	All EUs are hard-piped to the control device,	98 %
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Designed to operate with a minimum inlet temperature of 750 degrees F and a minimum volumetric flow of 2000 cfm		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</b>		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b> The PSEUs controlled by this incinerator are subject to either (1) emission limits proposed by the Administrator after November 15, 1990 pursuant to Section 112 of the Act and therefore 40 CFR 64 does not apply per §64.2(b)(1)(i), or (2) emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1, and therefore 40 CFR 64 does not apply per §64.2(b)(1)(vi).		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
The temperature and flow rate are continuously monitored.		

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> 10G-01001	<b>List all emission units associated with this control device.</b> Resin Building G Reactor-Coagulation-Vacuum System	
<b>Manufacturer:</b> Met-Pro	<b>Model number:</b> Not available	<b>Installation date:</b> 1986
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input checked="" type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Styrene, 1,3-Butadiene, Acrylonitrile, VOCs	All EUs are hard-piped to the control device,	98 %
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Designed to operate with a minimum inlet temperature of 744 degrees F and a minimum volumetric flow of 1500 cfm		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b> The PSEUs controlled by this incinerator are subject to either (1) emission limits proposed by the Administrator after November 15, 1990 pursuant to Section 112 of the Act and therefore 40 CFR 64 does not apply per §64.2(b)(1)(i), or (2) emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1, and therefore 40 CFR 64 does not apply per §64.2(b)(1)(vi).		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
The temperature and flow rate are continuously monitored.		

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> 10J-01001	<b>List all emission units associated with this control device.</b> Resin Building J Reactor-Coagulation-Vacuum System	
<b>Manufacturer:</b> Met-Pro	<b>Model number:</b> Not available	<b>Installation date:</b> 1986
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input checked="" type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Styrene, 1,3-Butadiene, Acrylonitrile, VOCs	All EUs are hard-piped to the control device,	98 %
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Designed to operate with a minimum inlet temperature of 702 degrees F and a minimum volumetric flow of 1500 cfm		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b> The PSEUs controlled by this incinerator are subject to either (1) emission limits proposed by the Administrator after November 15, 1990 pursuant to Section 112 of the Act and therefore 40 CFR 64 does not apply per §64.2(b)(1)(i), or (2) emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1, and therefore 40 CFR 64 does not apply per §64.2(b)(1)(vi).		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
The temperature and flow rate are continuously monitored.		

## **Attachment H**

### **Compliance Assurance Monitoring**

## ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at <http://www.epa.gov/ttn/emc/cam.html>

### CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*):

YES  NO

- a. The PSEU is located at a major source that is required to obtain a Title V permit;
- b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is **NOT** exempt;

#### LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
  - Stratospheric Ozone Protection Requirements.
  - Acid Rain Program Requirements.
  - Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
  - An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).
- c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;
  - d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND
  - e. The PSEU is **NOT** an exempt backup utility power emissions unit that is municipally-owned.

### BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

**RENEWAL APPLICATION.** **ALL** PSEUs for which a CAM plan has **NOT** yet been approved need to be addressed in this CAM plan submittal.

**INITIAL APPLICATION** (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

**SIGNIFICANT MODIFICATION TO LARGE PSEUs.** **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, **Only** address the appropriate monitoring requirements affected by the significant modification.

**3) <sup>a</sup> BACKGROUND DATA AND INFORMATION**

Complete the following table for **all** PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU in order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	<sup>b</sup> EMISSION LIMITATION or STANDARD	<sup>c</sup> MONITORING REQUIREMENT
001-01	Latex Process	1,3-Butadiene	Latex Flare	R30-10700010-2005 Part 2; 4.1.1.3; 40,000 lb/hr and 43,000 lb/yr.	Continuously monitor for the presence of the pilot flame
001-01	Latex Process	Total VOC	Latex Flare	R30-10700010-2005 Part 2; 4.1.1.3; 50,000 lb/hr and 63,000 lb/yr.	Continuously monitor for the presence of the pilot flame
<u>EXAMPLE</u> Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

<sup>a</sup> If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

<sup>b</sup> Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

<sup>c</sup> Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

**CAM MONITORING APPROACH CRITERIA**

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. If more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

<b>4a) PSEU Designation:</b> Latex Area	<b>4b) Pollutant:</b> 1,3-Butadiene	<b>4c) <sup>a</sup> Indicator No. 1:</b> Presence of pilot flame at flare	<b>4d) <sup>a</sup> Indicator No. 2:</b>
<b>5a) GENERAL CRITERIA</b> Describe the <u>MONITORING APPROACH</u> used to measure the indicators:		The presence of a pilot flame at the flare is continuously monitored using a thermocouple.	
<sup>b</sup> Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:		The indicator range is not numerical. The thermocouple activates an alarm if it detects less than 500 degrees F, indicating that the flame is absent. The alarm is deactivated when the thermocouple detects 500 degrees F, indicating the presence of a flame.	
<b>5b) PERFORMANCE CRITERIA</b> Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:		The thermocouple is mounted at the flare pilot to continuously monitor the flame.	
<sup>c</sup> For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring:		Not Applicable	
Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):		The thermocouple, alarm switch and alarm are on an annual preventative maintenance schedule. During maintenance, all three are tested and the set point of the switch is verified.	
<sup>d</sup> Provide the <u>MONITORING FREQUENCY</u> :		Continuous	
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:		Monitoring data (pilot flame presence/absence) is collected and stored electronically	
Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:		Not Applicable	

<sup>a</sup> Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

<sup>b</sup> Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

<sup>c</sup> The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

<sup>d</sup> Emission units with post-control PTE  $\geq$  100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

**RATIONALE AND JUSTIFICATION**

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:  
Latex Area

6b) Regulated Air Pollutant:  
1,3-Butadiene

7) **INDICATORS AND THE MONITORING APPROACH:** Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

The indicator (pilot flame presence) is appropriate because it is consistent with the indicator required by the NESHAP 40 CFR 63, Subpart JJJ.

8) **INDICATOR RANGES:** Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how EACH indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.
- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.
- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

**RATIONALE AND JUSTIFICATION:**

The indicator range (pilot flame presence/absence) is appropriate because it is consistent with the indicator range required by the NESHAP 40 CFR 63, Subpart JJJ.

**CAM MONITORING APPROACH CRITERIA**

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. If more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

<b>4a) PSEU Designation:</b> Latex Area	<b>4b) Pollutant:</b> Total VOC	<b>4c) <sup>a</sup> Indicator No. 1:</b> Presence of pilot flame at flare	<b>4d) <sup>a</sup> Indicator No. 2:</b>
<b>5a) GENERAL CRITERIA</b> Describe the <u>MONITORING APPROACH</u> used to measure the indicators:		The presence of a pilot flame at the flare is continuously monitored using a thermocouple.	
<sup>b</sup> Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:		The indicator range is not numerical. The thermocouple activates an alarm if it detects less than 500 degrees F, indicating that the flame is absent. The alarm is deactivated when the thermocouple detects 500 degrees F, indicating the presence of a flame.	
<b>5b) PERFORMANCE CRITERIA</b> Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:		The thermocouple is mounted at the flare pilot to continuously monitor the flame.	
<sup>c</sup> For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring:		Not Applicable	
Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):		The thermocouple, alarm switch and alarm are on an annual preventative maintenance schedule. During maintenance, all three are tested and the set point of the switch is verified.	
<sup>d</sup> Provide the <u>MONITORING FREQUENCY</u> :		Continuous	
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:		Monitoring data (pilot flame presence/absence) is collected and stored electronically	
Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:		Not Applicable	

<sup>a</sup> Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

<sup>b</sup> Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

<sup>c</sup> The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

<sup>d</sup> Emission units with post-control PTE  $\geq$  100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

**RATIONALE AND JUSTIFICATION**

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:  
Latex Area

6b) Regulated Air Pollutant:  
Total VOC

7) **INDICATORS AND THE MONITORING APPROACH:** Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

The indicator (pilot flame presence) is appropriate because it is consistent with the indicator required by the NESHAP 40 CFR 63, Subpart JJJ.

8) **INDICATOR RANGES:** Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how EACH indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.
- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.
- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

**RATIONALE AND JUSTIFICATION:**

The indicator range (pilot flame presence/absence) is appropriate because it is consistent with the indicator range required by the NESHAP 40 CFR 63, Subpart JJJ.