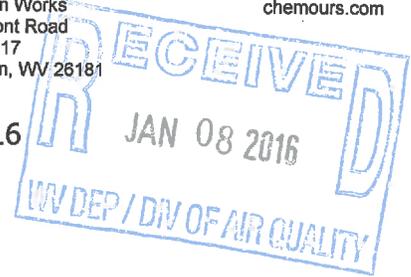




The Chemours Company  
Washington Works  
8480 DuPont Road  
PO Box 1217  
Washington, WV 26181

304-863-4000  
chemours.com

January 7, 2016



**CERTIFIED MAIL – 7014 1820 0001 2876 1659**  
**RETURN RECEIPT REQUESTED**

Mr. W. F. Durham, Director  
Division of Air Quality  
WV Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

**Title V Renewal Application for R30-107-00182-2011 Segment 11 of 14 – Research and Development – The Chemours Company FC, LLC  
Washington Works**

Dear Mr. Durham:

Attached, you will find a paper copy of the required information and two (2) copies on Compact Disk (CD) of the 45 CSR 30 completed renewal application for the Research and Development Title V Operating Permit (Segment 11 of 14) of the Chemours Company facilities located at Washington Works.

We have prepared the public copy of the pages of the permit renewal application. Chemours is claiming no confidentiality for this segment of the Washington Works Title V Permit.

This is the third permit renewal being submitted under the Chemours name and the appropriate changes on the application to reflect the changed Title V Plant identification number and the new FEIN have been included.

If you have any questions or concerns about this application, please call me at (304) 863-4271 or you may call John Mentink at (304) 863-4028. Mr. Mentink may also be reached by email at [john.j.mentink@chemours.com](mailto:john.j.mentink@chemours.com).

Very truly yours,

David F. Altman  
EHS Competency Manager  
Chemours Washington Works

Enclosure  
DFA:jjm/slb



<b>11. Mailing Address</b>		
<b>Street or P.O. Box:</b> P. O. Box 1217, Building 1		
<b>City:</b> Washington	<b>State:</b> WV	<b>Zip:</b> 26181-1217
<b>Telephone Number:</b> (304) 863-4300	<b>Fax Number:</b> (304) 863-4862	

<b>12. Facility Location</b>		
<b>Street:</b> 8480 DuPont Road	<b>City:</b> Washington	<b>County:</b> Wood
<b>UTM Easting:</b> 442.368 km	<b>UTM Northing:</b> 4,346.679 km	<b>Zone:</b> <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
<b>Directions:</b> From I-77 take the Route 50 bypass around Parkersburg towards Ohio. At the last exit prior to the bridge over the Ohio River exit from the route 50 Bypass on to DuPont Road. At the light turn left on DuPont road. Approximately 1 mile from the turn you will see the Site on your right and will be approaching the entrance to the main gate to the facility.		
<b>Portable Source?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>Is facility located within a nonattainment area?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If yes, for what air pollutants?</b>	
<b>Is facility located within 50 miles of another state?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, name the affected state(s).</b> Ohio	
<b>Is facility located within 100 km of a Class I Area<sup>1</sup>?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If yes, name the area(s).</b>	
<b>If no, do emissions impact a Class I Area<sup>1</sup>?</b> <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> Robert J. Fehrenbacher		<b>Title:</b> Plant Manager
<b>Street or P.O. Box:</b> P. O. Box 1217 - Building 1		
<b>City:</b> Washington	<b>State:</b> WV	<b>Zip:</b> 26181-1217
<b>Telephone Number:</b> (304) 863-4305	<b>Fax Number:</b> (304) 863-4820	
<b>E-mail address:</b> <a href="mailto:robert.j.fehrenbacher@chemours.com">robert.j.fehrenbacher@chemours.com</a>		
<b>Environmental Contact:</b> David F. Altman		<b>Title:</b> Sr. Environmental Control Consultant
<b>Street or P.O. Box:</b> P. O. Box 1217 - Building 1		
<b>City:</b> Washington	<b>State:</b> WV	<b>Zip:</b> 26181-1217
<b>Telephone Number:</b> (304) 863-4271	<b>Fax Number:</b> (304) 863-4862	
<b>E-mail address:</b> <a href="mailto:David.F.Altman@chemours.com">David.F.Altman@chemours.com</a>		
<b>Application Preparer:</b> John J. Mentink		<b>Title:</b> Sr. SHE Consultant
<b>Company:</b> Chemours		
<b>Street or P.O. Box:</b> P. O. Box 1217 Building 1		
<b>City:</b> Washington	<b>State:</b> WV	<b>Zip:</b> 26181-1217
<b>Telephone Number:</b> (304) 863-4033	<b>Fax Number:</b> (304) 863-4862	
<b>E-mail address:</b> <a href="mailto:john.j.mentink@Chemours.com">john.j.mentink@Chemours.com</a>		

<b>14. Facility Description</b>			
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
Chemical and Plastics Resins Mfg	Thermoplastic Resins	325211	2821
<b>Provide a general description of operations.</b> Polymer resins and ingredients are melt compounded into a final pelletized product through an extrusion/cutting operation. Raw materials are received in individual packaging or in bulk and are then combined into a final product which can be subsequently shipped in bags, boxes drums or bulk containers.			
15. Provide an <b>Area Map</b> showing plant location as <b>ATTACHMENT A</b> .			
16. Provide a <b>Plot Plan(s)</b> , e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as <b>ATTACHMENT B</b> . For instructions, refer to "Plot Plan - Guidelines."			
17. Provide a detailed <b>Process Flow Diagram(s)</b> showing each process or emissions unit as <b>ATTACHMENT C</b> . 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 type="checkbox"/> PSD (45CSR14)
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)		<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> NESHAP (45CSR15)		<input type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 111 NSPS		<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(g) Case-by-case MACT		<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 112(i) Early reduction of HAP		<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Section 129 Standards/Reqts.		<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> Tank vessel reqt., section 183(f)		<input checked="" type="checkbox"/> 45CSR21 State enforceable only rule
<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 type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> NO <sub>x</sub> Budget Trading Program Non-EGUs (45CSR1)		<input type="checkbox"/> NO <sub>x</sub> Budget Trading Program EGUs (45CSR26)

## 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.

Note: The primary purpose of this facility is to conduct Research and Development. The emission sources used only for R&D are subject to 45CSR13B and are exempted from permitting. The emission sources described on this application are sometimes used to produce commercial products and for those times are subject to either of the most recent version of permit R13-2654.

- a. 40 C.F.R. 60, Subpart K - "Standards of Performance For Storage Vessels For Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978." There are no storage tanks in the Research facility subject to this requirement.
- b. 40 C.F.R. 60, Subpart Ka - "Standards of Performance for Storage Vessels For Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984." There are no storage tanks in the Research facility subject to this requirement.
- c. 40 C.F.R. 60, Subpart Kb - "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984." There are no storage tanks in the Research facility subject to this requirement.
- d. 40 C.F.R. 60, Subpart VV - "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry." The Research facility does not produce as intermediates or final products any of the materials listed in 40 C.F.R. §60.489.
- e. 40 C.F.R. 60, Subpart DDD - "Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry." The Research facility does not manufacture polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) for which this rule applies.
- f. 40 C.F.R. 60, Subpart RRR - "Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes. The Research facility does not produce any of the chemicals listed in 40 C.F.R. §60.707 as a product, co-product, by-product, or intermediate.
- g. 40 C.F.R. 61, Subpart V - "National Emission Standards for Equipment Leaks (Fugitive Emissions Sources)." Applies to sources in VHAP service as defined in 40 C.F.R. §61.241. VHAP service involves chemicals that are not used in a manner that qualifies them under the rule in the Research facility.
- h. 40 C.F.R. 63, Subpart H - "National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks." 40 C.F.R. 63 Subparts F, G, and H do not apply to the Research manufacturing process units, as they do not meet the criteria in 40 C.F.R. §§63.100(b)(1), (b)(2), and (b)(3).

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.**

- i. 40 C.F.R. 63, Subpart JJJ - "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins. The Research facility does not produce the materials listed in 40 C.F.R. §63.1310.
- j. 40 C.F.R. 63, Subpart WWWW "National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Productions." The Research facility does not engage in reinforced plastics composites production as defined in 40 C.F.R. §63.5785 and does not manufacture composite material as defined in 40 C.F.R. §63.5935.
- k. 40 C.F.R. 63, Subpart PPPP – "National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products." The Research facility does not produce an intermediate or final product that meets the definition of "surface coating" plastic part.
- l. 40 C.F.R. 63, Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants: Industrial/Commercial/Institutional Boilers and Process Heaters." The Research facility does not own or operate an industrial, commercial, or institutional boiler or process heater as defined in 40 C.F.R. §63.7575.
- m. 40 C.F.R. 63, Subpart HHHHH – "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing." The Research facility does not produce, blend, or manufacture coatings as part of the manufacturing process.
- n. 40 C.F.R. 82, Subpart B - "Protection of Stratospheric Ozone." Requires recycling of Chlorofluorocarbons (CFCs) from motor vehicles and that technicians servicing equipment need to be licensed. The Research facility does not conduct motor vehicle maintenance involving CFCs on site.
- o. 40 C.F.R. 82, Subpart C – "Protection of Stratospheric Ozone." Bans non-essential products containing Class I substances and bans non-essential products containing or manufactured with Class II substances. The Research facility does not use, manufacture, nor distribute these materials.
- p. 45CSR2 – "To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers." The Research facility does not contain any fuel burning units.
- q. 45CSR10 – "To Prevent and Control Air Pollution from the Emission of Sulfur Oxides." The Research facility does not have emission sources of sulfur oxides subject to this rule.
- r. 45CSR15 – "Emission Standards for Hazardous Air Pollutants Pursuant to 40 C.F.R. 61." The Research facility is not subject to any requirements under 40 C.F.R. 61.

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.**

- s. 45CSR16 – “Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. 60.” The Research facility is not subject to any requirements under 40 C.F.R. 60.
- t. 45CSR17 – “To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter.” Per 45CSR§17-6.1, Research is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7.
- u. 45CSR34 – “Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 C.F.R. 63.” The Research facility is not subject to any requirements under 40 C.F.R. 63.

**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).

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161. [40 C.F.R. 82, Subpart F]

## 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).

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

3.1.10. **45CSR21 and 45CSR27.** The permittee shall comply with all hourly and annual emission limits set forth by the affected 45CSR13 permits, for each of the sources and associated emission points identified in Attachment A of Permit R13-3223 (Appendix A of this Permit).

Note: For the Research and Development Area, the affected permit is R13-2654; and the R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

[45CSR13, R13-3223, 4.1.1; 45CSR13, R13-2654, 6.1.3 and 6.1.4]

3.1.11. **45CSR21.** The permitted sources identified in Appendix A and recognized as being subject to 45CSR21 shall comply with all applicable requirements of 45CSR21 – “Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds” provided, however, that compliance with any more stringent requirements under the affected 45CSR13 permit identified in Appendix A, are also demonstrated. The applicable requirements set forth by 45CSR21 shall include, but not be limited to, the following: [45CSR13, R13-3223, 4.1.2; 45CSR13, R13-2654, 6.1.3]

3.1.11.1. The permittee shall maintain the aggregated hourly and annual VOC control efficiency of 90% or greater, on a site-wide basis, for all existing sources listed or required to be listed as part of the original facility-wide Reasonably Available Control Measures (RACM) plan, as identified in Appendix A. [45CSR13, R13-3223, 4.1.2.1; 45CSR13, R13-2654, 6.1.3; 45CSR§21-40.3.a.1 (State-Enforceable only)]

3.1.11.2. On or after May 1, 1996, construction or modification of any emission source resulting in a maximum theoretical emissions (MTE) of VOCs equaling or exceeding six (6) pounds per hour and not listed or required to be listed in the facility-wide RACM plan shall require the prior approval by the Director of an emission control plan that meets the definition of reasonable available control technology (RACT) on a case-by-case basis for both fugitive and non-fugitive VOC emissions from such source. All sources constructed or modified on or after May 1, 1996 shall be subject to the following: [45CSR13, R13-3223, 4.1.2.2; 45CSR13, R13-2654, 6.1.3; 45CSR§21-40.3.c (State-Enforceable only)]

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

[45CSR13, R13-3223, 4.1.2.2.a; 45CSR13, R13-2654, 6.1.3; 45CSR§21-40.4.e (State-Enforceable only)]

b. The MTE and associated emission reductions of the constructed or modified source will not be calculated into the site-wide aggregate hourly and annual emissions reduction requirements set forth in Section 3.1.11.1. [45CSR13, R13-3223, 4.1.2.2.b; 45CSR13, R13-2654, 6.1.3]

## 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).

- 3.1.12. **45CSR27.** The permitted sources identified in Appendix A and recognized as being subject to 45CSR27 shall comply with all applicable requirements of 45CSR27 – “To Prevent and Control the Emissions of Toxic Air Pollutants” provided, however, that compliance with any more stringent requirements under the affected 45CSR13 permit identified in Appendix A are also demonstrated. The applicable requirements set forth by 45CSR27 shall include, but not be limited to, the following: [45CSR13, R13-3223, 4.1.3; 45CSR13, R13-2654, 6.1.4]

3.1.12.1. The permittee shall employ the best available technology (BAT) for the purpose of reducing toxic air pollutants (TAP) associated with the applicable sources and emission points identified in Appendix A. [45CSR13, R13-3223, 4.1.3.1; 45CSR13, R13-2654, 6.1.4; 45CSR§27-3.1 (State-Enforceable only)]

3.1.12.2. The permittee shall employ BAT for the purpose of preventing and controlling fugitive emissions of TAP to the atmosphere as a result of routing leakage from those sources and their associated equipment identified in Appendix A as operating in TAP service. [45CSR13, R13-3223, 4.1.3.2; 45CSR13, R13-2654, 6.1.4; 45CSR§27-4.1 (State-Enforceable only)]

Note: For the Research and Development Area, the affected permit is R13-2654; and the R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

- 3.1.13. **45CSR27.** In the event a source and associated emission point identified in Appendix A are subject to the MACT standards of 40 C.F.R. 63, then compliance with the applicable MACT requirements identified in the affected 45CSR13 permit shall demonstrate compliance with the BAT requirements set forth in 3.1.12.

Note: For the Research and Development Area, the affected permit is R13-2654; and the R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

[45CSR13, R13-3223, 4.1.4; 45CSR13, R13-2654, 6.1.4; 45CSR§27-3.1 (State-Enforceable only)]

- 3.1.14. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.1 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. [45CSR§13-5.11.; 45CSR13, R13-3223, 4.1.5; 45CSR13, R13-2654, 6.1.5]

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

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

**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**

- 3.2.1. **45CSR21.** The permittee shall implement and maintain leak detection and repair (LDAR) programs for the reduction of fugitive VOC emissions in all manufacturing process units subject to 45CSR§21-40 producing a product or products intermediate or final, in excess of 1,000 megagrams (1,100 tons) per year in accordance with the applicable methods and criteria of 45CSR§21-37 or alternate procedures approved by the Director. Procedures approved by the Director, 40 C.F.R. 60, Subpart VV, 40 C.F.R. 61, Subpart V, 40 C.F.R. 63, Subpart H, 40 C.F.R. 63, Subpart TT, 40 C.F.R. 63, Subpart UU, 40 C.F.R. 65, Subpart F, and 40 C.F.R. 265, Subpart CC. This requirement shall apply to all units identified in Appendix A irrespective of whether or not such units produce as intermediates or final products, substances on the lists contained with 40 C.F.R. 60, 40 C.F.R. 61, or 40 C.F.R. 63.

Note: The R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

**[45CSR13, R13-3223, 4.2.1; 45CSR13, R13-2654, 6.1.3; 45CSR§21-40.3.a.2 (State-Enforceable only)]**

- 3.2.2. **45CSR27.** The permittee shall implement and maintain a LDAR program for the applicable sources and emission points identified in Appendix A in order to reduce the emissions of TAP in accordance with the requirements of 40 C.F.R. 63, Subpart H – “National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.” Compliance with 40 C.F.R. 63, Subpart H shall be considered demonstration of compliance with the provisions of 45CSR§27-4 – “Fugitive Emissions of Toxic Air Pollutants.”

Note: The R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

**[45CSR13, R13-3223, 4.2.2; 45CSR13, R13-2654, 6.1.4; 45CSR§27-4.1 (State-Enforceable only)]**

- 3.2.3. **45CSR21 and 45CSR27.** In the event a source and associated emission point identified in Appendix A are subject to the MACT standards of 40 C.F.R. 63, then compliance with any applicable LDAR program set forth by the MACT and identified in the affected 45CSR13 permit shall demonstrate compliance with the monitoring requirements set forth in this permit.

Note: For the Research and Development Area, the affected permit is R13-2654; and the R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

**[45CSR13, R13-3223, 4.2.3; 45CSR13, R13-2654, 6.1.3; 45CSR13, R13-45CSR§21-37.1.c (State-Enforceable only); 45CSR§27-4.1 (State-Enforceable only)]**

## Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
  - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
  - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
  - d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
    1. The permit or rule evaluated, with the citation number and language.
    2. The result of the test for each permit or rule condition.
    3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

## Testing Requirements

- 3.3.2. **45CSR21.** Manufacturing process units may be exempted upon written request of the permittee to the Director. Exempted units are exempted from the frequency of testing as described in 45CSR§21-37, however, LDAR testing of this unit or certification of emission using approved fugitive emission factors will be required every three years, or upon request by the Director or his duly authorized representative. Waiver or scheduling of LDAR testing every three years may be granted by the Director if written request and justification are submitted by the permittee. Units exempted from testing are not exempted from testing which may be required under any other applicable State or Federal regulations, orders, or permits. The Director may periodically require verifications by the permittee that maintenance and repair procedures associated with approved exemptions are continued and practiced.

**[45CSR13, R13-3223, 4.3.1; 45CSR13, R13-2654, 6.1.3; 45CSR§21-40.3.a.2 (State-Enforceable only)]**

- 3.3.3. **45CSR21.** In the event a source and associated emission point identified in Appendix A are subject to the MACT standards of 40 C.F.R. 63, then compliance with the applicable LDAR testing requirements set forth by the MACT and identified in the affected 45CSR13 permit shall demonstrate compliance with the LDAR testing requirements set forth in this permit.

Note: For the Research and Development Area, the affected permit is R13-2654; and the R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

**[45CSR13, R13-3223, 4.3.2; 45CSR13, R13-2654, 6.1.3; 45CSR§21-37.1.c (State-Enforceable only); 45CSR§27-4.1 (State-Enforceable only)]**

## Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-3223, 4.4.1; 45CSR13, R13-2654, 6.4.1 and 4.4.1]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.1, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-3223, 4.4.2; 45CSR13, R13-2654, 6.4.2]

3.4.5. **Records of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.1, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

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

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

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

[45CSR13, R13-3223, 4.4.3; 45CSR13, R13-2654, 6.4.3]

- 3.4.6. **45CSR21.** Unless granted a variance pursuant to 45CSR§21-9.3, or as approved by the Director as part of a required Start-up, Shutdown, and Malfunction (SSM) Plan mandated under 40 C.F.R. §63.6(e) or another applicable Section of 40 C.F.R. 63, the owner or operator of the facility shall operate all emission control equipment listed Appendix A as part of the facility-wide control efficiency plan at all times the facilities are in operation or VOC emissions are occurring from these sources or activities. In the event of a malfunction, and a variance has not been granted, the production unit shall be shut down or the activity discontinued as expeditiously as possible. The permittee shall comply with 45CSR§21-9.3 with respect to all periods of non-compliance with the emission limitations set forth in the affected 45CSR13 permits and the emissions reduction requests set forth in the facility-wide control efficiency plan resulting from unavoidable malfunctions of equipment.

Note: For the Research and Development Area, the affected permit is R13-2654; and the R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

**[45CSR13, R13-3223, 4.4.4; 45CSR13, R13-2654, 6.1.3]**

- 3.4.7. **45CSR27.** The permittee shall maintain records of the results of all monitoring and inspections, emission control measures applied, and the nature, timing, and results of repair efforts conducted in accordance to 45CSR§27-10 and set forth in the affected 45CSR13 permits as identified in Appendix A.

Note: For the Research and Development Area, the affected permit is R13-2654; and the R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

**[45CSR13, R13-3223, 4.4.5; 45CSR13, R13-2654, 6.1.4]**

## Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

Phone: 304/926-0475  
FAX: 304/926-0478

**If to the US EPA:**

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

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.

[45CSR§30-8.]

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: [R3-APD-Permits@epa.gov](mailto:R3-APD-Permits@epa.gov). The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.

[45CSR§30-5.3.e.]

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

[45CSR§30-5.1.c.3.A.]

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

**3.5.8. Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
  2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
  3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
  4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.  
[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.  
[45CSR§30-4.3.h.1.B.]

**3.5.10. Reserved**

- 3.5.11. **45CSR21.** The permittee shall submit to the DAQ a plan for complete, facility-wide implementation of RACT requirements within one hundred eighty (180) days of notification by the Director that a violation of the National Ambient Air Quality Standards (NAAQS) for ozone (that were in effect on or before May 1, 1996) has occurred. Such plan shall include those sources listed in Appendix A as part of the site-wide control efficiency requirement and may contain an update of existing RACT analyses. Full implementation of such plan shall be completed within two (2) years of approval of the RACT plan by the Director.

Note: The R13-3223 Attachment A listing for only those sources in the Research and Development Area is provided in Appendix A.

[45CSR13, R13-3223, 4.5.1; 45CSR13, R13-2654, 6.1.3; ~~45CSR13, R13-2692, 4.1.9~~; 45CSR§40.4.c.1 (State-Enforceable only)]

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

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



**21. Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit ( <i>if any</i> )
R13-2654D	09/17/2015	
R13-3223	12/08/2014	

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

Permit Number	Date of Issuance	Permit Condition Number

**Section 3: Facility-Wide Emissions**

<b>23. Facility-Wide Emissions Summary [Tons per Year]</b>	
<b>Criteria Pollutants</b>	<b>Potential Emissions</b>
Carbon Monoxide (CO)	0.04
Nitrogen Oxides (NO <sub>x</sub> )	0
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	0.63
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	3.73
Total Particulate Matter (TSP)	3.73
Sulfur Dioxide (SO <sub>2</sub> )	0
Volatile Organic Compounds (VOC) (Including fugitives)	30.09
<b>Hazardous Air Pollutants<sup>2</sup></b>	<b>Potential Emissions</b>
Methylene Chloride	0.044
Total Other HAPs	10.663
Hydrogen Fluoride	Hydrogen Chloride
Acetonitrile	Methyl Methacrylate
Formaldehyde	Titanium Tetrachloride
Ethylene Glycol	Maleic Anhydride
Hydrogen Chloride	Toluene
Hydrogen Fluoride	Trichloroethylene
Methanol	Vinyl Acetate
<b>Other Pollutants</b>	<b>Potential Emissions</b>
Fluorine	0.091
Fluorides	0.011
<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.	

**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 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 type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input 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 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 on site.  Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:
<input type="checkbox"/>	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.  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:
<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.

<b>24. Insignificant Activities (Check all that apply)</b>	
<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 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 checked="" type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input 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 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 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 type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.

<b>24. Insignificant Activities (Check all that apply)</b>	
<input checked="" type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input 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 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****25. Equipment Table**

Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.

**26. Emission Units**

For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.

For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F**.

**27. Control Devices**

For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.

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 **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

**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: Robert J. Fehrenbacher

Title: Plant Manager

**Responsible official's signature:**Signature: 

Signature Date: Jan. 7, 2016

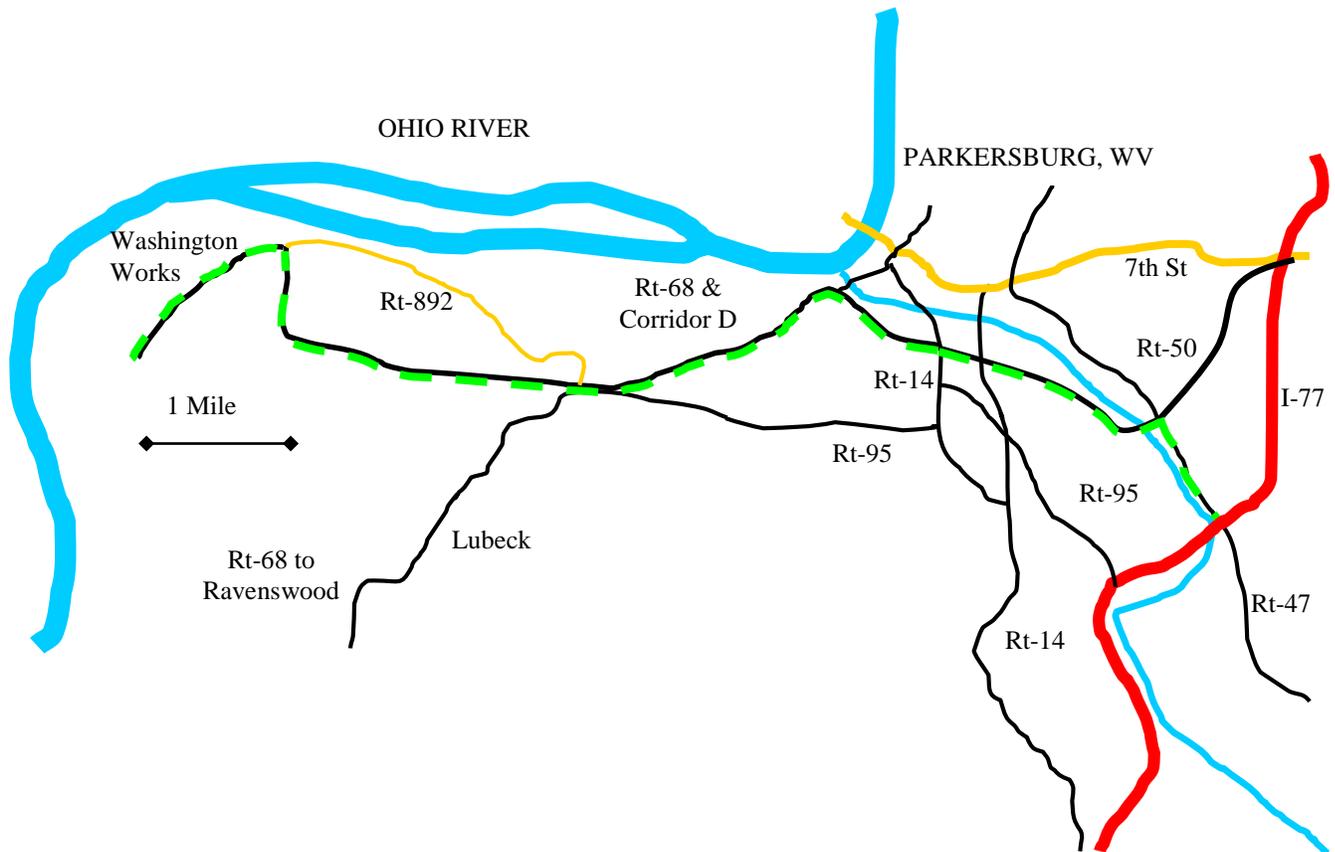
(Must be signed and dated in blue ink)

**Note: Please check all applicable attachments included with this permit application:**

<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)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<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.wydep.org/daq](http://www.wydep.org/daq), requested by phone (304) 926-0475, and/or obtained through the mail.*

## ATTACHMENT A



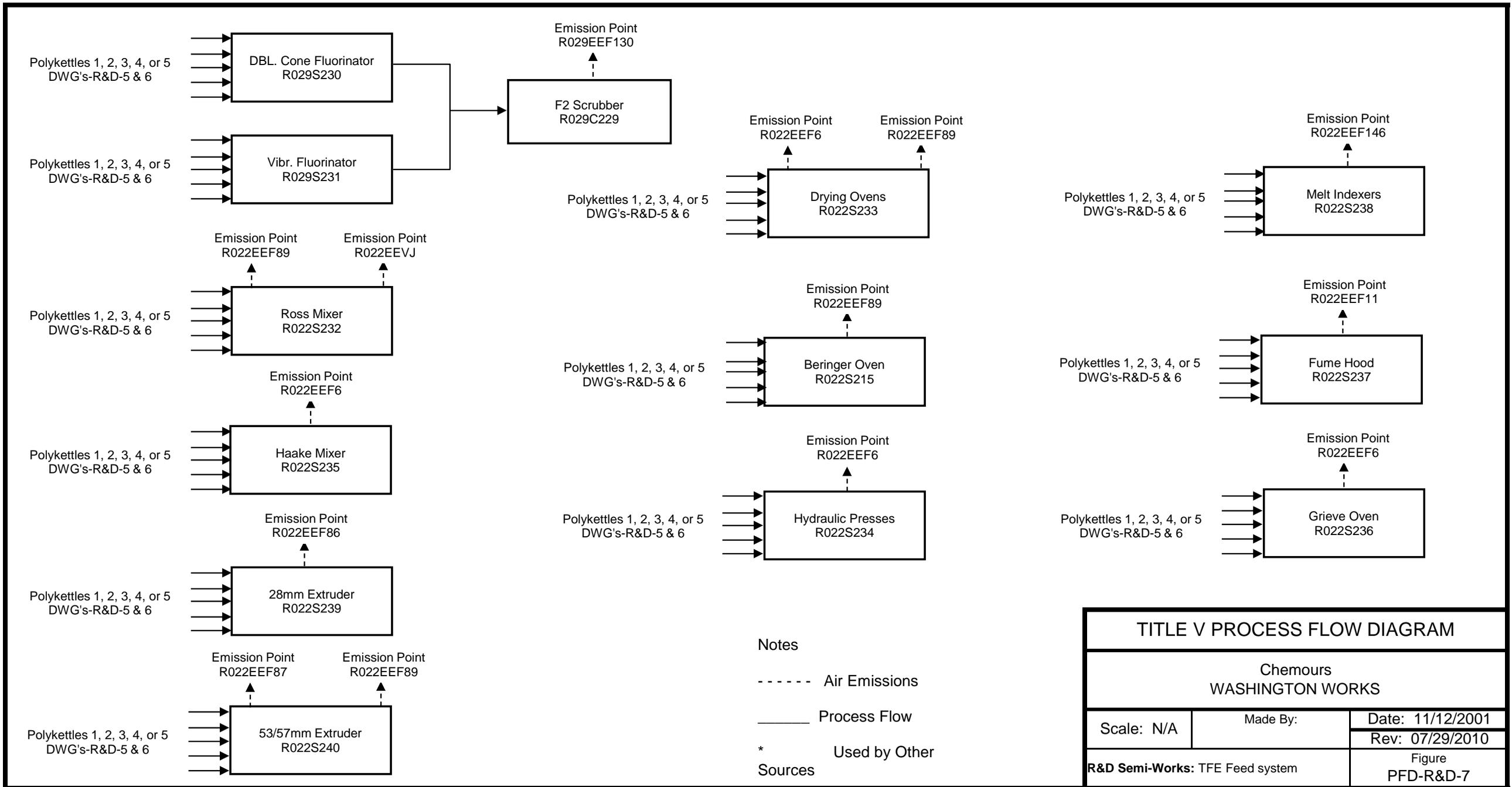
From Interstate 77 North, take exit 174 for Rt-47/Staunton Ave.  
 The exit ramp will loop toward the south. Turn right towards Parkersburg.  
 Proceed west, about 1 mile, until the intersection with Rt-50.  
 Pass under the highway then immediately turn left onto the entrance ramp at the traffic light.  
 Follow the bypass about 5 miles to the exit just before the bridge across the Ohio River.  
Do not get off at the exit for "DuPont Rd/Ravenswood."  
 Turn left (south) onto DuPont Rd, Rt-892.  
 Proceed approx. 1 mile to facility on right.  
 Turn right to the facility at the traffic light.

# Plant Map

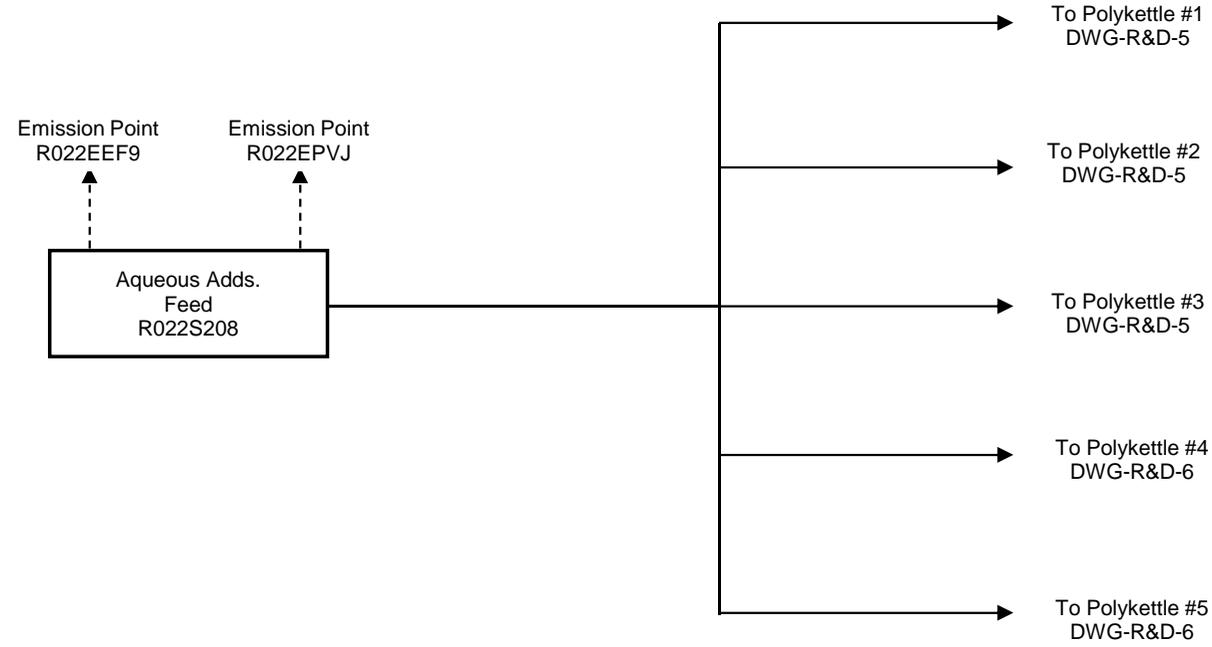


ATTACHMENT B - Plant Map

<b>PFD-R&amp;D-1</b>	<b>Semi-Works: TFE Feed system</b>
<b>PFD-R&amp;D-2</b>	<b>Semi-Works: Aqueous Addition Feed system</b>
<b>PFD-R&amp;D-3</b>	<b>Semi-Works: Non-Aqueous Addition Feed system</b>
<b>PFD-R&amp;D-4</b>	<b>Semi-Works: HFP Feed System</b>
<b>PFD-R&amp;D-5</b>	<b>Semi-Works: PolyKettles #1, #2 &amp; #3</b>
<b>PFD-R&amp;D-6</b>	<b>Semi-Works: PolyKettles #4 &amp; #5</b>
<b>PFD-R&amp;D-7</b>	<b>Semi-Works: Miscellaneous Equipment</b>
<b>PFD-R&amp;D-8</b>	<b>Semi-Works: Parts Cleaner</b>







Notes

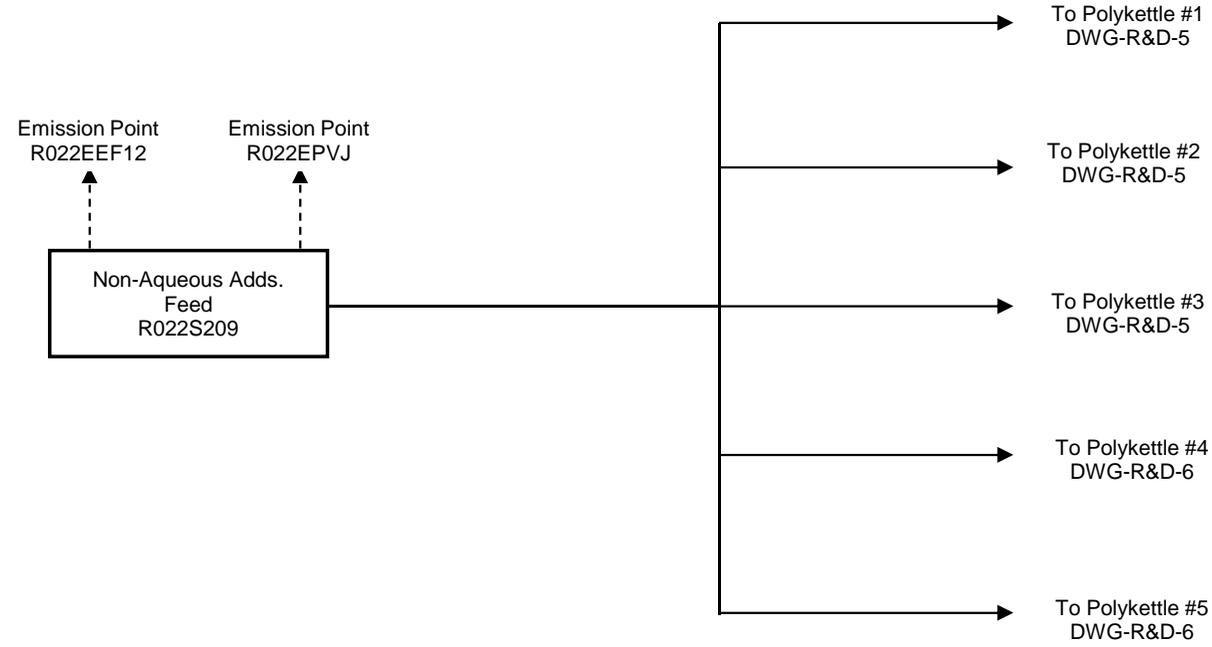
----- Air Emissions

\_\_\_\_\_ Process Flow

\* Used by Other

Sources

<b>TITLE V PROCESS FLOW DIAGRAM</b>		
Chemours WASHINGTON WORKS		
Scale: N/A	Made By:	Date: 11/12/2001
		Rev: 07/29/2010
<b>R&amp;D Semi-Works:</b> TFE Feed system		Figure PFD-R&D-2



Notes

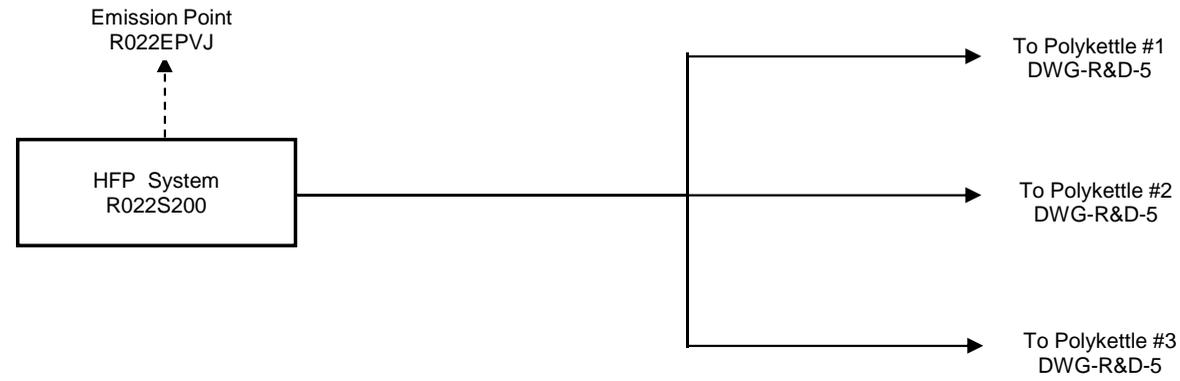
----- Air Emissions

\_\_\_\_\_ Process Flow

\* Used by Other

Sources

<b>TITLE V PROCESS FLOW DIAGRAM</b>		
Chemours WASHINGTON WORKS		
Scale: N/A	Made By:	Date: 11/12/2001
		Rev: 07/29/2010
R&D Semi-Works: TFE Feed system		Figure PFD-R&D-3



Notes

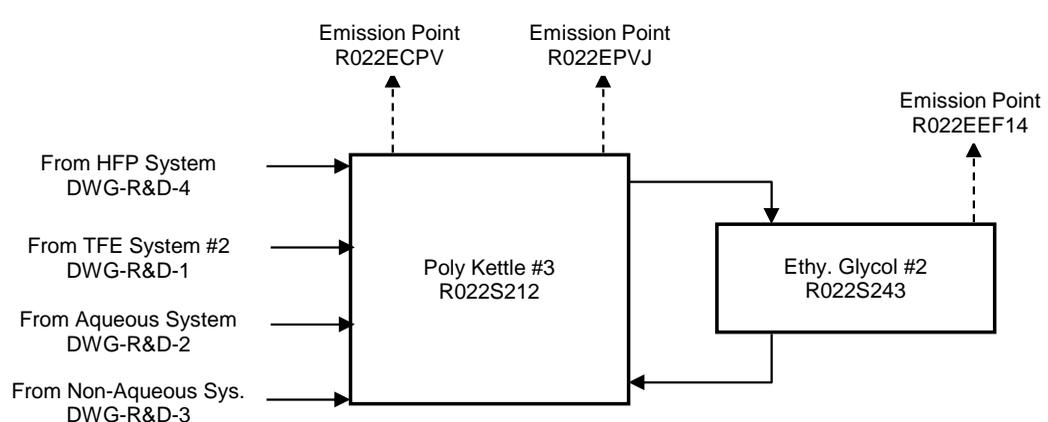
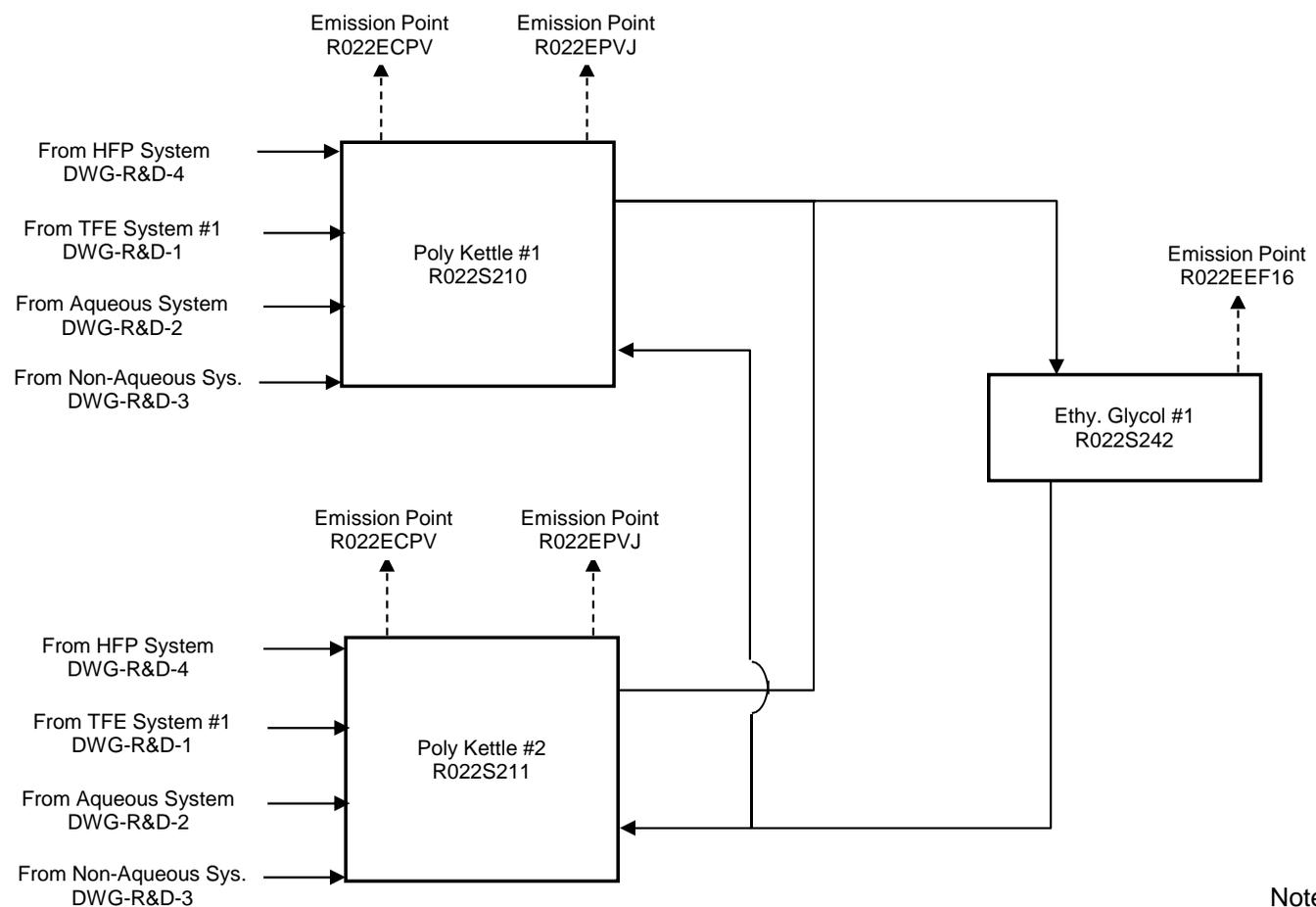
----- Air Emissions

\_\_\_\_\_ Process Flow

\* Used by Other

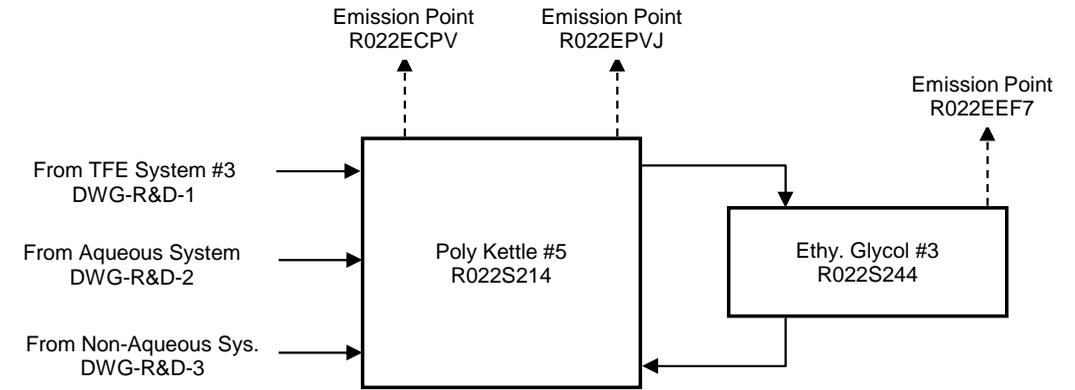
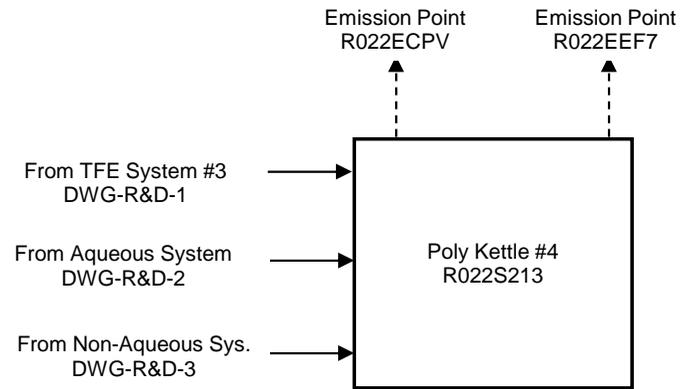
Sources

<b>TITLE V PROCESS FLOW DIAGRAM</b>		
Chemours WASHINGTON WORKS		
Scale: N/A	Made By:	Date: 11/12/2001
		Rev: 07/29/2010
R&D Semi-Works: TFE Feed system		Figure PFD-R&D-4



Notes  
 - - - - - Air Emissions  
 \_\_\_\_\_ Process Flow  
 \* Used by Other  
 Sources

TITLE V PROCESS FLOW DIAGRAM		
Chemours WASHINGTON WORKS		
Scale: N/A	Made By:	Date: 11/12/2001
		Rev: 07/29/2010
R&D Semi-Works: TFE Feed system		Figure PFD-R&D-5



Notes

----- Air Emissions

\_\_\_\_\_ Process Flow

\* Used by Other

Sources

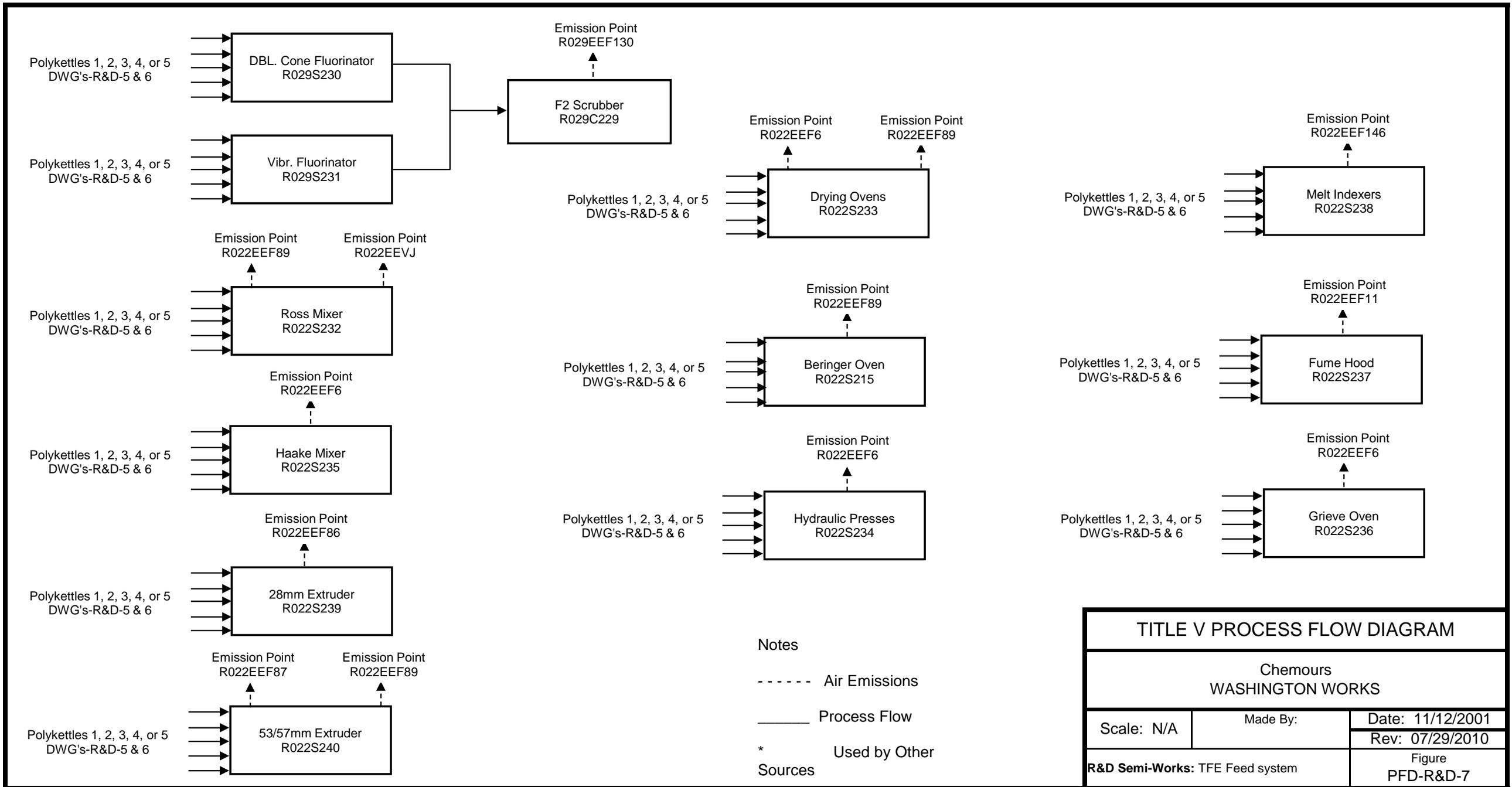
TITLE V PROCESS FLOW DIAGRAM

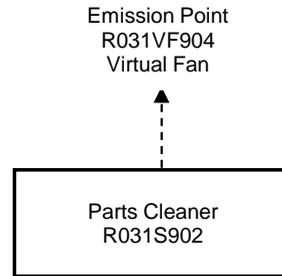
Chemours  
WASHINGTON WORKS

Scale: N/A	Made By:	Date: 11/12/2001
		Rev: 07/29/2010

R&D Semi-Works: TFE Feed system

Figure  
PFD-R&D-6





Notes

----- Air Emissions

\_\_\_\_\_ Process Flow

\* Used by Other

Sources

<b>TITLE V PROCESS FLOW DIAGRAM</b>		
Chemours WASHINGTON WORKS		
Scale: N/A	Made By:	Date: 11/12/2001
		Rev: 07/29/2010
<b>R&amp;D Semi-Works:</b> TFE Feed system		Figure PFD-R&D-8

### ATTACHMENT D - Title V Equipment Table

<b>ATTACHMENT D - Title V Equipment Table</b> (includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)					
Emission Point ID <sup>1</sup>	Control Device <sup>1</sup>	Emission Unit ID <sup>1</sup>	Emission Unit Description	Design Capacity	Year Installed/Modified
(Inside Vent)	Integral Cyclone	R031S903	Bead Blast Unit	900 ACFM	1993
R031E902	None	R031S902	Part Cleaner	50 Gallons	2002
22-E-215	None	22-S-215	Mini-cleaning Oven	0.15 ft3	2002
22-E-109	None	22-S-109	Research Laboratory Hood	2,830 ACFM	1970
22-E-202	None	22-S-202	Research Laboratory Hood	2,830 ACFM	1970
22-E-208	None	22-S-208	Research Laboratory Hood	2,830 ACFM	1970
22-E-209	None	22-S-209	Research Laboratory Hood	2,830 ACFM	1970
R022E F51	None	R022S-B05	Hood	2,815 ACFM	1950
R022E F52	None	R022S-B06	Hood	2,815 ACFM	1950
R022E F63	None	R022S-B17	Hood	2,815 ACFM	1950
R022EF65	None	R022S-B19	Hood	2,815 ACFM	1950
R022E F66	None	R022S-B20	Hood	2,815 ACFM	1950
R022E F115	None	R022S-B36	Hood	2,815 ACFM	1985
R022E F117	None	R022S-B38	Hood	1,500 ACFM	1985
R022E F118	None	R022S-B40	Hood	2,815 ACFM	1985
R022E-F132	None	R022S-047	Local Vent	12,000 ACFM	1985
R022ECPV	None	R022S204	FP SW O2 Analyzers	4.5 scfm	1978
		R022S205A	FP SW TFE Tank #1 Vent	14 gallons	2004
		R022S206A	FP SW TFE Tank #2 Vent	10 gallons	1994
		R022S207A	FP SW TFE Tank #3 Vent	1.2 gallons	1985
		R022S213A	Reactor #4 Mixed Feed Vent	1 liter	1974
		R022S247	Monomer Transfer Line	4 gallons	2002

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

### ATTACHMENT D - Title V Equipment Table

R022EEF006	None	R022S233A	Drying Ovens	3.5 pph	1965-1995
		R022S234	Hydraulic Presses Hood	0.35 pph	1964-1992
		R022S235	Mixer	0.5 pph	1996
		R022S236	#2 Oven	0.05 pph	1973
R022EEF007	None	R022S213B	Reactor #4 Rxn Vent	1 liter	1974
		R022S244	Coolant System #3	30 gallons	1985
R022EEF009	None	R022S208A	FP SW Aq Feeds Vent	12 liters	1980-2000
R022EEF011	None	R022S237	Fume Hood	4 pph	1964
R022EEF012	None	R022S209A	SW Nonaq Feeds Vent	2.5 liters	1980-2000
R022EEF014	None	R022S243	Coolant System #2	10 gallons	1996
R022EEF016	None	R022S242	Coolant System #1	8 gallons	1988
R022EEF085	None	R022S240C	Feed Hopper	500 pph	1976
R022EEF086	None	R022S239	Small Extruder	10 pph	1974
R022EEF087	None	R022S240A	Large Extruder	500 pph	1976
R022EEF089	None	R022S215	#1 Oven	10.5 pph	1992
		R022S232A	Mixer Vent	30 gallons	1985
		R022S233B	Drying Ovens	0.2 pph	1964
		R022S240B	Large Extruder	500 pph	1976
R022EEF146	None	R022S238	Melt Indexers/Oven	0.57 pph	1964
R022EEVJ	None	R022S232B	Mixer Evac	30 gallons	1985
R022EPK1	None	R022S210A	Reactor #1 Vent	10 gallons	1969
R022EPK2	None	R022S211A	Reactor #2 Vent	10 gallons	1988
R022EPK3	None	R022S212A	Reactor #3 Vent	10 gallons	1994
R022EPK5	None	R022S214A	Reactor #5 Vent	1 gallon	1985
<p><sup>1</sup>For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.</p>					

### ATTACHMENT D - Title V Equipment Table

R022EPVJ	None	R022S200	HFP System Evac	4 gallons	1989
		R022S205B	FP SW TFE Tank #1 Evac	14 gallons	2004
		R022S206B	FP SW TFE Tank #2 Evac	10 gallons	1994
		R022S207B	FP SW TFE Tank #3 Evac	1.2 gallons	1985
		R022S208B	SW Aq Feeds Evac	12 liters	1980-2000
		R022S209B	SW Nonaq Feeds Evac	2.5 liters	1980-2000
		R022S210B	Reactor #1 Evac	10 gallons	1969
		R022S211B	Reactor #2 Evac	10 gallons	1988
		R022S212B	Reactor #3 Evac	10 gallons	1994
		R022S214B	Reactor #5 Evac	1 gallon	1985
R029EEF130	R029C229	R029S230	Double Cone Fluorinator	24 pph	1985
R029EEF130	R029C229	R029S231	Vibrating Bed Fluorinator	35 pph	1987
<p><sup>1</sup>For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.</p>					

<b>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> 22-S-109	<b>Emission unit name:</b> Lab hood	<b>List any control devices associated with this emission unit:</b> NA	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Exhaust hood in lab 109 (EF-117) EP ID: 22-E-109			
<b>Manufacturer:</b> Buffalo Forge	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1968	<b>Installation date:</b> 1970	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2830 ACFM			
<b>Maximum Hourly Throughput:</b> 12,990 pph	<b>Maximum Annual Throughput:</b> 56,896 ton/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM <sub>2.5</sub> )	NA	NA
Particulate Matter (PM <sub>10</sub> )	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<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.

See attachment for list of applicable regulations.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> 22-S-202	<b>Emission unit name:</b> Lab hood	<b>List any control devices associated with this emission unit:</b> NA	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Exhaust hood in lab 202 (EF-71) EP ID: 22-E-202			
<b>Manufacturer:</b> Buffalo Forge	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1968	<b>Installation date:</b> 1970	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2830 ACFM			
<b>Maximum Hourly Throughput:</b> 12,990 pph	<b>Maximum Annual Throughput:</b> 56,896 ton/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X___ No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM <sub>2.5</sub> )	NA	NA
Particulate Matter (PM <sub>10</sub> )	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<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.

See attachment for list of applicable regulations.

\_\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> 22-S-208	<b>Emission unit name:</b> Lab hood	<b>List any control devices associated with this emission unit:</b> NA	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Exhaust hood in lab 208 (EF-118) EP ID: 22-E-208			
<b>Manufacturer:</b> Buffalo Forge	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1968	<b>Installation date:</b> 1970	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2830 ACFM			
<b>Maximum Hourly Throughput:</b> 12,990 pph	<b>Maximum Annual Throughput:</b> 56,896 ton/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X___ No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM <sub>2.5</sub> )	NA	NA
Particulate Matter (PM <sub>10</sub> )	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA
Volatile Organic Compounds (VOC)	0.000001	0.0000044
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<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.

See attachment for list of applicable regulations.

\_\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> 22-S-209	<b>Emission unit name:</b> Lab hood	<b>List any control devices associated with this emission unit:</b> NA	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Exhaust hood in lab 209 (EF-146) EP ID: 22-E-209			
<b>Manufacturer:</b> Buffalo Forge	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1968	<b>Installation date:</b> 1970	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2830 ACFM			
<b>Maximum Hourly Throughput:</b> 12,990 pph	<b>Maximum Annual Throughput:</b> 56,896 ton/yr	<b>Maximum Operating Schedule:</b> 8760 hr/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>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM <sub>2.5</sub> )	NA	NA
Particulate Matter (PM <sub>10</sub> )	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<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.

See attachment for list of applicable regulations.

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> R022S-047	<b>Emission unit name:</b> Area Hoods	<b>List any control devices associated with this emission unit:</b> 22-C-001	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Molding room hoods (EF-132). EP ID: R022E-F132			
<b>Manufacturer:</b> Buffalo Forge	<b>Model number:</b>	<b>Serial number:</b>	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> NA	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 12,000 ACFM			
<b>Maximum Hourly Throughput:</b> 50,400 PPH	<b>Maximum Annual Throughput:</b> 220,720 tons/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b> NA		<b>Type and Btu/hr rating of burners:</b> NA	
<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> NA			
<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
NA	NA	NA	NA

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	0.7	3.1
Total Particulate Matter (TSP)	0.7	3.1
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.00006	0.0003
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-200	<b>Emission unit name:</b> System Evacuation Vent	<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> HFP System Evacuation Vent EP ID: R022EPVJ			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1989	<b>Installation date:</b> 1989	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 4 batches	<b>Maximum Operating Schedule:</b> 4 hr / yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	47.4	0.092
ODC	0.031	6.2E-5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	1.5E-4	2.9E-7
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> R022S-204	<b>Emission unit name:</b> Oxygen analyzer	<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> Oxygen analyzer EP ID: R022ECPV			
<b>Manufacturer:</b> Teledyne	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b>	<b>Installation date:</b>	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b>			
<b>Maximum Hourly Throughput:</b> 1.354 pph	<b>Maximum Annual Throughput:</b> 5.9 TONS/YR	<b>Maximum Operating Schedule:</b> 8760 HR/YR	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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
<b><i>Emissions Data</i></b>			
Criteria Pollutants	Potential Emissions		

	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	1.354	5.9
ODC	0.00005	0.00022
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	0.00005	0.00022
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-205A	<b>Emission unit name:</b> Tank #1 vent	<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> FP SW TFE Tank #1 Vent EP ID: R022ECPV			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 2004	<b>Installation date:</b> 2004	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 12 batches	<b>Maximum Operating Schedule:</b> 12 batches / year	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	146.4	0.878
ODC	0.54	.0033
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	0.0054	0.000033
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-205B	<b>Emission unit name:</b> Tank #1 Evacuation vent	<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> FP SW TFE Tank #1 Evacuation Vent EP ID: R022EPVJ			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 2004	<b>Installation date:</b> 2004	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 0.17 hr/batch	<b>Maximum Annual Throughput:</b> 12 batches	<b>Maximum Operating Schedule:</b> 2 hr / yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	3.5	0.0035
ODC	0.013	1.3E-5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	1.3E-4	1.3E-7
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-206A	<b>Emission unit name:</b> Tank #2 vent	<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> FP SW TFE Tank #1 Vent EP ID: R022ECPV			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1994	<b>Installation date:</b> 1994	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 12 batches	<b>Maximum Operating Schedule:</b> 12 batches / year	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	106.4	0.638
ODC	0.4	0.0024
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	0.004	0.000024
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-206B	<b>Emission unit name:</b> Tank #2 Evacuation vent	<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> FP SW TFE Tank #2 Evacuation Vent EP ID: R022EPVJ			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 2004	<b>Installation date:</b> 2004	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 0.17 hr/batch	<b>Maximum Annual Throughput:</b> 12 batches	<b>Maximum Operating Schedule:</b> 2 hr / yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	2.6	0.0026
ODC	9.6E-3	9.5E-8
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	9.6E-5	9.5e-8
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-207A	<b>Emission unit name:</b> Tank #3 vent	<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> FP SW TFE Tank #3 Vent EP ID: R022ECPV			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 12 batches	<b>Maximum Operating Schedule:</b> 12 batches / year	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	12	0.072
ODC	0.045	0.00027
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	0.00045	0.0000027
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-207B	<b>Emission unit name:</b> Tank #3 Evacuation vent	<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> FP SW TFE Tank #3 Evacuation Vent EP ID: R022EPVJ			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 0.17 hr/batch	<b>Maximum Annual Throughput:</b> 12 batches	<b>Maximum Operating Schedule:</b> 2 hr / yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.29	2.9E-4
ODC	1.1E-3	1.1E-6
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	1.1E-5	1.1E-8
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-208A	<b>Emission unit name:</b> Aqueous Feed Vent	<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> FP SW Aqueous Feed EP ID: R022EEF009			
<b>Manufacturer:</b> Gilson	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1990-2000	<b>Installation date:</b> 1990-2000	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 3500 batches	<b>Maximum Operating Schedule:</b> 3500 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	5.4E-3	2.7E-3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methanol	1.6E-3	1.4E-3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-208B	<b>Emission unit name:</b> Aqueous Feed Evacuation Vent	<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> SW Aqueous Feed Vent EP ID: R022EPVJ			
<b>Manufacturer:</b> Gilson	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1980-2000	<b>Installation date:</b> 1980-2000	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 3500 batches	<b>Maximum Operating Schedule:</b> 3500 hr / yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	6.2E-3	4.3E-3
ODC		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methanol	3.1E-3	2.2E-3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-209A	<b>Emission unit name:</b> Feed Vent	<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> SW Nonaqueous Feed Vent EP ID: R022EEF012			
<b>Manufacturer:</b> Gilson	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1980-2000	<b>Installation date:</b> 1980-2000	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 3500 batches	<b>Maximum Operating Schedule:</b> 3500 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.032	0.019
Ozone Depleting Chemicals	5.2E-5	1.5E-5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid	5.1E-7	1.5E-7
Maleic anhydride	0.013	4.1E-3
Methyl methacrylate	0.014	4.2E-3
Vinyl acetate	0.012	3.6E-3
Trichloroethylene	0.018	5.4E-3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-209B	<b>Emission unit name:</b> Non-aqueous Feed Vent	<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> SW Non-aqueous Feed Vent EP ID : R022EPVJ			
<b>Manufacturer:</b> Gilson	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1980-2000	<b>Installation date:</b> 1980-2000	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 3500 batches	<b>Maximum Operating Schedule:</b> 3500 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.13	0.107
Ozone Depleting Chemicals	2.6E-4	2.2E-4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid	2.0E-6	1.7E-6
Maleic anhydride	0.055	0.035
Methyl methacrylate	0.056	0.036
Vinyl acetate	0.048	0.031
Trichloroethylene	0.074	0.047
Toluene	2.6E-7	2.1E-7
Acetonitrile	4.0E-5	2.5E-5
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-210A	<b>Emission unit name:</b> Mixer #1 Vent	<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> Mixer #1 Vent EP ID: R022EPK1			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1969	<b>Installation date:</b> 1969	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1 hr/batch			
<b>Maximum Hourly Throughput:</b> 1 batch/hr	<b>Maximum Annual Throughput:</b> 700 hrs/yr 700 batches/yr	<b>Maximum Operating Schedule:</b> 700 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	7.8	4.72
ODC	0.54	0.19
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	3.8E-5	1.3E-5
Methanol	0.25	0.088
Acetonitrile	8.0E-5	2.8E-5
Maleic anhydride	0.3	0.68
Methyl methacrylate	0.3	0.68
Vinyl acetate	0.3	0.68
Trichlorethylene	0.3	0.68
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-210B	<b>Emission unit name:</b> Reactor #1 Evacuation Vent	<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> Reactor #1 Evacuation Vent EP ID : R022EPCJ			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1969	<b>Installation date:</b> 1969	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 700 batches	<b>Maximum Operating Schedule:</b> 700 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.67	0.235
Ozone Depleting Chemicals	3.1E-3	1.1E-3
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Maleic anhydride	8.4E-3	2.1E-2
Methyl methacrylate	8.4E-3	2.1E-2
Vinyl acetate	8.4E-3	2.1E-2
Trichloroethylene	8.4E-3	2.1E-2
Toluene	6.1E-7	2.2E-7
Acetonitrile	1.3E-7	4.5E-8
Methanol	4.0E-4	1.4E-4
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-211A	<b>Emission unit name:</b> Mixer #2 Vent	<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> Mixer #2 Vent EP ID: R022EPK2			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1969	<b>Installation date:</b> 1969	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1 hr/batch			
<b>Maximum Hourly Throughput:</b> 1 batch/hr	<b>Maximum Annual Throughput:</b> 700 hrs/yr 700 batches/yr	<b>Maximum Operating Schedule:</b> 700 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	7.8	4.72
ODC	0.54	0.19
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	3.8E-5	1.3E-5
Methanol	0.25	0.088
Acetonitrile	8.0E-5	2.8E-5
Maleic anhydride	0.3	0.68
Methyl methacrylate	0.3	0.68
Vinyl acetate	0.3	0.68
Trichlorethylene	0.3	0.68
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-211B	<b>Emission unit name:</b> Mixer #2 Evacuation Vent	<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> Mixer #2 Evacuation Vent EP ID: R022EPVJ			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1988	<b>Installation date:</b> 1988	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1 hr/batch			
<b>Maximum Hourly Throughput:</b> 1 batch/hr	<b>Maximum Annual Throughput:</b> 700 hrs/yr 700 batches/yr	<b>Maximum Operating Schedule:</b> 700 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.67	0.235
ODC	0.0031	0.0011
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	6.1E-7	2.2E-7
Methanol	4.0E-4	1.4E-4
Acetonitrile	1.3E-7	4.5E-8
Maleic anhydride	8.4E-3	2.1E-2
Methyl methacrylate	8.4E-3	2.1E-2
Vinyl acetate	8.4E-3	2.1E-2
Trichlorethylene	8.4E-3	2.1E-2
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-212A	<b>Emission unit name:</b> Mixer #3 Vent	<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> Mixer #3 Vent EP ID: R022EPK3			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1969	<b>Installation date:</b> 1969	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1 hr/batch			
<b>Maximum Hourly Throughput:</b> 1 batch/hr	<b>Maximum Annual Throughput:</b> 700 hrs/yr 700 batches/yr	<b>Maximum Operating Schedule:</b> 700 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	7.8	4.72
ODC	0.54	0.19
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	3.8E-5	1.3E-5
Methanol	0.25	0.088
Acetonitrile	8.0E-5	2.8E-5
Maleic anhydride	0.3	0.68
Methyl methacrylate	0.3	0.68
Vinyl acetate	0.3	0.68
Trichlorethylene	0.3	0.68
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-212B	<b>Emission unit name:</b> Mixer #3 Evacuation Vent	<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> Mixer #3 Evacuation Vent EP ID: R022EPVJ			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1988	<b>Installation date:</b> 1988	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1 hr/batch			
<b>Maximum Hourly Throughput:</b> 1 batch/hr	<b>Maximum Annual Throughput:</b> 700 hrs/yr 700 batches/yr	<b>Maximum Operating Schedule:</b> 700 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.67	0.235
ODC	0.0031	0.0011
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	6.1E-7	2.2E-7
Methanol	4.0E-4	1.4E-4
Acetonitrile	1.3E-7	4.5E-8
Maleic anhydride	8.4E-3	2.1E-2
Methyl methacrylate	8.4E-3	2.1E-2
Vinyl acetate	8.4E-3	2.1E-2
Trichlorethylene	8.4E-3	2.1E-2
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-213A	<b>Emission unit name:</b> Reactor #4 Vent	<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> Reactor #4 Mixed Feed Tank EP ID: R022ECPV			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1974	<b>Installation date:</b> 1974	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 2 hr/batch	<b>Maximum Annual Throughput:</b> 1400 batches	<b>Maximum Operating Schedule:</b> 1400 batches / year	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.08	0.056
ODC	0.00016	0.00011
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	0.0000016	0.0000011
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-213B	<b>Emission unit name:</b> Reactor #4 Vent	<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> Reactor #4 Reactor Vent EP ID: R022EEF007			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1974	<b>Installation date:</b> 1974	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 700 batches	<b>Maximum Operating Schedule:</b> 700 batches / year	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	2.3	0.79
ODC	0.31	0.022
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric acid	0.00008	0.00003
Acetonitrile	0.00008	0.000023
Methanol	0.1	0.035
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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> R022S-214A	<b>Emission unit name:</b> Mixer #5 Vent	<b>List any control devices associated with this emission unit:</b> None
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Mixer #5 Vent

EP ID: R022EPK5

<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA
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<b>Construction date:</b> 1969	<b>Installation date:</b> 1969	<b>Modification date(s):</b> MM/DD/YYYY
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**

1 hr/batch

<b>Maximum Hourly Throughput:</b> 1 batch/hr	<b>Maximum Annual Throughput:</b> 700 hrs/yr 700 batches/yr	<b>Maximum Operating Schedule:</b> 700 hr/yr
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**Fuel Usage Data (fill out all applicable fields)**

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

<b>Maximum design heat input and/or maximum horsepower rating:</b>	<b>Type and Btu/hr rating of burners:</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.**

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	1.25	0.472
ODC	0.053	0.019
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	3.8E-6	1.4E-6
Methanol	0.25	0.088
Acetonitrile	5.3E-5	1.9E-5
Maleic anhydride	0.2	0.069
Methyl methacrylate	0.2	0.068
Vinyl acetate	0.2	0.068
Trichlorethylene	0.2	0.068
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-214B	<b>Emission unit name:</b> Mixer #5 Evacuation Vent	<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> Mixer #5 Evacuation Vent EP ID: R022EPVJ			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1988	<b>Installation date:</b> 1988	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1 hr/batch			
<b>Maximum Hourly Throughput:</b> 1 batch/hr	<b>Maximum Annual Throughput:</b> 700 hrs/yr 700 batches/yr	<b>Maximum Operating Schedule:</b> 700 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.066	0.023
ODC	3.1E-4	1.1E-4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Toluene	6.1E-8	2.2E-8
Methanol	4.0E-5	1.4E-5
Acetonitrile	8.5E-8	3.0E-8
Maleic anhydride	3.2E-3	1.9E-3
Methyl methacrylate	3.2E-3	1.9E-3
Vinyl acetate	3.2E-3	1.9E-3
Trichlorethylene	3.2E-3	1.9E-3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-215	<b>Emission unit name:</b> Oven	<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> Berringer Oven EP ID: R022EEF089			
<b>Manufacturer:</b> Berringer	<b>Model number:</b> MINI J	<b>Serial number:</b> MJ530	
<b>Construction date:</b> 1992	<b>Installation date:</b> 1992	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2 hr/batch			
<b>Maximum Hourly Throughput:</b> 2 hr/batch	<b>Maximum Annual Throughput:</b> 208 batches/yr	<b>Maximum Operating Schedule:</b> 208 batches/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.028	0.0015
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	6.6E-4	7.0E-5
Total Particulate Matter (TSP)	6.6E-4	7.0E-5
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.063	0.0033
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrofluoric acid	0.016	0.0008
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-232A	<b>Emission unit name:</b> Mixer	<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> Ross Mixer EP ID: R022EEF089			
<b>Manufacturer:</b> Ross	<b>Model number:</b> NA	5166	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 15 min/batch			
<b>Maximum Hourly Throughput:</b> 4 batches/hr	<b>Maximum Annual Throughput:</b> 62.5 hr/yr	<b>Maximum Operating Schedule:</b> 62.5 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.66	0.087
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-232B	<b>Emission unit name:</b> Mixer Vent	<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> Ross Mixer Evacuation Vent EP ID: R022EEVJ			
<b>Manufacturer:</b> Ross	<b>Model number:</b> NA	5166	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 0.25 hrs/batch			
<b>Maximum Hourly Throughput:</b> 4 batch/hr	<b>Maximum Annual Throughput:</b> 62.5 hrs/yr 250 batches/yr	<b>Maximum Operating Schedule:</b> 62.5 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X_ No		<b>If yes, is it?</b> ___ Indirect Fired ___Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.66	0.082
ODC		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-233A	<b>Emission unit name:</b> Drying Oven	<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> Drying Oven EP ID: R022EEF006			
<b>Manufacturer:</b> Hotpack Forma Hotpack Grieve	<b>Model number:</b> 212570-14 NA NA HA850	<b>Serial number:</b> 76495 NA NA 470042	
<b>Construction date:</b> 1965-1995	<b>Installation date:</b> 1965-1995	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 72 hr/batch	<b>Maximum Annual Throughput:</b> 122 batches	<b>Maximum Operating Schedule:</b> 8760 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	0.0084	0.006
Total Particulate Matter (TSP)	0.0084	0.006
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	NA	NA
ODC	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-233B	<b>Emission unit name:</b> Oven	<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> Drying oven EP ID: R022EEF089			
<b>Manufacturer:</b> Hotpack	<b>Model number:</b> 212570-14	<b>Serial number:</b> NA	
<b>Construction date:</b> 1964	<b>Installation date:</b> 1964	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 72 hrs/batch			
<b>Maximum Hourly Throughput:</b> 0.013 batches/hr	<b>Maximum Annual Throughput:</b> 122 batches/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	0.00042	0.0003
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-234	<b>Emission unit name:</b> Hydraulic Press	<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> Hydraulic press exhaust hood EP ID: R022EEF006			
<b>Manufacturer:</b> #1 PHI #2 PHI #3 PHI #4 PHI #5 PHI	<b>Model number:</b> NA P210H P210X P210G-X4B-21 SP2100-X4A-21	<b>Serial number:</b> NA 5711 2056 92-9-003 91-1-015	
<b>Construction date:</b> 1964-1992	<b>Installation date:</b> 1962-1992	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1.7 hr/batch	<b>Maximum Annual Throughput:</b> 2500 batches	<b>Maximum Operating Schedule:</b> 4167 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X_ No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	1.5E-5	0.0012	
Nitrogen Oxides (NO <sub>x</sub> )			
Lead (Pb)			
Particulate Matter (PM <sub>2.5</sub> )			
Particulate Matter (PM <sub>10</sub> )	3.75E-05	3.9E-05	
Total Particulate Matter (TSP)	0.0084	0.006	
Sulfur Dioxide (SO <sub>2</sub> )			
Volatile Organic Compounds (VOC)	0.0016	0.0017	
ODC	4.4X10 <sup>9</sup>	4.6X10 <sup>9</sup>	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Hydrochloric Acid	0.0002	0.00021	
Hydrofluoric acid	0.0004	0.00042	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	
TiCl <sub>4</sub>	4.4E-09	4.6E-09	
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-235	<b>Emission unit name:</b> Mixer	<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> Haake Mixer EP ID: R022EEF006			
<b>Manufacturer:</b> Haake	<b>Model number:</b> RC300P	<b>Serial number:</b> 1200000419/003	
<b>Construction date:</b> 1996	<b>Installation date:</b> 1996	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 6 hr/batch	<b>Maximum Annual Throughput:</b> 1000 batches	<b>Maximum Operating Schedule:</b> 6000 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.3E-5	1.2E-5
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	5.6E-5	2.8E-5
Total Particulate Matter (TSP)	0.0084	0.006
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.0016	0.0017
ODC	6.6E-9	3.3E-9
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid	0.0003	0.00015
Hydrofluoric acid	0.0006	0.0003
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
TiCl <sub>4</sub>	6.6E-9	3.3E-0
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-236	<b>Emission unit name:</b> Oven	<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> Grieve Oven EP ID: R022EEF006			
<b>Manufacturer:</b> Custom made	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1996	<b>Installation date:</b> 1996	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 250 batches	<b>Maximum Operating Schedule:</b> 250 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.6E-7	2.6E-7
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	6.2E-7	6.5E-7
Total Particulate Matter (TSP)	6.2E-7	6.5E-7
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	2.6E-5	2.6E-5
ODC	7.3E-11	7.5E-11
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid	3.3E-6	3.3E-6
Hydrofluoric acid	6.6E-6	6.5E-6
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
TiCl <sub>4</sub>	7.3E-11	7.5E-11
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-237	<b>Emission unit name:</b> Fume Hood	<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> Fume Hood EP ID: R022EEF011			
<b>Manufacturer:</b> GE	<b>Model number:</b> SK182H6268	<b>Serial number:</b> NA	
<b>Construction date:</b> 1964	<b>Installation date:</b> 1964	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 4 hr/batch	<b>Maximum Annual Throughput:</b> 700 batches	<b>Maximum Operating Schedule:</b> 175 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	2.1	0.79
Ozone Depleting Chemicals	2.1	0.17
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methanol	0.01	0.0035
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-238	<b>Emission unit name:</b> Oven	<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> Melt indexer sinter ovens EP ID: R022EEF146			
<b>Manufacturer:</b> BUFLO-FG	<b>Model number:</b> 365BL1	<b>Serial number:</b> S129710000001	
<b>Construction date:</b> 1964	<b>Installation date:</b> 1964	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 0.5 hrs/batch			
<b>Maximum Hourly Throughput:</b> 0.5 batches/hr	<b>Maximum Annual Throughput:</b> 7500 hrs/yr 15,000 batches/yr	<b>Maximum Operating Schedule:</b> 7500 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	2.6E-5	7.0E-6
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	6.4E-5	1.8E-5
Total Particulate Matter (TSP)	6.4E-5	1.8E-5
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.027	0.00073
ODC	7.5E-9	2.1E-9
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrofluoric acid	6.8E-4	1.9E-4
Hydrochloric acid	3.4E-4	9.4E-5
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
TiCl <sub>4</sub>	7.5E-9	2.1E-9
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> R022S-239	<b>Emission unit name:</b> Extruder	<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> Small Extruder Vent EP ID: R0EEF086			
<b>Manufacturer:</b> WERNER-PFLEIDERER	<b>Model number:</b> NA	<b>Serial number:</b> 150047	
<b>Construction date:</b> 1974	<b>Installation date:</b> 1974	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 5 hr/day			
<b>Maximum Hourly Throughput:</b> 5 hr/day	<b>Maximum Annual Throughput:</b> 800 hrs/yr	<b>Maximum Operating Schedule:</b> 800 hrs/yr	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.6E-4	1.9E-4
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	0.012	0.0005
Total Particulate Matter (TSP)	0.012	0.0005
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.046	0.019
ODC	1.4E-7	6.0E-8
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid	0.006	0.0025
Hydrofluoric acid	0.12	0.005
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
TiCl <sub>4</sub>	1.4E-7	6.0E-8
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-240A	<b>Emission unit name:</b> Extruder	<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> Large Extruder Vent EP ID: R022EEF087			
<b>Manufacturer:</b> WERNER-PFLEIDERER CORP.	<b>Model number:</b> ZSK53L	<b>Serial number:</b> 3734	
<b>Construction date:</b> 1976	<b>Installation date:</b> 1976	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 6 hr/day			
<b>Maximum Hourly Throughput:</b> 5 hr/day	<b>Maximum Annual Throughput:</b> 1560 hrs/yr	<b>Maximum Operating Schedule:</b> 1560 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X_ No		<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.023	0.0182
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	0.056	0.044
Total Particulate Matter (TSP)	0.056	0.044
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	2.31	1.81
ODC	6.6E-6	5.0E-6
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrochloric Acid	0.3	0.234
Hydrofluoric acid	0.6	0.47
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
TiCl <sub>4</sub>	6.6E-6	5.0E-6
<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.**

See attachment list for all applicable requirements.

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**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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-240B	<b>Emission unit name:</b> Extruder vent	<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> Large extruder vent EP ID: R022EEF089			
<b>Manufacturer:</b> WERNER-PFLEIDERER	<b>Model number:</b> ESA120	<b>Serial number:</b> 180017	
<b>Construction date:</b> 1976	<b>Installation date:</b> 1976	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 6 hrs/batch			
<b>Maximum Hourly Throughput:</b> 0.17 batches/hr	<b>Maximum Annual Throughput:</b> 1560 hrs/yr	<b>Maximum Operating Schedule:</b> 1560 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.023	0.018
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	0.0560	0.044
Total Particulate Matter (TSP)	0.056	0.044
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	2.31	1.81
ODC	6.6E-6	5.0E-6
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrofluoric acid	0.6	0.47
Hydrochloric acid	0.3	0.234
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
TiCl <sub>4</sub>	6.6E-6	5.0E-6
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> R022S-240C	<b>Emission unit name:</b> Feed 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> Feed Hopper EP ID: R022EEF085			
<b>Manufacturer:</b> Custom made by Dupont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1988	<b>Installation date:</b> 1988	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 2 hr/batch	<b>Maximum Annual Throughput:</b> 1560 batches	<b>Maximum Operating Schedule:</b> 780 hrs/yr	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	0.1	0.078
Total Particulate Matter (TSP)	0.1	0.078
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-242	<b>Emission unit name:</b> Coolant System #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> Coolant System #1 EP ID: R022EEF016			
<b>Manufacturer:</b> Custom made by Dupont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1988	<b>Installation date:</b> 1988	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 10 batches	<b>Maximum Operating Schedule:</b> 10 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	6.0E-6	3.0E-8
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Ethylene Glycol	6.0E-6	3.0E-8
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-243	<b>Emission unit name:</b> Coolant System #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> Coolant System #2 EP ID: R022EEF014			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1996	<b>Installation date:</b> 1996	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 10 batches	<b>Maximum Operating Schedule:</b> 10 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	7.6E-6	3.8E-8
ODC		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Ethylene Glycol	7.6E-6	3.8E-8
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-244	<b>Emission unit name:</b> Coolant System #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> Coolant System #3 EP ID: R022EEF007			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 10 batches	<b>Maximum Operating Schedule:</b> 10 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	2.4E-5	1.2E-7
ODC		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Ethylene Glycol	2.4E-5	1.2E-7
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-247	<b>Emission unit name:</b> Line Vent	<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> Monomer transfer Line Vent EP ID: R022ECPV			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 2002	<b>Installation date:</b> 2002	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 1 hr/batch	<b>Maximum Annual Throughput:</b> 1500 batches	<b>Maximum Operating Schedule:</b> 1500 batches / year	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.88	0.66
ODC	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> R022S-B05	<b>Emission unit name:</b> EXHAUST HOOD	<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>  Exhaust vent (EF051) EP ID: R022E-F51			
<b>Manufacturer:</b>	<b>Model number:</b>	<b>Serial number:</b>	
<b>Construction date:</b> 1950	<b>Installation date:</b> 1950	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2815 ACFM			
<b>Maximum Hourly Throughput:</b> 2815 ACFM, 12,920 PPH	<b>Maximum Annual Throughput:</b> 56,593 TONS/YR	<b>Maximum Operating Schedule:</b> 8760 HR/YR	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X_ No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	4.5X10 <sup>7</sup>	0.000002
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<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.

See attachment list for all applicable requirements

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Monthly maintenance records will be kept. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-B06	<b>Emission unit name:</b> EXHAUST HOOD	<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>  Exhaust vent )EF-52) EP ID: R022E-F52			
<b>Manufacturer:</b>	<b>Model number:</b>	<b>Serial number:</b>	
<b>Construction date:</b> 1950	<b>Installation date:</b> 1950	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2815 ACFM			
<b>Maximum Hourly Throughput:</b> 2815 ACFM, 12,920 PPH	<b>Maximum Annual Throughput:</b> 56,593 TONS/YR	<b>Maximum Operating Schedule:</b> 8760 HR/YR	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X_ No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	4.5X10 <sup>7</sup>	0.000002
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

**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.).**

Engineering estimate

***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.

See attachment list for all applicable requirements

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Monthly maintenance records will be kept. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R022S-B17	<b>Emission unit name:</b> EXHAUST HOOD	<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>  Exhaust vent (EF-63) EP ID: R022E-F63			
<b>Manufacturer:</b>	<b>Model number:</b>	<b>Serial number:</b>	
<b>Construction date:</b> 1950	<b>Installation date:</b> 1950	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2815 ACFM			
<b>Maximum Hourly Throughput:</b> 2815 ACFM, 12,920 PPH	<b>Maximum Annual Throughput:</b> 56,593 TONS/YR	<b>Maximum Operating Schedule:</b> 8760 HR/YR	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X_ No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	4.5X10 <sup>7</sup>	0.000002
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

**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.).**

Engineering estimate

***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.

See attachment list for all applicable requirements

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Monthly maintenance records will be kept. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-B19 (same as 22-S-101)	<b>Emission unit name:</b> Lab hood	<b>List any control devices associated with this emission unit:</b> NA	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Exhaust hood in lab 101 (EF-65) EP ID: R022E-F65			
<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1950	<b>Installation date:</b> 1950	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2815 ACFM			
<b>Maximum Hourly Throughput:</b> 12,990 pph	<b>Maximum Annual Throughput:</b> 56,896 ton/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM <sub>2.5</sub> )	NA	NA
Particulate Matter (PM <sub>10</sub> )	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<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.

See attachment for list of applicable regulations.

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b>Emission Unit Description</b>			
<b>Emission unit ID number:</b> R022S-B20 (same as 22-S-101)	<b>Emission unit name:</b> Lab hood	<b>List any control devices associated with this emission unit:</b> NA	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Exhaust hood in lab 101 (EF-66) EP ID: R022E-F66			
<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1950	<b>Installation date:</b> 1950	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2815 ACFM			
<b>Maximum Hourly Throughput:</b> 12,990 pph	<b>Maximum Annual Throughput:</b> 56,896 ton/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b>  <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM <sub>2.5</sub> )	NA	NA
Particulate Matter (PM <sub>10</sub> )	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA
Volatile Organic Compounds (VOC)	NA	NA
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<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.

See attachment for list of applicable regulations.

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Monthly production records will be kept. Monthly maintenance records will be kept. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> R022S-B36	<b>Emission unit name:</b> EXHAUST HOOD	<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>  Exhaust vent (EF-115) EP ID: R022E-F115			
<b>Manufacturer:</b>	<b>Model number:</b>	<b>Serial number:</b>	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> NA	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 2815 ACFM			
<b>Maximum Hourly Throughput:</b> 2815 ACFM, 12,920 PPH	<b>Maximum Annual Throughput:</b> 56,593 TONS/YR	<b>Maximum Operating Schedule:</b> 8760 HR/YR	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X_ No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	0.0006	0.0026
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
Carbon monoxide	5.67X10 <sup>-5</sup>	0.0002
Formic acid	0.0005	0.00219
TOC	0.0006	0.0026
<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.

See attachment list for all applicable requirements

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Monthly maintenance records will be kept. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> R022S-B38	<b>Emission unit name:</b> Lab hood	<b>List any control devices associated with this emission unit:</b> NA	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Exhaust hood in lab 109 (EF-117). EP ID: R022S-F117			
<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1500 ACFM			
<b>Maximum Hourly Throughput:</b> 16300 pph	<b>Maximum Annual Throughput:</b> 27,594 ton/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> ___Yes ___X___ No		<b>If yes, is it?</b>  ___ Indirect Fired ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	NA	NA	
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	
Lead (Pb)	NA	NA	
Particulate Matter (PM <sub>2.5</sub> )	NA	NA	
Particulate Matter (PM <sub>10</sub> )	NA	NA	
Total Particulate Matter (TSP)	NA	NA	
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	
Volatile Organic Compounds (VOC)	NA	NA	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Methylene chloride	0.0013	0.0055	
	NA	NA	
	NA	NA	
	NA	NA	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	
	NA	NA	
	NA	NA	
	NA	NA	
<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.

See attachment for list of applicable regulations.

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b>			
<b>Emission unit ID number:</b> R022S-B40	<b>Emission unit name:</b> Lab hood	<b>List any control devices associated with this emission unit:</b> NA	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b>  Exhaust hood in lab 208 (EF-118) EP ID: R022E-F118			
<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> NA	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 1500 ACFM			
<b>Maximum Hourly Throughput:</b> 6300 pph	<b>Maximum Annual Throughput:</b> 27,594 ton/yr	<b>Maximum Operating Schedule:</b> 8760 hr/yr	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></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>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Lead (Pb)	NA	NA
Particulate Matter (PM <sub>2.5</sub> )	NA	NA
Particulate Matter (PM <sub>10</sub> )	NA	NA
Total Particulate Matter (TSP)	NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA
Volatile Organic Compounds (VOC)	0.000001	0.0000044
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Methylene chloride	0.0013	0.0055
	NA	NA
	NA	NA
	NA	NA
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
	NA	NA
	NA	NA
	NA	NA
<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.

See attachment for list of applicable regulations.

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R029S-230	<b>Emission unit name:</b> Double Cone Fluorinator	<b>List any control devices associated with this emission unit:</b> R029C229	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Reactor #1 Evacuation Vent EP ID : R029EEF130			
<b>Manufacturer:</b> Custom made by DuPont	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 8 hrs/batch	<b>Maximum Annual Throughput:</b> 156 batches	<b>Maximum Operating Schedule:</b> 1248 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrofluoric	4.4E-3	3.0E-3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
Fluorides	5.7E-3	4.5E-3
Fluorine	0.15	9.0E-3
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R029S-231	<b>Emission unit name:</b> Vibrating Bed Fluorinator	<b>List any control devices associated with this emission unit:</b> R029C229	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Vibrating Bed Fluorinator EP ID: R022EEF130			
<b>Manufacturer:</b> Carrier Vibrating Equipment	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 1987	1987	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> Batch process			
<b>Maximum Hourly Throughput:</b> 8 hrs/batch	<b>Maximum Annual Throughput:</b> 156 batches	<b>Maximum Operating Schedule:</b> 1248 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Hydrofluoric	6.5E-3	4.5E-3
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
Fluorides	8.4E-3	6.5E-3
Fluorine	0.15	0.082
<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.**

See attachment list for all applicable requirements.

\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Production records will be monitored and recorded monthly. Maintenance and repairs will be monitored and recorded monthly. All records of checks will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R031S902	<b>Emission unit name:</b> Parts cleaner	<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> Parts cleaner EP ID: R031E902			
<b>Manufacturer:</b> Safety Kleen	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> 2002	<b>Installation date:</b> 2002	<b>Modification date(s):</b> MM/DD/YYYY	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 50 gallon			
<b>Maximum Hourly Throughput:</b> NA	<b>Maximum Annual Throughput:</b> NA	<b>Maximum Operating Schedule:</b> 8760 hrs/yr	
<b>Fuel Usage Data (fill out all applicable fields)</b>			
<b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO <sub>x</sub> )			
Lead (Pb)			
Particulate Matter (PM <sub>2.5</sub> )			
Particulate Matter (PM <sub>10</sub> )			
Total Particulate Matter (TSP)			
Sulfur Dioxide (SO <sub>2</sub> )			
Volatile Organic Compounds (VOC)	0.206	0.9	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	
<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.**

See attachment list for all applicable requirements

\_\_\_\_ 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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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>ATTACHMENT E - Emission Unit Form</b>			
<i>Emission Unit Description</i>			
<b>Emission unit ID number:</b> R031S903	<b>Emission unit name:</b> Sand blaster	<b>List any control devices associated with this emission unit:</b> Integral cyclone and bag filter, inside vent	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Sandblaster EP ID: R031E903			
<b>Manufacturer:</b> ZERO MFG. CO.	<b>Model number:</b> BPN 220-1	<b>Serial number:</b> 262914	
<b>Construction date:</b> 2002	<b>Installation date:</b> 2002	<b>Modification date(s):</b> NA	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> 900 ACFM			
<b>Maximum Hourly Throughput:</b> 3780 pph	<b>Maximum Annual Throughput:</b> 16,556 tons/yr	<b>Maximum Operating Schedule:</b> 8760 hrs/yr	
<i>Fuel Usage Data (fill out all applicable fields)</i>			
<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>		<b>Type and Btu/hr rating of burners:</b>	
<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>			
<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

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )	0.104	0.455
Total Particulate Matter (TSP)	0.104	0.455
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

**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.).**

Engineering estimate

***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.

See attachment list for all applicable requirements

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 shall be by performing a visible emissions check on the stack once per month, not to exceed 45 days. The visible emission check will be made by a person trained in 40 CFR 60, Appendix A, Method 22. Pounds of production will be recorded each month. Maintenance records will be monitored and recorded each month. All records will be kept for five years.

**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 G - Air Pollution Control Device Form**

<b>Control device ID number:</b> R029C229	<b>List all emission units associated with this control device.</b> R029S230, R029S231	
<b>Manufacturer:</b> DuPont internal design	<b>Model number:</b> NA	<b>Installation date:</b> 1985

**Type of Air Pollution Control Device:**

<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 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 (describe)
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Dry Plate

**List the pollutants for which this device is intended to control and the capture and control efficiencies.**

Pollutant	Capture Efficiency	Control Efficiency
Hydrogen fluoride	90%	90%
Fluorine	90%	90%
Fluorides	90%	90%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Liquor is 45% KOH solution down to 10% by pumping from a drum into the scrubber. Liquor pressure to scrubber is 95 psia, pressure drop through scrubber is 10 in H2O, liquor flow rate is 35 gpm. Design gas flow is 2.4 ACFM at 482F and 1.45 psia. Average gas flow is 0.144 acfm.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?** \_\_\_ Yes \_\_\_X\_ No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**

Performance is monitored by measuring the concentration of KOH after every third cylinder of fluorine consumed. The KOH concentration is maintained at <8%.

## 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.

<b>3) <sup>a</sup> BACKGROUND DATA AND INFORMATION</b>					
Complete the following table for <u>all</u> 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.					
<b>PSEU DESIGNATION</b>	<b>DESCRIPTION</b>	<b>POLLUTANT</b>	<b>CONTROL DEVICE</b>	<b><sup>b</sup>EMISSION LIMITATION or STANDARD</b>	<b><sup>c</sup> MONITORING REQUIREMENT</b>
<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.

<b>CAM MONITORING APPROACH CRITERIA</b>			
Complete this section for <u>EACH</u> 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 <u>EACH</u> indicator selected for <u>EACH</u> 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>	<b>4b) Pollutant:</b>	<b>4c) <sup>a</sup> Indicator No. 1:</b>	<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:			
<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:			
<b>5b) PERFORMANCE CRITERIA</b> Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:			
<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:			
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.):			
<sup>d</sup> Provide the <u>MONITORING FREQUENCY</u> :			
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:			
Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:			

<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:

6b) Regulated Air Pollutant:

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):

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:**