



781 Chestnut Ridge Road  
Morgantown, WV 26505 USA  
Phone 304.599.2595  
Web www.mylan.com

July 7, 2016

William F. Durham  
Director  
WV Department of Environmental Protection  
Division of Air Quality  
601 57th Street, SE  
Charleston, WV 25304

RE: Permit R30-06100033-2012 Renewal Application  
Mylan Pharmaceuticals, Plant ID 03-54-06100033

Dear Mr. Durham:

Mylan Pharmaceuticals Inc. (Mylan) was issued a Title V permit on January 24, 2012, which expires on January 10, 2017. According to 45CSR30 4.1.a.3, a Title V renewal application must be submitted six months prior to the date of permit expiration. As such, Mylan is hereby submitting its Title V renewal application in a timely fashion prior to the renewal deadline of July 10, 2016. The enclosed Title V Permit renewal application consists of the following:

- Title V Application Form
- Attachment A: Area Map
- Attachment B: Plot Plans
- Attachment C: Process Flow Diagrams
- Rule 31/CBI Cover Document – NOTE: Process Flow Diagrams contain Confidential Business Information, and has been properly marked as such. This is the only item within the enclosed submittal, which has been declared confidential.
- Attachment D: Title V Equipment Table
- Attachment E: Emission Unit Forms
- Attachment G: Air Pollution Control Device Forms

Mylan has always strived to maintain a proactive role in assuring environmental compliance and appreciates your assistance with this permit renewal application. Should you require any additional information, please contact me directly at the address provided by the letterhead or by telephoning (304) 599-2595, extension 7392.

Sincerely,

A handwritten signature in blue ink that reads 'Eric Hunsberger'.

Eric Hunsberger  
Senior Manager, North America Environmental Compliance

Enclosures

cc: Brian Tephacock, WV DEP  
Carrie McCumbers, WV DEP  
Mylan Inc., Global EHS

July 2016

**Does Not Contain Confidential Business Information**

**RULE 30/TITLE V  
PERMIT RENEWAL APPLICATION**

**MYLAN PHARMACEUTICALS, INC.  
PLANT ID# 061-00033  
MORGANTOWN, WEST VIRGINIA**

**PREPARED BY:**

**Mylan Pharmaceuticals, Inc.**

**REDACTED VERSION**

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- Attachment D: Equipment Table
- Attachment E: Emission Unit Forms
- Attachment G: Control Device Forms



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

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

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 sections: 1. Name of Applicant (Mylan Pharmaceuticals, Inc.), 2. Facility Name or Location (Chestnut Ridge Road Plant Morgantown), 3. DAQ Plant ID No. (061-00033), 4. Federal Employer ID No. (FEIN) (550455423), 5. Permit Application Type (Permit Renewal), 6. Type of Business Entity (Corporation), 7. Is the Applicant the: (Both), 8. Number of onsite employees (2578), 9. Governmental Code (Privately owned and operated; 0), 10. Business Confidentiality Claims (Yes).

<b>11. Mailing Address</b>		
Street or P.O. Box: P.O. Box 4310		
City: Morgantown	State: WV	Zip: 26504-4310
Telephone Number: (304) 599-2595	Fax Number: (304) 598-5471	

<b>12. Facility Location</b>		
Street: 781 Chestnut Ridge Road	City: Morgantown	County: Monongalia
UTM Easting: 589.6 km	UTM Northing: 4390.1 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
<b>Directions:</b> I-79 to exit 155 follow signs for W.V.U. Follow US Route 19 to Coliseum. Turn left onto SR 705 for approximately 1.2 miles. Turn right to stay on SR 705 (Chestnut Ridge Road). Follow for approximately 0.6 miles to plant on left.		
<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> PA, OH, MD	
<b>Is facility located within 100 km of a Class I Area<sup>1</sup>?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>If no, do emissions impact a Class I Area<sup>1</sup>?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, name the area(s).</b> Dolly Sods Otter Creek	
<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> John Sylvester		<b>Title:</b> Head of Manufacturing Operations - Morgantown
<b>Street or P.O. Box:</b> P.O. Box 4310		
<b>City:</b> Morgantown	<b>State:</b> WV	<b>Zip:</b> 26504-4310
<b>Telephone Number:</b> (304) 599-2595	<b>Fax Number:</b> (304) 598-5471	
<b>E-mail address:</b> john.sylvester@mylan.com		
<b>Environmental Contact:</b> Jonathan Lewin		<b>Title:</b> Environmental Engineer
<b>Street or P.O. Box:</b> P.O. Box 4310		
<b>City:</b> Morgantown	<b>State:</b> WV	<b>Zip:</b> 26504-4310
<b>Telephone Number:</b> (304) 599-2595	<b>Fax Number:</b> (304) 598-5471	
<b>E-mail address:</b> <a href="mailto:jonathan.lewin@mylan.com">jonathan.lewin@mylan.com</a>		
<b>Application Preparer:</b> Eric Hunsberger		<b>Title:</b> Senior Manager, NA Environmental Compliance
<b>Company:</b> Mylan Pharmaceuticals, Inc.		
<b>Street or P.O. Box:</b> P.O. Box 4310		
<b>City:</b> Morgantown	<b>State:</b> WV	<b>Zip:</b> 26504-4310
<b>Telephone Number:</b> (304) 599-2595	<b>Fax Number:</b> (304) 598-5471	
<b>E-mail address:</b> <a href="mailto:eric.hunsberger@mylan.com">eric.hunsberger@mylan.com</a>		

**14. Facility Description**

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

Process	Products	NAICS	SIC
Pharmaceutical Compounding and Formulating	Various Pharmaceutical Tablets and Capsules	325410	2834

**Provide a general description of operations.**

Mylan Pharmaceuticals, Inc. (Mylan) is a batch pharmaceutical manufacturing company. Mylan purchases raw materials from suppliers and performs various quality control tests on the raw materials. The manufacturing plant mixes, compounds, and formulates pharmaceutical products. While a number of proprietary processes exist, the basic manufacturing process is as follows:

Weighing of Raw Materials -> Blending of Raw Materials -> Granulation of Blended Materials -> Dose Forming of Blended Materials -> Packaging of Dose Forms

Mylan also operates various laboratories in Morgantown, WV. QA/QC laboratories are operated at the Chestnut Ridge Road manufacturing site.

Mylan's Chestnut Ridge Road facility is required to have a Title V Permit due to the potential to emit VOC at greater than 100 tons per year.

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

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

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

**Section 2: Applicable Requirements**

<b>18. Applicable Requirements Summary</b>	
Instructions: Mark all applicable requirements.	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR34)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input checked="" type="checkbox"/> Section 111 NSPS	<input type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input checked="" type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input 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"/> CAIR NO <sub>x</sub> Annual Trading Program (45CSR39)	<input type="checkbox"/> CAIR NO <sub>x</sub> Ozone Season Trading Program (45CSR40)
<input type="checkbox"/> CAIR SO <sub>2</sub> Trading Program (45CSR41)	

<b>19. Non Applicability Determinations</b>
<p><b>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.</b></p> <p>a. 45CSR27 – <i>To Prevent and Control the Emissions of Toxic Air Pollutants</i>. This rule does not apply to the facility because the facility currently does not have the potential to emit any such air pollutant in quantities equal to or greater than those set forth in this rule.</p> <p>b. 40 C.F.R. 60, Subpart Ka – <i>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</i>. This subpart does not apply to the storage tanks at the facility because the tanks do not contain a petroleum liquid and the tanks have a capacity (approximately 8,300 gallons each) less than those tanks defined as an affected facility.</p> <p>c. 40 C.F.R. 60, Subpart Kb – <i>Standard of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984</i>. This subpart does not apply to the storage tanks at the facility because two of the tanks were installed [in 1978] prior to July 23, 1984. Additionally, each tank has a capacity (approximately 8,300 gallons each) less those tanks defined as an affected facility.</p>
<input checked="" type="checkbox"/> 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.**

- d. 40 C.F.R. 63, Subpart F – *National Emissions Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*. The facility does not manufacture any of the chemicals listed in Table I of Subpart F as a primary product.
- e. 40 C.F.R. 63, Subpart G – *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*. The facility is not subject to Subpart F, therefore, it is not subject to Subpart G of Part 63.
- f. 40 C.F.R. 63, Subpart FFFF – *National Standards for Miscellaneous Organic Chemical Manufacturing*. The facility does not emit hazardous air pollutants at major levels and is therefore not subject to this subpart.
- g. 40 C.F.R. 63, Subpart GGG – *National Standards for Pharmaceuticals Production*. The facility does not emit hazardous air pollutants at major levels and is therefore not subject to this subpart.
- h. 40 C.F.R. 63, Subpart DDDDD – *National Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters*. The facility is not a major source of hazardous air pollutants and is therefore not subject to this subpart.
- i. 40 C.F.R. 63, Subpart VVVVVV – *National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources*. All HAP emissions are from the quality control laboratories, which are exempt from this subpart according to 40 C.F.R. § 63.11494(c)(4) and Research and development facilities, as defined in CAA section 112(c)(7), which are exempt from this subpart according to 40 C.F.R. § 63.11494(c)(3).
- j. 40 C.F.R. 64 - *Compliance Assurance Monitoring*. This is the third Title V permit renewal for this facility. At the times of the first and second renewal, CAM was determined not to be applicable to the sources currently in use at the facility. Since the second renewal, a few new pieces of equipment were installed at this facility. This equipment includes Oven 0021 (Emission Unit ID No. 264), Coating Line 1911 (Emission Unit ID No. 1911) and Coating Pan 23581 (Emission Unit ID No. 246). The RTO serves as the control device for the oven, coating line and coating pan. The coating pan also has a cartridge collector to control PM emissions. The PTE of any unit being routed to a control device for the pollutant being controlled is less than 100 TPY, therefore CAM still does not apply.
- k. 45CSR§2-5.1 – The facility burns natural gas only; therefore this section of 45CSR2 does not apply.
- l. 45CSR§10-4 – The facility's manufacturing process source operations do not emit sulfur dioxide with the exception of trace amounts from natural gas combustion.
- m. 45CSR§10-5 & 45CSR§10-8 – The facility's boilers burn only natural gas; therefore, they are exempt from the requirements of these sections of 45CSR10.
- n. 45CSR10A – *Testing, Monitoring, Recordkeeping and Reporting Requirements Under 45CSR10*. The facility's boilers combust natural gas only; therefore, the facility is exempt from the requirements of this rule.

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).

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.; R30-06100033-2012 MM04 3.1.1.; R13-2068R 3.1.1.]
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.; R30-06100033-2012 MM04 3.1.2.; R13-2068R 3.1.2.]
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 CFR § 61.145, 40 CFR § 61.148, and 40CFR § 61.150. The permittee 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 40CFR§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 CFR 61 and 45CSR34; R30-06100033-2012 MM04 3.1.3.; R13-2068R 3.1.3.]
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; R30-06100033-2012 MM04 3.1.4.; R13-2068R 3.1.4.]
5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown. [45CSR§13-10.5.; R13-2068R 3.1.5.]
6. **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; R30-06100033-2012 MM04 3.1.5.; R13-2068R 3.1.6.]
7. **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); R30-06100033-2012 MM04 3.1.6; R13-2068R 3.5.5.]
8. **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 CFR 82, Subpart F; R30-06100033-2012 MM04 3.1.7.]
9. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. §68.10 and 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 CFR 68; R30-06100033-2012 MM04 3.1.8.]

Permit Shield

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

1. **Open Burning Notification requirements:** Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.; R30-06100033-2012 MM04 3.1.2.; R13-2068R 3.1.2.]
2. **Open Burning Notification requirements:** Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.; R30-06100033-2012 MM04 3.1.2.; R13-2068R 3.1.2.]
3. **Asbestos Notification requirements:** The permittee 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 40CFR§61.145(b)(3)(i). A copy of this notice is required to be sent to the US EPA, the Division of Waste Management and the Bureau for Public Health – Environmental Health. [40 CFR 61 and 45CSR34; R30-06100033-2012 MM04 3.1.3.; R13-2068R 3.1.3.]
4. **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., 45CSR§4. State-Enforceable only; R30-06100033-2012 MM04 3.4.3.; R13-2068R 3.4.2.]
5. **Permanent Shutdown.** All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown. [45CSR§13-10.5.; R13-2068R 3.1.5.]
6. **Standby plan for reducing emissions.** Prepare standby plans as required in item 6 above. [45CSR§11-5.2; R30-06100033-2012 MM04 3.1.5.; R13-2068R 3.1.6.]
7. **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); R30-061-00033-2012 MM04 3.1.6; R13-2068R 3.5.5.]
8. **Ozone-depleting substances.** Maintain records of maintenance activities conducted by contract personnel. [40 CFR 82, Subpart F; R30-06100033-2012 MM04 3.1.7.]
9. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. §68.10 and 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. [40CFR68; R30-06100033-2012 MM04 3.1.8.]

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

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

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

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

10. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment. [45CSR7-5.2.; R30-06100033-2012 MM04 3.1.9.]
11. Due to unavoidable malfunction of equipment, emissions exceeding limits set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. [45CSR§7-9.1.; R30-06100033-2012 MM04 3.1.10.]
12. Facility-wide emissions to the atmosphere of Hazardous Air Pollutants (HAPs) shall not exceed or equal 9.4 tons per year of any single HAP or 24.4 tons per year of any combination of HAPs. Yearly total HAPs will be determined using a 12-month rolling total. [45CSR13, R30-06100033-2012 MM04 3.1.11.; R13-2068R 3.1.7.]

Permit Shield

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

10. **Fugitive Dust Control Systems.** The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems monthly to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of such inspections and of all scheduled and non-scheduled maintenance of such systems. These records shall be maintained on site for five (5) years from the record creation date, stating any maintenance or corrective actions taken as a result of the monthly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. [45CSR§30-5.1.c.; R30-06100033-2012 MM04 3.4.4.]

11. **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.

[WV Code § 22-5-4(a)(15) and 45CSR13; R30-06100033-2012 MM04 3.3.1.; R13-2068R 3.3.1.]

12. The facility shall monitor on a monthly and yearly basis facility-wide HAP usage. Yearly HAP calculations shall be based on a 12-month rolling total. [R30-06100033-2012 MM04 3.2.1.; R13-2068R 3.2.1.]

To demonstrate compliance with the facility-wide HAP limits, the permittee shall maintain monthly and yearly records of facility-wide HAP usage. The facility shall prepare monthly facility-wide calculations of the amount of each individual HAP emitted and the amount of aggregated HAPs emitted. Yearly HAP calculations shall be based on a 12-month rolling total. [R30-06100033-2012 MM04 3.4.5.; R13-2068R 3.4.3.]

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

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

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

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

13. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment, identified with an asterisk, 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.; R30-06100033-2012 MM04 3.1.12.; R13-2068R 4.1.1.]
14. **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.; R30-06100033-2012 MM04 3.5.9.]
15. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche. [R13-2068R 3.4.1.]
16. **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; R30-06100033-2012 MM04 3.5.1.; R13-2068R 3.5.1.]
17. 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.; R30-06100033-2012 MM04 3.5.2.; R13-2068R 3.5.2.]

Permit Shield

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

13. **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.; R30-06100033-2012 MM04 3.4.1.; R13-2068R 4.2.1.]

**Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment identified with an asterisk in Section 1.1., the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. [R30-06100033-2012 MM04 3.4.6.; R13-2068R 4.2.2.]

**Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment identified with an asterisk 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. [R30-06100033-2012 MM04 3.4.7.; R13-2068R 4.2.3.]

14. **New applicable requirements.** The permittee is responsible for notifying the Secretary and submitting an appropriate compliance schedule. [45CSR§30-4.3.h.1.B.; R30-06100033-2012 MM04 3.5.9.]

15. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche. [45CSR§30-5.1.c.2.B.; R30-06100033-2012 MM04 3.4.2.; R13-2068R 3.4.1.]

16. **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; R30-06100033-2012 MM04 3.5.1.; R13-2068R 3.5.1.]

17. 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.; R30-06100033-2012 MM04 3.5.2.; R13-2068R 3.5.2.]

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

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

## 20. Facility-Wide Applicable Requirements

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).

18. Except in the case of the electronic submittal requirement in 3.5.5, 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

[R30-06100033-2012 MM04 3.5.3.; R13-2068R 3.5.3.]

19. **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.; R30-06100033-2012 MM04 3.5.4.]
20. In accordance with 45CSR30 – Operating Permit Program, 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. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative. [R13-2068R 3.5.4.1.]
21. **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 submitted to USEPA shall be forwarded by e-mail only to: 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.; R30-06100033-2012 MM04 3.5.5.]
22. **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.; R30-06100033-2012 MM04 3.5.6.]

Permit Shield

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

18. Except in the case of the electronic submittal requirement in 3.5.5, 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  
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1650 Arch Street  
Philadelphia, PA 19103-2029

[R30-06100033-2012 MM04 3.5.3.; R13-2068R 3.5.3.]

19. **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.; R30-06100033-2012 MM04 3.5.4.]
20. In accordance with 45CSR30 – Operating Permit Program, 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. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative. [R13-2068R 3.5.4.1.]
21. **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 submitted to USEPA shall be forwarded by e-mail only to: 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.; R30-06100033-2012 MM04 3.5.5.]
22. **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.; R30-06100033-2012 MM04 3.5.6.]

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

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

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

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

**23. 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 Director 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.] [R30-06100033-2012 MM04 3.5.8.]

Permit Shield

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

**23. 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 Director 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.] [R30-06100033-2012 MM04 3.5.8.]

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

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



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

Permit Number	Date of Issuance	Permit Condition Number
R13-0757		
R13-2068	12/31/1996	
R13-2068A	10/30/1998	
R13-2068B	07/28/1999	
R13-2068C	03/05/2001	
R13-2068D	03/21/2001	
R13-2068E	05/13/2004	
R13-2068F	06/28/2005	
R13-2068G	11/08/2005	
R13-2068H	03/13/2006	
R13-2068I	05/24/2007	
R13-2068J	06/13/2007	
R13-2068K	01/05/2010	
R13-2068M	11/03/2010	
R13-2269	12/03/1998	
R13-2269A	12/18/1998	
R13-2269B	11/20/2000	
R13-2269C	03/05/2001	
R13-2269D	03/21/2001	
R30-0610033-1996	07/09/2001	
R30-0610033-1996 MM01	03/11/2005	
R30-0610033-1996 MM02	03/17/2006	
R30-0610033-2006	12/12/2006	
R30-0610033-2006 MM01	11/27/2007	
R30-0610033-2006 SM01	03/30/2010	



**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)	82.6
Nitrogen Oxides (NO <sub>x</sub> )	64.6
Lead (Pb)	
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	76.83
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	76.83
Total Particulate Matter (TSP)	76.83
Sulfur Dioxide (SO <sub>2</sub> )	0.6
Volatile Organic Compounds (VOC)	141.7
<b>Hazardous Air Pollutants<sup>2</sup></b>	<b>Potential Emissions</b>
Total HAPs	9.4 of any single HAP or 24.4 of any combination of HAPs
<b>Regulated Pollutants other than Criteria and HAP</b>	<b>Potential Emissions</b>

<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 checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO <sub>2</sub> lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input checked="" type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input 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.  Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:  _____  _____  _____  _____  _____  _____  _____

<b>24. Insignificant Activities (Check all that apply)</b>	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input checked="" type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input 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 checked="" 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 checked="" type="checkbox"/>	40. Ozone generators.

<b>24. Insignificant Activities (Check all that apply)</b>	
<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 checked="" type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input checked="" type="checkbox"/>	52. Steam leaks.
<input checked="" type="checkbox"/>	53. Steam sterilizers.
<input checked="" type="checkbox"/>	54. Steam vents and safety relief valves.
<input checked="" type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input checked="" type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input checked="" type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input checked="" type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

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

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

**Section 6: Certification of Information**

<p><b>28. Certification of Truth, Accuracy and Completeness and Certification of Compliance</b></p> <p><i>Note: This Certification must be signed by a responsible official. The <b>original</b>, signed in <b>blue ink</b>, must be submitted with the application. Applications without an <b>original</b> signed certification will be considered as incomplete.</i></p>	
<p><b>a. Certification of Truth, Accuracy and Completeness</b></p> <p>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.</p>	
<p><b>b. Compliance Certification</b></p> <p>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.</p>	
<p><b>Responsible official (type or print)</b></p>	
<p>Name: John Sylvester</p>	<p>Title: Head of Manufacturing Operations - Morgantown</p>
<p><b>Responsible official's signature:</b></p>	
<p>Signature: </p>	<p>Signature Date: <u>07.07.2016</u></p>
<p><small>(Must be signed and dated in blue ink)</small></p>	

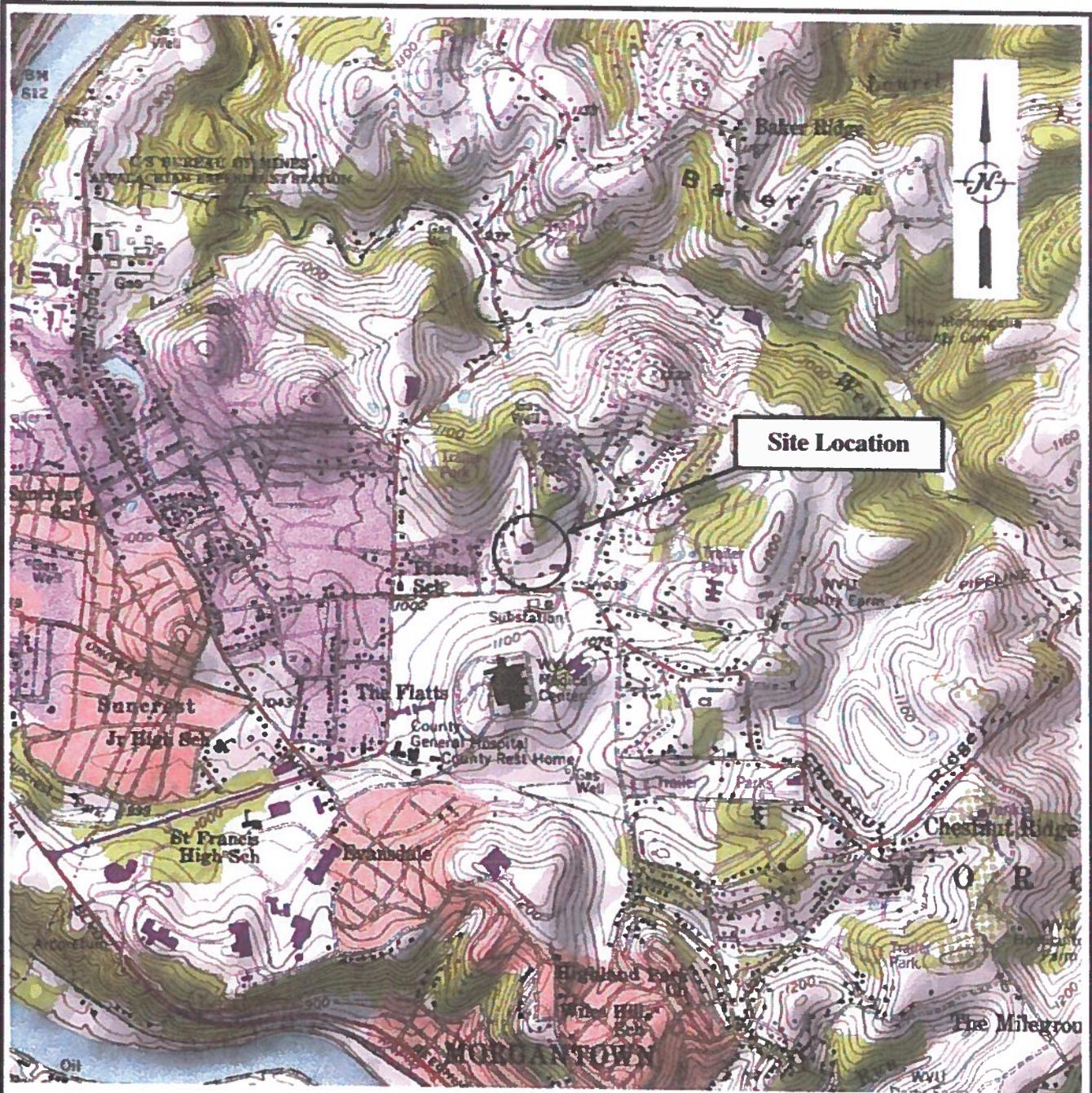
<p><b>Note: Please check all applicable attachments included with this permit application:</b></p>	
<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input 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 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 <http://www.wvdep.org/www.dep.wv.gov/dag>, requested by phone (304) 926-0475, and/or obtained through the mail.*

APPLICATION FOR  
TITLE V PERMIT RENEWAL

**Attachment A**

MYLAN PHARMACEUTICALS, INC.  
PLANT ID# 061-00033  
MORGANTOWN, WEST VIRGINIA



Reference:  
 3-D TopoQuads © DeLorme,  
 Yarmouth, Me 04096  
 Source Data:  
 7.5 Minute USGS  
 Topographic Quadrangle

Morgantown North, WV

## Vicinity Map

Scale 1" = 2000'

## Mylan Pharmaceuticals

Air Permit Application

APPLICATION FOR  
TITLE V PERMIT REVISION

**Attachment B**

MYLAN PHARMACEUTICALS, INC.  
PLANT ID# 061-00033  
MORGANTOWN, WEST VIRGINIA

Attachment B - Plot Plan

Mylan Pharmaceuticals, Inc.

Chestnut Ridge Road Facility

Plant ID: 031-00066



Drawing created on 07/06/2016

WV NET

APPLICATION FOR  
TITLE V PERMIT RENEWAL

**Attachment C**

MYLAN PHARMACEUTICALS, INC.  
PLANT ID# 061-00033  
MORGANTOWN, WEST VIRGINIA

**Claim of Confidentiality Cover Document**

Mylan Pharmaceuticals is hereby submitting this Claim of Confidentiality Cover Document pursuant to 45 CSR 31-3.3.b.

Company Name	Mylan Pharmaceuticals Inc.	Responsible Official	John Sylvester	
Company Address	PO Box 4310	Confidential Information Designee in State of WV	Name	Craig Travis
	Morgantown, WV		Title	Senior Director, Global Environmental Compliance
	26504-4310		Address	PO Box 4310
Person/Title Submitting Confidential Information	Eric Hunsberger			Morgantown, WV 26504-4310
	Senior Manager, NA Environmental Compliance		Phone	304-599-2595
			Fax	304-598-5471

Reason for Submittal of Confidential Information:
Renewal Application for Rule 30 / Title V Operating Permit

Identification of Confidential Information	Rationale for Confidential Claim	Confidential Treatment Time Period
PFD – General Process Flow Diagram (Entire Diagram)	Business Confidential/Trade Secret Data is contained on the PFDs – Process Flow Diagrams, which would cause substantial harm to the business’s competitive position if disclosed (per 45 CSR 31, Section 4.1.e.1.) due to the manufacturing flow process details contained on the PFD. The information on the PFD qualifies for confidentiality protection from disclosure in accordance with the provisions of 45 CSR 31, Sections 4.1.a. through 4.1.e.	Permanently for all Claimed Confidential.

Responsible Official Signature:	
Responsible Official Title:	Head of Manufacturing Operations - Morgantown
Date Signed:	07.07.2016

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

**Redacted Copy - Claim of Confidentiality  
July 2016**

MYLAN PHARMACEUTICALS, INC.  
CHESTNUT RIDGE ROAD PLANT  
MORGANTOWN, WV

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45CSR30 PERMIT RENEWAL APPLICATION  
ATTACHMENT C

GENERAL PROCESS FLOW DIAGRAM

JULY 2016

APPLICATION FOR  
TITLE V PERMIT RENEWAL

**Attachment D**

MYLAN PHARMACEUTICALS, INC.  
PLANT ID# 061-00033  
MORGANTOWN, WEST VIRGINIA

**ATTACHMENT D - Title V Equipment Table**  
(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
1	None	1	Boiler 3: Natural gas boiler	6.27 MMBtu/hr	1987
2	None	2	Boiler 4: Natural gas boiler	1.5 MMBtu/hr	1987
3	None	3	Boiler 5: Natural gas boiler	6.00 MMBtu/hr	1991
4	None	4	Boiler 2: Natural gas boiler	1.18 MMBtu/hr	1974
6	None	6	Boiler 1: Natural gas boiler	3.34 MMBtu/hr	1968
7	None	7	Boiler 7: Natural gas boiler	6.99 MMBtu/hr	1997
8	None	8	Boiler 8: Natural gas boiler	6.99 MMBtu/hr	1997
9	None	9	Boiler 11: Natural gas boiler	2.07 MMBtu/hr	2000
9	None	009A	Boiler 12: Natural gas boiler	2.07 MMBtu/hr	2000
10	None	10	Boiler 15: Natural gas boiler	7 MMBtu/hr	2004
11	None	11	Boiler 2343: Natural gas boiler	21.0 MMBtu/hr	2005
12	None	12	Boiler 2344: Natural gas boiler	21.0 MMBtu/hr	2005
13	None	13	Boiler 2345: Natural gas boiler	21.0 MMBtu/hr	2005
14	None	14	Boiler 2674: Natural gas boiler	0.65 MMBtu/hr	2005
15	None	15	Boiler 2675: Natural gas boiler	0.65 MMBtu/hr	2005
210	CC EF169	210	Coating Pan 169	500 lb/load	1985
215	CC EF1390	215	Coating Pan 1390	750 lb/load	1999
220	CC EF186	220	Coating Pan 186	500 lb/load	1986
230	CC EF217	230	Coating Pan 217	500 lb/load	1987
240	CC EF99	240	Coating Pan 99	500 lb/load	1983
241	CC EF 4553	241	Coating Pan 4549	750 lb/load	2009
242	CC EF4101	242	Coating Pan 4027	245 lb/load	2008
243	CC EF4164	243	Coating Pan 3853	750 lbs/load	2008
244; 10008085	CC EF7674; RTO	244	Coating Pan 7552	750 lb/load	2010
245; 10008085	CC 8422; RTO	245	Coating Pan 8421	750 lb/load	2010
246; 10008085	CC 23583; RTO	246	Coating Pan 23581	750 lbs/load	2015
260; 10008085	RTO	260	Oven 19	Varies	Prior to 1973
261; 10008085	RTO	261	Oven 18	Varies	Prior to 1973
264; 10008085	RTO	264	Oven 0021	Electric, Load Varies	2013
1911; 10008085	RTO	1911	Coating Line 1911	10.77 lb/hr	2014
280	Rotoclone 4	Rooms 74-101 - 74-122, 74-129	Room General Exhaust	Varies	1992 (Rotoclone)

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
281	Rotoclone 3	Rooms 74-151, 74-153, 91-129, 91-130, 91-132, 91-134 – 91-137, 91-139, 91-229, 91-230, 91-232, 91-329, 91-330, 91-332, 91-334 – 91-337	Room General Exhaust	Varies	1991 (Rotoclone)
282	Rotoclone 3798	Rooms 74-150, 74-152, 74-154, 74-159, 74-160, 74-161, 74-162, 74-212, 91-232, 91-233	Room General Exhaust	Varies	2013
283	Rotoclone 2	Rooms 74-205 – 74-209, 99-217 – 99-219	Room General Exhaust	Varies	1982 (Rotoclone)
287	Rotoclone 6	Rooms BL209, BL211, BL214, BL304, BL306, BL307, BL309-BL314, BL316, BL402 – BL404, BL406-BL414, BL416	Room General Exhaust	Varies	1996
288	Rotoclone 5	Rooms BB101-BB103, BB106, BB108-BB111, BB113-BB118, BB201-BB203, BB206-BB208, BB210-BB217, BB303, BB312	Room General Exhaust	Varies	1996
291	Rotoclone 7	Rooms 85-205A – 85-208A, 99-105, 99-114 – 99-122, 99-209, ORG201A – ORG204A	Room General Exhaust	Varies	1999
294	Rotoclone 9	Rooms BB112, 85-106, 85-108, 85-114, 85-115, 85-102, 85-104, 85-107, 85-110	Room General Exhaust	Varies	2003
295	Rotoclone 10	Rooms BL218, BL219	Room General Exhaust	Varies	2004
296	Rotoclone 2317	Rooms NEX140, NEX142, NEX144, NEX146, NEX159 - NEX162	Room General Exhaust	Varies	2005
297	Rotoclone 2318	Rooms NEX139, NEX141, NEX143, NEX145, NEX152 - NEX158, NEX163, NEX164	Room General Exhaust	Varies	2005

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
298	Rotoclone 2319	Rooms NEX131 - NEX136, NEX138, NEX147, NEX148	Room General Exhaust	Varies	2005
299	Rotoclone 2320	Rooms NEX175, NEX177, NEX179, NEX181, NEX183	Room General Exhaust	Varies	2005
300	Rotoclone 2321	Rooms NEX176, NEX178, NEX180, NEX182, NEX186 - NEX189	Room General Exhaust	Varies	2005
305	Rotoclone 2322	Rooms NEX231, NEX232, NEX234, NEX275-NEX283, NEX286-NEX289	Room General Exhaust	Varies	2005
306	Rotoclone 2323	Rooms NEX211A-217A	Room General Exhaust	Varies	2005
307	Rotoclone 2324	Rooms NEX372, NEX374, NEX376, NEX378, NEX380	Room General Exhaust	Varies	2005
308	Rotoclone 2325	Rooms NEX349, NEX362, NEX364, NEX366, NEX368, NEX369	Room General Exhaust	Varies	2005
309	Rotoclone 2326	Rooms NEX346, NEX355, NEX357, NEX359 - NEX361	Room General Exhaust	Varies	2005
310	Rotoclone 2327	Rooms NEX375, NEX377, NEX379, NEX381	Room General Exhaust	Varies	2005
311	Rotoclone 2328	Rooms NEX216A, NEX217A, NEX535-NEX538	Room General Exhaust	Varies	2005
312	Rotoclone 2329	Rooms NEX321 - NEX330, NEX421 - NEX430	Room General Exhaust	Varies	2005
313	Rotoclone 2330	Rooms NEX303, NEX405 - NEX412	Room General Exhaust	Varies	2005
314	Rotoclone 2331	Rooms NEX468, NEX469, NEX472 - NEX480	Room General Exhaust	Varies	2005
315	Rotoclone 2332	Rooms NEX435 - NEX438, NEX413 - NEX416, NEX419	Room General Exhaust	Varies	2005
316	Rotoclone 2333	Rooms NEX464 - NEX467, NEX481, NEX482, NEX484 - NEX492	Room General Exhaust	Varies	2005
317	Rotoclone 2334	Rooms NEX305-NEX312, NEX316	Room General Exhaust	Varies	2005

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
318	Rotoclone 2335	Rooms NEX445B, NEX445C, NEC445D, NEX445E, NEX445F, NEX445G	Room General Exhaust	Varies	2005
319	Rotoclone 2336	Rooms NEX514, NEX516A-D, NEX522 - NEX524, NEX526, NEX528, NEX530, NEX535 - NEX538	Room General Exhaust	Varies	2005
320	Rotoclone 2337	Rooms NEX503, NEX505, NEX507, NEX509, NEX511, NEX513	Room General Exhaust	Varies	2005
321	Rotoclone 2338	Rooms NEX506, NEX508, NEX510, NEX512, NEX515	Room General Exhaust	Varies	2005
322	CC 17034	Rooms 74-174, 74-175, 74-176, 74-177, 74-179, 74-179A, 74-180, 74-180A	Room General Exhaust	Varies	2012
323	CC 100023125	Rooms 87-103 to 87-117	Room General Exhaust	Varies	2014
533	CC EF527	533	Fluid Bed 527	Up to 575 Kg/Load	1991
534; 10008085	CCEF473; RTO	534	Fluid Bed 473	Up to 250 Kg/Load	1997
535	CC EF1339	535	Fluid Bed 1339	Up to 575 Kg/Load	1997
536	CC EF1222	536	Fluid Bed 1222	Up to 250 Kg/Load	1997
537	CC EF1552	537	Fluid Bed 1552	Up to 575 Kg/Load	1997
538; 10008085	CC EF1855; RTO	538	Fluid Bed 1855	Up to 250 Kg/Load	2002
571	CC EF2113	571	Fluid Bed 2113	Up to 575 Kg/Load	2004
572; 10008085	CC EF2181; RTO	572	Fluid Bed 2181	Up to 250 Kg/Load	2004
573; 10008538	CC 3340; Absorber	573	Fluid Bed 2811	Up to 575 Kg/Load	2006
574; 10008085	CC 3416; RTO	574	Fluid Bed 3287	Up to 250 Kg/Load	2006
575; 10008085	CC 3643; RTO	575	Fluid Bed 3620	Up to 250 Kg/Load	2007
576; 10008085	CC 3407; RTO	576	Fluid Bed 3426	Up to 575 Kg/Load	2007

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
577; 10008085	CC 3881; RTO	577	Fluid Bed 3704	Up to 250 Kg/Load	2008
578; 10008085	CC 3879; RTO	578	Fluid Bed 3705	Up to 575 Kg/Load	2008
579; 10008538	CC 4287; Absorber	579	Fluid Bed 4001	Up to 575 Kg/Load	2008
580; 10008085	CC 10007482; RTO	580	Fluid Bed 7560	Up to 575 Kg/Load	2010
581	CC 15982	581	Fluid Bed 15982	Up to 250 Kg/Load	2011
582	CC 16117	582	Fluid Bed 16117	Up to 575 Kg/Load	2011
10008085	None	10008085	Regenerative Thermal Oxidation	16.0 mmBtu/hr 3,070 lbs/hr	2010
10008538	None	10008538	Absorber	4,000 cfm	2010
10007530	None	10007530	Kohler 100 REZG Natural Gas Fired Emergency Generator	162 bhp/1,800 rpm	2010
10008594	None	10008594	Kohler 100 REZG Natural Gas Fired Emergency Generator	162 bhp/1,800 rpm	2011
1053	None	1053	750 kW Detroit Diesel/MTU Emergency Generator	1,066 bhp/1800 rpm	2011
1053	None	1053	Diesel Fuel Tank	2,100 gallons	2011
301	None	301	IPA Storage Tank #1	8,324 gallons	1978
302	None	302	IPA Storage Tank #2	8,324 gallons	1978
303	None	303	Ethanol Storage Tank #1	8,324 gallons	2010
304	None	304	Ethanol Storage Tank #2	8,324 gallons	2010
N/A	None	N/A	Acetone Storage Tank #1	8,324 gallons	2010
N/A	None	N/A	Acetone Storage Tank #2	8,324 gallons	2010
305	None	305	IPA Storage Tank #3	8,348 gallons	2015
306	None	306	IPA Storage Tank #4	8,348 gallons	2015
N/A	None	N/A	Various Laboratory Equipment and Exhaust Hoods	N/A	Varies
N/A	None	N/A	Weighing, Compounding and Formulating equipment in production rooms that do not vent outside a production building	Varies	Varies
N/A	None	N/A	Class I or Class II CFC-containing Equipment Subject to 40 CFR Part 82 Subpart F	Varies	Varies

<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.

APPLICATION FOR  
TITLE V PERMIT RENEWAL

**Attachment E**

MYLAN PHARMACEUTICALS, INC.  
PLANT ID# 061-00033  
MORGANTOWN, WEST VIRGINIA

## ATTACHMENT E - Emission Unit Form

***Emission Unit Description***

<b>Emission unit ID number:</b> 007, 008, 010  Each boiler is identical and has identical requirements	<b>Emission unit name:</b> Boiler 7, Boiler 8, Boiler 15	<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.):**  
 Boiler 007, 008 and 010 are water tube boilers manufactured by Bryan Boilers with design capacities of approximately 7,000,000 BTU/hr each. Boilers 007, 008 and 010 use natural gas to generate steam for plant humidification, process heat, hot water for space heater, and other energy demands as necessary.

<b>Manufacturer:</b> Bryan Boilers	<b>Model number:</b> Boiler 7: RV700-S-15-FDG Boiler 8: RV700-S-15-FDG Boiler 15: RV700-S-15-FDG	<b>Serial number:</b> Boiler 7: 78399 Boiler 8: 78393 Boiler 15: 91245
---------------------------------------	---	---

<b>Construction date:</b>	<b>Installation date:</b> Boiler 7: 1997 Boiler 8: 1997 Boiler 15: 2004	<b>Modification date(s):</b>
---------------------------	--	------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 7 MMBTU/hr per boiler

<b>Maximum Hourly Throughput:</b> 7,000 cubic feet natural gas per hour per boiler	<b>Maximum Annual Throughput:</b> 61,320,000 cubic feet natural gas per year per boiler	<b>Maximum Operating Schedule:</b> 24 hours/day, 7 days/week, 52 weeks/year
---	--	--

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

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

<b>Maximum design heat input and/or maximum horsepower rating:</b> 7,000,000 BTU/hr per boiler	<b>Type and Btu/hr rating of burners:</b> Webster natural gas burning
---	--

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**  
 Natural Gas: 7,000 cubic feet/hour per boiler; 61,320,000 cubic feet/year per boiler  
 No secondary fuel

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	N/A	N/A	1,020 BTU/scf

***Emissions Data***

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.59 each	2.58 each
Nitrogen Oxides (NO <sub>x</sub> )	0.70 each	3.07 each
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )	0.10 each	0.30 each
Particulate Matter (PM <sub>10</sub> )	0.10 each	0.30 each
Total Particulate Matter (TSP)	0.10 each	0.30 each
Sulfur Dioxide (SO <sub>2</sub> )	0.10 each	0.10 each
Volatile Organic Compounds (VOC)	0.10 each	0.20 each
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Trace amounts from natural gas combustion		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Potential emissions derived from AP-42 Emission Factors, Fifth Edition, Volume I, Chapter I, Section 4: Natural Gas Combustion (7/98).</p> <p>Emissions listed in Permit R13-2068R</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.**

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six-minute block average. [45CSR§2-3.1; R13-2068R 5.1.1.; R30-06100033-2012 MM04 4.1.1]

Compliance with the visible emission requirements of 45CSR2, subsection 3.1 (4.1.1.), shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 4.1.1. Continuous opacity monitors shall not be required on fuel burning units, which employ wet scrubbing systems for emission control. [45CSR§2-3.2; R13-2068R 5.1.2.; R30-06100033-2012 MM04 4.1.2.]

The maximum amount of natural gas to be burned by a single boiler (Emission Unit ID's 007, 008, 010) shall not exceed 7,000 ft<sup>3</sup>/hr or 61,320,000 ft<sup>3</sup>/yr. [R13-2068R 5.1.9.; R30-06100033-2012 MM04 4.1.3.]

Maximum emissions from each boiler (007, 008, 010) shall not exceed the following limits identified in the Emissions Data above. These values were based on the design of 7 MMBTU/hr. [R13-2068R 5.1.5, 5.1.6, 5.1.7.; R30-06100033-2012 MM04 4.1.4.]

Permit Shield

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

The facility shall monitor the amount of natural gas used and the hours of operation for Boilers 007, 008, 010, 011, 012, and 013 on a monthly and yearly basis. To demonstrate compliance with the emission limits and natural gas usage limits, the permittee shall record for each boiler the monthly hours of operation, and the monthly fuel consumption. [45CSR16, 40 C.F.R. § 60.48c(g) (Subpart Dc); R13-2068R 5.2.2., 5.2.3., 5.4.1.; R30-06100033-2012 MM04 4.2.1.]

At such reasonable times as the Director may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with the opacity standards of 45CSR§2-3.1. Method 9 shall be conducted in accordance with 40 C.F.R. 60, Appendix A. [R13-2068R 5.2.1.; R30-06100033-2012 MM04 4.2.2.]

A record of each visible emission check shall be maintained on site for five (5) years from the record creation date. Such record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. [R13-2068R 5.4.2.; R30-06100033-2012 MM04 4.4.1.]

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> 011, 012, 013 Each boiler is identical and has identical requirements	<b>Emission unit name:</b> Boiler 2343, Boiler 2344, Boiler 2345	<b>List any control devices associated with this emission unit:</b> None
---	---	---

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
 Boilers 2343, 2344, and 2345 are water tube boilers manufactured by Bryan Boilers with design capacities of 21,000,000 BTU/hr each. Boilers 2343, 2344, and 2345 use natural gas to generate steam for plant humidification, process heat, hot water for space heater, and other energy demands as necessary.

<b>Manufacturer:</b> Bryan Boilers	<b>Model number:</b> Boiler 2343: RW-2100-S-150/15-FDG-LX Boiler 2344: RW-2100-S-150/15-FDG-LX Boiler 2345: RW-2100-S-150/15-FDG-LX	<b>Serial number:</b> Boiler 2343: 03218 Boiler 2344: 93171 Boiler 2345: 93323
---------------------------------------	--	---

<b>Construction date:</b>	<b>Installation date:</b> Boiler 2343: 2005 Boiler 2344: 2005 Boiler 2345: 2005	<b>Modification date(s):</b>
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 21 MM BTU/hr per boiler

<b>Maximum Hourly Throughput:</b> 20,590 cubic feet natural gas per hour per boiler	<b>Maximum Annual Throughput:</b> 180.4 million cubic feet natural gas per year per boiler	<b>Maximum Operating Schedule:</b> 24 hours/day, 7 days/week, 52 weeks/year
--	---	--

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

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

<b>Maximum design heat input and/or maximum horsepower rating:</b> 21,000,000 BTU/hr per boiler	<b>Type and Btu/hr rating of burners:</b> Webster low NOx natural gas burner
--	---

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

Natural Gas: 20,590 cubic feet/hour per boiler; 180.4 million cubic feet/year per boiler  
 No secondary fuel

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	N/A	N/A	1,020 BTU/scf

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.07 each	17.84 each
Nitrogen Oxides (NO <sub>x</sub> )	2.06 each	9.02 each
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )	0.20 each	0.86 each
Particulate Matter (PM <sub>10</sub> )	0.20 each	0.86 each
Total Particulate Matter (TSP)	0.20 each	0.86 each
Sulfur Dioxide (SO <sub>2</sub> )	0.02 each	0.05 each
Volatile Organic Compounds (VOC)	0.21 each	0.92 each
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Trace amounts from natural gas combustion		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Potential emissions derived from AP-42 Emission Factors, Fifth Edition, Volume I, Chapter I, Section 4: Natural Gas Combustion (7/98).</p> <p>Emissions listed in Permit R13-2068R</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.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six-minute block average. [45CSR§2-3.1; R13-2068R 5.1.1.; R30-06100033-2012 MM04 4.1.1]

Compliance with the visible emission requirements of 45CSR2, subsection 3.1 (4.1.1.), shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 4.1.1. Continuous opacity monitors shall not be required on fuel burning units, which employ wet scrubbing systems for emission control. [45CSR§2-3.2; R13-2068R 5.1.2.; R30-06100033-2012 MM04 4.1.2.]

The three (3) Bryan Steam Corporation boilers (Emission Unit ID's 011, 012, & 013) shall combust only natural gas fuel. The maximum amount of natural gas consumed by each boiler shall not exceed 20,590 ft<sup>3</sup>/hr and 180.4 million ft<sup>3</sup>/yr. [R13-2068R 5.1.10; R30-06100033-2012 MM04 4.1.5.]

Each of the three (3) 21.0 MMBtu/hr Bryan Steam Corporation boilers (Emission Unit ID's 011, 012, & 013) shall not exceed the emission rates identified in the Emissions Data above. These values were based on the design of 21 MMBTU/hr. [45CSR§2-4.1.b., 45CSR§10-3.3.f.; R13-2068R 5.1.3, 5.1.4., 5.1.8.; R30-06100033-2012 MM04 4.1.6.]

Permit Shield

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

The facility shall monitor the amount of natural gas used and the hours of operation for Boilers 007, 008, 010, 011, 012, and 013 on a monthly and yearly basis. To demonstrate compliance with the emission limits and natural gas usage limits, the permittee shall record for each boiler the monthly hours of operation, and the monthly fuel consumption. [45CSR16, 40 C.F.R. § 60.48c(g) (Subpart Dc); R13-2068R 5.2.2., 5.2.3., 5.4.1.; R30-06100033-2012 MM04 4.2.1.]

At such reasonable times as the Director may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with the opacity standards of 45CSR§2-3.1. Method 9 shall be conducted in accordance with 40 C.F.R. 60, Appendix A. [R13-2068R 5.2.1.; R30-06100033-2012 MM04 4.2.2.]

A record of each visible emission check shall be maintained on site for five (5) years from the record creation date. Such record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. [R13-2068R 5.4.2.; R30-06100033-2012 MM04 4.4.1.]

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**

Note: Only a summary table was provided for the listed boilers due to their small design capacities. Each listed boiler burns only natural gas.

**Table E.1. Other Boiler Units**

Emission Point ID	Emission Unit ID	Emission Unit Description	Fuel Type	Design Capacity	Manufacturer	Model Number	Serial Number	Year Installed
001	001	Boiler	Natural Gas	6.27 MMBtu/hr	Cleaver Brooks	CB.700-150	L-83187	1987
002	002	Boiler	Natural Gas	1.5 MMBtu/hr	Bryan	CL-150S-15-FDG	63579	1987
003	003	Boiler	Natural Gas	6.00 MMBtu/hr	Bryan	RV600-S-15-FDG	70831	1991
004	004	Boiler	Natural Gas	1.18 MMBtu/hr	Cleaver Brooks	CB700-100	I-58293	1974
006	006	Boiler	Natural Gas	3.34 MMBtu/hr	Carrier Air Conditioning Co.	None	6538105 X	1968
009	009	Boiler	Natural Gas	2.07 MMBtu/hr	Bryan	HECL 210-W-FDG-LH	83916	1999
009	009A	Boiler	Natural Gas	2.07 MMBtu/hr	Bryan	HECL 210-W-FDG	83923	1999
014	014	Boiler	Natural Gas	0.65 MMBtu/hr	Bryan	DR650-WT-FDG-335-AV-PH-IN	93037	2005
015	015	Boiler	Natural Gas	0.65 MMBtu/hr	Bryan	DR650-WT-FDG-335-AV-PH-IN	93038	2005

The following includes combined emissions from all units listed in Table E.1

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		8.73
Nitrogen Oxides (NO <sub>x</sub> )		10.39
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		0.79
Particulate Matter (PM <sub>10</sub> )		0.79
Total Particulate Matter (TSP)		0.79
Sulfur Dioxide (SO <sub>2</sub> )		0.062
Volatile Organic Compounds (VOC)		0.57
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Trace amounts from natural gas combustion		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Potential emissions derived from AP-42 Emission Factors, Fifth Edition, Volume I, Chapter I, Section 4: Natural Gas Combustion (7/98).</p> <p>Emissions based on combined maximum design capacities for all boilers listed in Table E.1.</p>		

## ATTACHMENT E - Emission Unit Form

***Emission Unit Description***

<p><b>Emission unit ID number:</b> 210, 220, 230, 240, 243 Each coating pan is similar and has similar requirements</p>	<p><b>Emission unit name:</b> Coating Pan 169, Coating Pan 186, Coating Pan 217, Coating Pan 99, Coating Pan 3853</p>	<p><b>List any control devices associated with this emission unit:</b> Coating Pan 169: Cartridge Collector EF169, Coating Pan 186: Cartridge Collector EF186, Coating Pan 217: Cartridge Collector EF217, Coating Pan 99: Cartridge Collector EF99, Coating Pan 3853: Cartridge Collector 4164</p>
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
For various products, the tablets may be coated with aqueous-based coating mixture in a rotary tumbler (coating pan) equipped with spray nozzles. Each coating pan uses heat to flash off the aqueous solvent. PM emissions from each coating pan are controlled by a cartridge collector.

<p><b>Manufacturer:</b> O'Hara Technologies and Thomas Engineering Inc.</p>	<p><b>Model number:</b> Varies</p>	<p><b>Serial number:</b> Varies</p>
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<p><b>Construction date:</b></p>	<p><b>Installation date:</b> Coating Pan 169: 1985 Coating Pan 186: 1986 Coating Pan 217: 1987 Coating Pan 99: 1983 Coating Pan 3853: 2008</p>	<p><b>Modification date(s):</b></p>
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 500 lbs/load per coating pan (169, 186, 217, 99) and 750 lbs/load per coating pan (3853)

<p><b>Maximum Hourly Throughput:</b> Varies</p>	<p><b>Maximum Annual Throughput:</b> Varies</p>	<p><b>Maximum Operating Schedule:</b> 24 hours/day, 5 days/week, 50 weeks/year</p>
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***Fuel Usage Data (fill out all applicable fields)***

<p><b>Does this emission unit combust fuel?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><b>If yes, is it?</b> <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired</p>
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<p><b>Maximum design heat input and/or maximum horsepower rating:</b> n/a</p>	<p><b>Type and Btu/hr rating of burners:</b> n/a</p>
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**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**  
n/a

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

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

<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> )	0.4 pph each (169, 186, 217, 99); 0.9 pph (3853)	1.2 tpy each (169, 186, 217, 99); 2.7 tpy (3853)	
Particulate Matter (PM <sub>10</sub> )	0.4 pph each (169, 186, 217, 99); 0.9 pph (3853)	1.2 tpy each (169, 186, 217, 99); 2.7 tpy (3853)	
Total Particulate Matter (TSP)	0.4 pph each (169, 186, 217, 99); 0.9 pph (3853)	1.2 tpy each (169, 186, 217, 99); 2.7 tpy (3853)	
Sulfur Dioxide (SO <sub>2</sub> )			
Volatile Organic Compounds (VOC)			
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
None			
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	
n/a			
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Maximum annual material process throughput multiplied by emission factor based on filter study and control device efficiency.</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.**

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation, which is greater than twenty (20) percent opacity. [45CSR§7-3.1.; R13-2068R 8.1.1.; R30-06100033-2012 MM04 7.1.1.]

No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of 45CSR7. Based on the process weight rates for the Coating Pans (excluding Coating Pans 1390, 4549, 4027, 3853, 7552, 8421 and 23581; Emission Unit ID No. 215, 241, 242, 243, 244, 245 and 246), 333 pounds per hour each, the corresponding allowable particulate matter emission rate is 0.4 pounds per hour each. Based on the process weight rates for Coating Pans 3853 (Emission Unit ID 243), 750 pounds per hour, the corresponding allowable particulate matter emission rate is 0.9 pounds per hour. [45CSR§7-4.1.; R30-06100033-2012 MM04 7.1.2.]

The coating pans shall operate according to the following requirements: b. The annual aggregate dry material loading of all coating pans shall not exceed 11,000,000 pounds on a rolling yearly total basis. c. Cartridge collectors shall be used at all times on each coating pan to control particulate matter emissions. Each collector shall, at a minimum, achieve a collection efficiency of 95%. g. No HAP-containing solvents shall be processed in any coating pan. [R13-2068R 8.1.6.; R30-06100033-2012 MM04 7.1.6.]

Permit Shield

**Applicable Requirements (continued)**

**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.)**

Visible emissions monitoring shall be conducted initially at least once per month for all emission points subject to opacity limitations. After three consecutive monthly readings in which no visible emissions are observed from any of the subject emission points, those emission points will be allowed to conduct visible emissions checks once per calendar quarter. If visible emissions are observed during a quarterly monitoring from an emission point(s), then that emission point(s) with observed emissions or opacity shall be required to revert to monthly monitoring. Any emission point that has reverted to monthly monitoring shall be allowed to again conduct quarterly visible emissions checks only after three consecutive monthly readings in which no visible emissions are observed from the subject emission point.

These visible emission checks shall be conducted in accordance with 40 CFR 60, Appendix A, Method 22 during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct a 40 CFR 60, Appendix A, Method 9 evaluation within twenty four (24) hours. A Method 9 evaluation shall not be required if the visible emissions condition is corrected within twenty four (24) hours from the time the visible emission condition was identified and the unit is operated at normal operating conditions. [R13-2068R 8.2.1.; R30-06100033-2012 MM04 7.2.1.]

For the purposes of demonstrating compliance with the minimum cartridge collection efficiency as given under 7.1.6.c, the permittee shall: a. Install, maintain, and operate the cartridge collectors consistent with safety and good air pollution control practices for minimizing emissions, and shall follow all manufacture's recommendations concerning control device maintenance and performance. b. Conduct a weekly visual inspection of the cartridge, cartridge connections, and dust hoppers of each cartridge collector, in order to ensure proper operation of cartridge collectors. Records shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any. c. Either conduct representative performance testing, pursuant to the performance testing procedures as outlined under 3.3.1. of this permit, on the cartridge collectors to determine a minimum collection efficiency or produce a vendor guarantee stating that the cartridge collectors (or associated filters) will meet a minimum collection efficiency of 95%. [R13-2068R 8.2.2.; R30-06100033-2012 MM04 7.2.2.]

For the purposes of demonstrating compliance with maximum annual aggregate dry material loading set forth in 7.1.6.b., the permittee shall monitor and record the aggregate monthly and rolling twelve month total amount of dry material loaded into the coating pans. [R13-2068R 8.2.4.; R30-06100033-2012 MM04 7.2.4.]

Records of weekly inspections conducted on the cartridge collector shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any. [R13-2068R 8.4.1.; R30-06100033-2012 MM04 7.4.1.]

The permittee shall maintain a record of all solvents used in the coating pans and keep a copy of the associated MSDS/SDS to verify that the solvents did not contain any constituent HAPs. [R13-2068R 7.4.2.; R30-06100033-2012 MM04 7.4.2.]

**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*

**Emission unit ID number:**

215, 241, 242, 244, 245, 246

Each coating pan is similar and has similar requirements

**Emission unit name:**

Coating Pan 1390, Coating Pan 4549, Coating Pan 4027, Coating Pan 7552, Coating Pan 8421, Coating Pan 23581

**List any control devices associated with this emission unit:**

Coating Pan 1390: Cartridge Collector 1390, Coating Pan 4549: Cartridge Collector 4553, Coating Pan 4027: Cartridge Collector 4101, Coating Pan 7552: Cartridge Collector 7674 and RTO, Coating Pan 8421: Cartridge Collector 8421 and RTO, Coating Pan 23581: Cartridge Collector 23583 and RTO

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

For various products, the tablets may be coated with aqueous-based coating mixture or solvent-based coating in a rotary tumbler (coating pan) equipped with spray nozzles. Each coating pan uses heat to flash off the water / solvent. PM emissions from each coating pan are controlled by a cartridge collector. VOC emissions from Coating Pans 7552, 8421 and 23581 are controlled by an RTO and are also authorized to emit to atmosphere (R30-06100033-2012 MM04 and R13-2068R).

**Manufacturer:**

O'Hara Technologies and Thomas Engineering Inc.

**Model number:**

Varies

**Serial number:**

Varies

**Construction date:**
**Installation date:**

 Coating Pan 1390: 1999  
 Coating Pan 4549: 2009  
 Coating Pan 4027: 2008  
 Coating Pan 7552: 2010  
 Coating Pan 8421: 2010  
 Coating Pan 23581: 2015

**Modification date(s):**
**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 750 lbs/load per coating pan (1390, 4549, 7552, 8421, 23581) and 245 lbs/load (4027)

**Maximum Hourly Throughput:**

Varies

**Maximum Annual Throughput:**

Varies

**Maximum Operating Schedule:**

24 hours/day, 5 days/week, 50 weeks/year

**Fuel Usage Data (fill out all applicable fields)**
**Does this emission unit combust fuel?**  Yes  No

**If yes, is it?**
 Indirect Fired  Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

n/a

**Type and Btu/hr rating of burners:**

n/a

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

n/a

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

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

<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> )	0.84 each (215, 241, 244, 245, 246), 0.28 (242)	6.25 tpy total (215, 241, 242, 244, 245, 246)	
Particulate Matter (PM <sub>10</sub> )	0.84 each (215, 241, 244, 245, 246), 0.28 (242)	6.25 tpy total (215, 241, 242, 244, 245, 246)	
Total Particulate Matter (TSP)	0.84 each (215, 241, 244, 245, 246), 0.28 (242)	6.25 tpy total (215, 241, 242, 244, 245, 246)	
Sulfur Dioxide (SO <sub>2</sub> )			
Volatile Organic Compounds (VOC)	396.9 pph each or 7.94 pph each with RTO (244, 245, 246)	5 tpy total for all coating pans	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
None			
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	
n/a			
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Maximum annual material process throughput multiplied by emission factor based on filter study and control device efficiency.</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.**

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation, which is greater than twenty (20) percent opacity. [45CSR§7-3.1.; R13-2068R 8.1.1.; R30-06100033-2012 MM04 7.1.1.]

Particulate matter emissions from the Coating Pan, venting through a cartridge collector (Coating Pans 1390, 4549, 4027, 7552, 8421 and 23581; Emission Unit IDs 215, 241, 242, 244, 245, 246) at Emission Point ID No. 215, 241, 242, 244, 245, and 246 shall not exceed the emission rates identified in the Emissions Data above. [45CSR§7-4.1.; R13-2068R 8.1.3.; R30-06100033-2012 MM04 7.1.3.]

Maximum hourly volatile organic compound emissions to the atmosphere from the Coating Pans shall not exceed: a. 396.9 lb/hr for each coating pan unit if not venting exhaust to the RTO for the purpose of controlling VOC emissions. b. 7.94 lb/hr (as emitted from the RTO) each for Coating Pans 7552, 8421 and 23581 (Emission Unit IDs 244, 245 and 246) if venting exhaust to the RTO for the purpose of controlling VOC emissions. [R13-2068R 8.1.4.; R30-06100033-2012 MM04 7.1.4]

Maximum total combined annual volatile organic compound emissions to the atmosphere from the Coating Pans shall not exceed 5.0 tons/year. [R13-2068R 8.1.5.; R30-06100033-2012 MM04 7.1.5.]

The coating pans shall operate according to the following requirements: a. The aggregate dry material loading of each coating pan shall not exceed the following values: (1) Coating Pan 1390 (Emission Unit ID 215): 750 pound/load; (2) Coating Pan 4549 (Emission Unit ID 241): 750 pound/load; (3) Coating Pan 4027 (Emission Unit ID 242): 245 pound/load; (4) Coating Pan 7552 (Emission Unit ID 244): 750 pound/load; (5) Coating Pan 8421 (Emission Unit ID 245): 750 pound/load; and (6) Coating Pan 23581 (Emission Unit ID 246): 750 pound/load. b. The annual aggregate dry material loading of all coating pans shall not exceed 11,000,000 pounds on a rolling yearly total basis. c. Cartridge collectors shall be used at all times on each coating pan to control particulate matter emissions. Each collector shall, at a minimum, achieve a collection efficiency of 95%. d. The solvent spray rate processed in coating pans 4549, 4027, 7552, 8421 and 23581 (Emission Unit IDs 241, 242, 244, 245 and 246) shall not exceed 3,000 grams-VOC/minute in each coating pan. e. No VOC-containing solvents shall be processed in coating pan 1390 (Emission Unit ID 215). f. Coating Pans 7552, 8421 and 23581 (Emission Unit IDs 244, 245 and 246) shall have the capability of directing exhaust to the RTO for control of VOCs or emitting directly to atmosphere. g. No HAP-containing solvents shall be processed in any coating pan. [R13-2068R 8.1.6.; R30-06100033-2012 MM04 7.1.6.]

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.)**

Visible emissions monitoring shall be conducted initially at least once per month for all emission points subject to opacity limitations. After three consecutive monthly readings in which no visible emissions are observed from any of the subject emission points, those emission points will be allowed to conduct visible emissions checks once per calendar quarter. If visible emissions are observed during a quarterly monitoring from an emission point(s), then that emission point(s) with observed emissions or opacity shall be required to revert to monthly monitoring. Any emission point that has reverted to monthly monitoring shall be allowed to again conduct quarterly visible emissions checks only after three consecutive monthly readings in which no visible emissions are observed from the subject emission point.

These visible emission checks shall be conducted in accordance with 40 CFR 60, Appendix A, Method 22 during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct a 40 CFR 60, Appendix A, Method 9 evaluation within twenty four (24) hours. A Method 9 evaluation shall not be required if the visible emissions condition is corrected within twenty four (24) hours from the time the visible emission condition was identified and the unit is operated at normal operating conditions. [R13-2068R 8.2.1.; R30-06100033-2012 MM04 7.2.1.]

For the purposes of demonstrating compliance with the minimum cartridge collection efficiency as given under 7.1.6.c, the permittee shall: a. Install, maintain, and operate the cartridge collectors consistent with safety and good air pollution control practices for minimizing emissions, and shall follow all manufacturer's recommendations concerning control device maintenance and performance. b. Conduct a weekly visual inspection of the cartridge, cartridge connections, and dust hoppers of each cartridge collector, in order to ensure proper operation of cartridge collectors. Records shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any. c. Either conduct representative performance testing, pursuant to the performance testing procedures as outlined under 3.3.1. of this permit, on the cartridge collectors to determine a minimum collection efficiency or produce a vendor guarantee stating that the cartridge collectors (or associated filters) will meet a minimum collection efficiency of 95%. [R13-2068R 8.2.2.; R30-06100033-2012 MM04 7.2.2.]

For the purposes of demonstrating compliance with maximum dry material loading set forth in 7.1.6.a., the permittee shall monitor and record the total dry material per load for each coating pan. This requirement may be waived if the permittee is able to demonstrate that the maximum reasonable design capacity of each coating pan is equal or less than the maximum load given under 7.1.6.a. or if the permittee is able to demonstrate that the maximum loading based on product formulations is equal or less than the maximum load given under 7.1.6.a. [R13-2068R 8.2.3.; R30-06100033-2012 MM04 7.2.3.]

For the purposes of demonstrating compliance with maximum annual aggregate dry material loading set forth in 7.1.6.b., the permittee shall monitor and record the aggregate monthly and rolling twelve month total amount of dry material loaded into the coating pans. [R13-2068R 8.2.4.; R13-06100033-2012 MM04 7.2.4.]

**Applicable Requirements (continued)**

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. (continued)**

For the purposes of demonstrating compliance with maximum annual VOC emission limit set forth in 7.1.5, the permittee shall: a. Monitor and record the aggregate monthly and rolling twelve month total amount of VOCs in pounds used in each coating pan with the exception of Coating Pans 7552, 8421 and 23581 (Emission Unit IDs 244, 245 and 246). b. Monitor and record the aggregate monthly and rolling twelve month total amount of VOCs in pounds used in Coating Pans 7552, 8421 and 23581 (Emission Unit IDs 244, 245 and 246) when each coating pan is and is not venting exhaust to the RTO for the purpose of controlling VOCs. c. Calculate and record the monthly and rolling twelve month aggregate VOC emissions from all coating pans by summing the following: (1) The total amount of VOCs in pounds used in each coating pan with the exception of Coating Pans 7552, 8421 and 23581 (Emission Unit IDs 244, 245 and 246). (2) The total amount of VOCs in pounds used in Coating Pans 7552, 8421 and 23581 (Emission Unit IDs 244, 245 and 246) when not venting exhaust to the RTO for the purpose of controlling VOCs. (3) The total amount of VOCs used in Coating Pans 7552, 8421 and 23581 (Emission Unit IDs 244, 245 and 246) when venting exhaust to the RTO for the purpose of controlling VOCs. Based on compliance with Requirement 8.1.7 of this permit, the permittee may apply a VOC destruction efficiency of 98% to the amount of VOCs used in Coating Pans 7552, 8421 and 23581 (Emission Unit IDs 244, 245 and 246) when venting exhaust to the RTO for the purpose of controlling VOCs. [R13-2068R 8.2.5.; R30-0610033-2012 MM04]

Records of weekly inspections conducted on the cartridge collector shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any. [R13-2068R 8.4.1.; R30-0610033-2012 MM04 7.4.1.]

The permittee shall maintain a record of all solvents used in the coating pans and keep a copy of the associated MSDS/SDS to verify that the solvents did not contain any constituent HAPs. [R13-2068R 8.4.2.; R30-0610033-2012 MM04 7.4.2.]

**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**

**Emission unit ID number:**

533, 535, 537, 571, 573, 576, 578, 579, 580, 582

Each fluid bed is identical with identical requirements.

**Emission unit name:**

Fluid Bed 527, Fluid Bed 1339, Fluid Bed 1552, Fluid Bed 2113, Fluid Bed 2811, Fluid Bed 3426, Fluid Bed 3705, Fluid Bed 4001, Fluid Bed 7560, Fluid Bed 16117

**List any control devices associated with this emission unit:**

Fluid Bed 527: Cartridge Collector (CC) EF527; Fluid Bed 1339: CC EF1339; Fluid Bed 1552: CC EF1552; Fluid Bed 2113: CC EF2113; Fluid Bed 2811: CC 3340 & Absorber 10008538; Fluid Bed 3426: CC 3407 & RTO 10008085; Fluid Bed 3705: CC 3879 & RTO 10008085; Fluid Bed 4001: CC 4287 & Absorber 10008538; Fluid Bed 7560: CC 10007482 & RTO 10008085; Fluid Bed 16117: CC 16117

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

The fluid bed equipment is used to provide a proper granulation of the pharmaceutical compounds. Powders are blended and dried within one unit. Each fluid bed is equipped with an internal filter for powder product recovery purposes. In addition to the integral filter, each fluid bed is equipped with a cartridge collector on the process emission vents. VOC emissions are controlled by a regenerative thermal oxidizer (RTO) for Fluid Beds 3426, 3705, and 7560 and a water absorber for Fluid Beds 2811 and 4001. Fluid Beds connected to the RTO or Absorber are authorized to emit to the atmosphere.

**Manufacturer:**

Vector Corporation

**Model number:**

FL - 300

**Serial number:**

Varies

**Construction date:**

**Installation date:**

Fluid Bed 527: 1991; Fluid Bed 1339: 1997; Fluid Bed 1552: 1997; Fluid Bed 2113: 2004; Fluid Bed 2811: 2006; Fluid Bed 3426: 2007; Fluid Bed 3705: 2008; Fluid Bed 4001: 2008; Fluid Bed 7560: 2010; Fluid Bed 16117: 2011

**Modification date(s):**

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 575 kg/load per fluid bed (R13-2068R/R30-06100033-2012 MM04)

**Maximum Hourly Throughput:**

Varies

**Maximum Annual Throughput:**

Varies

**Maximum Operating Schedule:**

18 hours/day, 7 days/week, 50 weeks/year

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

Does this emission unit combust fuel?  Yes  No

**If yes, is it?**

Indirect Fired  Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

n/a

**Type and Btu/hr rating of burners:**

n/a

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

n/a

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
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<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> )	0.1 each	0.1 each
Particulate Matter (PM <sub>10</sub> )	0.1 each	0.1 each
Total Particulate Matter (TSP)	0.1 each	0.1 each
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	529.2 pph each or 10.59 pph each with RTO (Fluid Beds 3426, 3705, 7560) or 26.46 pph each with Absorber (Fluid Beds 2811, 4001)	74 tpy total for all fluid beds (527, 473, 1339, 1222, 1552, 1855, 2113, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560, 15982, 16117)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
n/a		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Emissions based on operating design within processing capabilities incorporating control device efficiencies.</p> <p>Emissions listed in Permit R13-2068R, R30-06100033-2012 MM04.</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.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation, which is greater than twenty (20) percent opacity. [45CSR§7-3.1.; R13-2068R 6.1.1.; R30-06100033-2012 MM04 5.1.1.]

Maximum PM emissions (PM2.5/PM10/PM) from each Fluid Bed to the atmosphere shall not exceed 0.1 pounds per hour and 0.1 tons per year. [45CSR § 7-4.1.; R13-2068R 6.1.3.; R30-06100033-2012 MM04 5.1.2.]

The fluid beds shall operate according to the following requirements: a. The aggregate dry material loading of the fluid bed (excluding times of tablet/beads coating in a fluid bed) shall not exceed the following limits: (1) Fluid Beds 473, 1222, 1855, 2181, 3287, 3620, 3704, 15982 (Emission Unit IDs 534, 536, 538, 572, 574, 575, 577, 581): 250 kg/load b. The annual aggregate dry material loading of all fluid beds shall not exceed 99,000,000 pounds on a rolling yearly total basis. c. Cartridge collectors shall be used at all times on each fluid bed to control particulate matter emissions. Each collector shall, at a minimum, achieve a collection efficiency of 95%. d. The spray rate used in each fluid bed shall not exceed 4 kilograms-VOC/minute. e. Fluid Beds 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, and 7560 (Emission Unit IDs 534, 538, 572, 574 – 578, and 580) shall have the capability of directing exhaust to the RTO for control of VOCs or emitting directly to atmosphere. f. Fluid Beds 2811 and 4001 (Emission Unit IDs 573 and 579) shall have the capability of directing exhaust to the absorber for control of VOCs or emitting directly to atmosphere. g. No HAP-containing solvents shall be processed in any fluid bed. [R13-2068R 6.1.6.; R30-06100033-2012 MM04 5.1.3.]

Maximum hourly VOC emissions to the atmosphere from each Fluid Bed shall not exceed: a. 529.2 lb/hr for each fluid bed if not venting exhaust to the RTO for the purpose of controlling VOC emissions. b. 10.59 lb/hr (as emitted from the RTO) each for Fluid Beds 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, and 7560 (Emission Unit IDs 534, 538, 572, 574 – 578, and 580) if venting exhaust to the RTO for the purpose of controlling VOC emissions. When exhausting to the RTO, fluid bed emissions shall be placed on the RTO emission point. c. 26.46 lb/hr (as emitted from the absorber) each for Fluid Bed 2811 and 4001 (Emission Unit IDs 573 and 579) if venting exhaust to the absorber for the purpose of controlling VOC emissions. When exhausting to the absorber, fluid bed emissions shall be placed on the absorber emission point. [R13-2068R 6.1.4.; R13-06100033-2012 MM04 5.1.4.]

Maximum total combined annual VOC emissions to the atmosphere from the Fluid Beds shall not exceed 74.0 tons/year. [R13-2068R 6.1.5.; R30-06100033-2012 MM04 5.1.5.]

Permit Shield

*Applicable Requirements (continued)*

**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.)**

For the purposes of demonstrating compliance with the minimum cartridge collection efficiency as given under 5.1.3.c, the permittee shall: a. Install, maintain, and operate the cartridge collectors consistent with safety and good air pollution control practices for minimizing emissions, and shall follow all manufacture's recommendations concerning control device maintenance and performance. b. Conduct a weekly visual inspection of the cartridge, cartridge connections, and dust hoppers of each cartridge collector, in order to ensure proper operation of cartridge collectors. Records shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any. c. Either conduct representative performance testing, pursuant to the performance testing procedures as outlined under 3.3.1. of this permit, on the cartridge collectors to determine a minimum collection efficiency or produce a vendor guarantee stating that the cartridge collectors (or associated filters) will meet a minimum collection efficiency of 95%. [R13-2068R 6.2.2.; R30-06100033-2012 MM04 5.2.1.]

Visible emissions monitoring shall be conducted initially at least once per month for all emission points subject to opacity limitations. After three consecutive monthly readings in which no visible emissions are observed from any of the subject emission points, those emission points will be allowed to conduct visible emissions checks once per calendar quarter. If visible emissions are observed during a quarterly monitoring from an emission point(s), then that emission point(s) with observed emissions or opacity shall be required to revert to monthly monitoring. Any emission point that has reverted to monthly monitoring shall be allowed to again conduct quarterly visible emissions checks only after three consecutive monthly readings in which no visible emissions are observed from the subject emission point.

These visible emission checks shall be conducted in accordance with 40 CFR 60, Appendix A, Method 22 during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct a 40 CFR 60, Appendix A, Method 9 evaluation within twenty four (24) hours. A Method 9 evaluation shall not be required if the visible emissions condition is corrected within twenty four (24) hours from the time the visible emission condition was identified and the unit is operated at normal operating conditions. [R13-2068R 6.2.1.; R30-06100033-2012 MM04 5.2.2.]

For the purposes of demonstrating compliance with maximum dry material loading set forth in 5.1.3.a., the permittee shall monitor and record the total dry material per load for each fluid bed. This requirement may be waived if the permittee is able to demonstrate that the maximum reasonable design capacity of each fluid bed is equal or less than the maximum load given under 5.1.3.a. or if the permittee is able to demonstrate that the maximum loading based on product formulations is equal or less than the maximum load given under 5.1.3.a. [R13-2068R 6.2.3.; R30-06100033-2012 MM04 5.2.3.]

For the purposes of demonstrating compliance with maximum annual aggregate dry material loading set forth in 5.1.3.b., the permittee shall monitor and record the aggregate monthly and rolling twelve month total amount of dry material into the fluid beds. [R13-2068R 6.2.4.; R30-06100033-2012 MM04 5.2.4.]

**Applicable Requirements (continued)**

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. (continued)**

For the purposes of demonstrating compliance with maximum annual VOC emission limit set forth in 5.1.5, the permittee shall: a. Monitor and record the aggregate monthly and rolling twelve month total amount of VOCs in pounds used in each fluid bed with the exception of Fluid Beds 473, 1855, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560 (Emission Unit IDs 534, 538, and 572 – 580). b. Monitor and record the aggregate monthly and rolling twelve month total amount of VOCs in pounds used in Fluid Beds 473, 1855, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560 (Emission Unit IDs 534, 538, and 572 – 580) when each bed is and is not venting exhaust to the RTO/Absorber (as applicable) for the purpose of controlling VOCs. c. Calculate and record the monthly and rolling twelve month aggregate VOC emissions from all fluid beds by summing the following: (1) The total amount of VOCs in pounds used in each fluid bed with the exception of Fluid Beds 473, 1855, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560 (Emission Unit IDs 534, 538, and 572 – 580). (2) The total amount of VOCs in pounds used in Fluid Beds 473, 1855, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560 (Emission Unit IDs 534, 538, and 572 – 580) when not venting exhaust to the RTO/Absorber (as applicable) for the purpose of controlling VOCs. (3) The total amount of VOCs used in Fluid Beds 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, and 7560 (Emission Unit IDs 534, 538, 572, 574 – 578, and 580) when venting exhaust to the RTO for the purpose of controlling VOCs. Based on compliance with Requirement 8.1.7 of this permit, the permittee may apply a VOC destruction efficiency of 98% to the amount of VOCs used in Fluid Beds 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, and 7560 (Emission Unit IDs 534, 538, 572, 574 – 578, and 580) when venting exhaust to the RTO for the purpose of controlling VOCs. (4) The total amount of VOCs used in Fluid Beds 2811 and 4001 (Emission Unit IDs 573 and 579) when venting exhaust to the Absorber for the purpose of controlling VOCs. Based on compliance with Requirement 11.1.2 of this permit, the permittee may apply a VOC destruction efficiency of 95% to the amount of VOCs used in Fluid Beds 2811 and 4001 (Emission Unit IDs 573 and 579) when venting exhaust to the Absorber for the purpose of controlling VOCs. [R13-2068R 6.2.5.; R30-06100033-2012 MM04 5.2.5.]

The permittee shall maintain a record of all solvents used in the fluid beds and keep a copy of the associated MSDS/SDS to verify that the solvents did not contain any constituent HAPs. [R13-2068R 6.4.2.; R30-06100033-2012 MM04 5.4.1.]

Records of weekly inspections conducted on the cartridge collector shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any. [R13-2068R 6.4.1.; R30-06100033-2012 MM04 5.4.2.]

**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*

**Emission unit ID number:**

534, 536, 538, 572, 574, 575, 577, 581

Each fluid bed is identical with identical requirements.

**Emission unit name:**

Fluid Bed 473, Fluid Bed 1222, Fluid Bed 1855, Fluid Bed 2181, Fluid Bed 3287, Fluid Bed 3620, Fluid Bed 3704, Fluid Bed 15982

**List any control devices associated with this emission unit:**

Fluid Bed 473: Cartridge Collector (CC) 473 & RTO 10008085; Fluid Bed 1222: CC EF1222; Fluid Bed 1855: CC EF1855 & RTO 10008085; Fluid Bed 2181: CC EF2181 & RTO 10008085; Fluid Bed 3287: CC 3416 & RTO 10008085; Fluid Bed 3620: CC 3643 & RTO 10008085; Fluid Bed 3704: CC 3881 & RTO 10008085; Fluid Bed 15982: CC 15982

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

The fluid bed equipment is used to provide a proper granulation of the pharmaceutical compounds. Powders are blended and dried or beads are coated and dried within one unit. Each fluid bed is equipped with an internal filter for powder product recovery purposes. In addition to the integral filter, each fluid bed is equipped with a cartridge collector on the process emission vents. VOC emissions are controlled by a regenerative thermal oxidizer (RTO) for Fluid Beds 473, 1855, 2181, 3287, 3620 and 3704. Fluid Beds connected to the RTO are also authorized to emit to atmosphere.

**Manufacturer:**

Vector Corporation

**Model number:**

FL - M - 60

**Serial number:**

Varies

**Construction date:**
**Installation date:**

Fluid Bed 473: 1997; Fluid Bed 1222: 1997; Fluid Bed 1855: 2002; Fluid Bed 2181: 2004; Fluid Bed 3287: 2006; Fluid Bed 3620: 2007; Fluid Bed 3704: 2008; Fluid Bed 15982: 2011

**Modification date(s):**

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 250 kg/load per fluid bed (R13-2068R/R30-06100033-2012 MM04)

**Maximum Hourly Throughput:**

Varies

**Maximum Annual Throughput:**

Varies

**Maximum Operating Schedule:**

18 hours/day, 7 days/week, 50 weeks/year

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

Does this emission unit combust fuel?  Yes  No

**If yes, is it?**

Indirect Fired  Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

n/a

**Type and Btu/hr rating of burners:**

n/a

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

n/a

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

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

<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> )	0.1 each	0.1 each
Particulate Matter (PM <sub>10</sub> )	0.1 each	0.1 each
Total Particulate Matter (TSP)	0.1 each	0.1 each
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)	529.2 pph each or 10.59 pph each with RTO (Fluid Beds 473, 1855, 2181, 3287, 3620, 3704)	74 tpy total for all fluid beds (527, 473, 1339, 1222, 1552, 1855, 2113, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560, 15982, 16117)
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
n/a		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Emissions based on operating design within processing capabilities incorporating control device efficiencies.</p> <p>Emissions listed in Permit R13-2068R and R30-06100033-2012 MM04.</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.

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation, which is greater than twenty (20) percent opacity. [45CSR§7-3.1.; R13-2068R 6.1.1.; R30-06100033-2012 MM04 5.1.1.]

Maximum PM emissions (PM2.5/PM10/PM) from each Fluid Bed to the atmosphere shall not exceed 0.1 pounds per hour and 0.1 tons per year. [45CSR § 7-4.1.; R13-2068R 6.1.3.; R30-06100033-2012 MM04 5.1.2.]

The fluid beds shall operate according to the following requirements: a. The aggregate dry material loading of the fluid bed (excluding times of tablet/beads coating in a fluid bed) shall not exceed the following limits: (1) Fluid Beds 473, 1222, 1855, 2181, 3287, 3620, 3704, 15982 (Emission Unit IDs 534, 536, 538, 572, 574, 575, 577, 581): 250 kg/load b. The annual aggregate dry material loading of all fluid beds shall not exceed 99,000,000 pounds on a rolling yearly total basis. c. Cartridge collectors shall be used at all times on each fluid bed to control particulate matter emissions. Each collector shall, at a minimum, achieve a collection efficiency of 95%. d. The spray rate used in each fluid bed shall not exceed 4 kilograms-VOC/minute. e. Fluid Beds 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, and 7560 (Emission Unit IDs 534, 538, 572, 574 – 578, and 580) shall have the capability of directing exhaust to the RTO for control of VOCs or emitting directly to atmosphere. g. No HAP-containing solvents shall be processed in any fluid bed. [R13-2068R 6.1.6.; R30-06100033-2012 MM04 5.1.3.]

Maximum hourly VOC emissions to the atmosphere from each Fluid Bed shall not exceed: a. 529.2 lb/hr for each fluid bed if not venting exhaust to the RTO for the purpose of controlling VOC emissions. b. 10.59 lb/hr (as emitted from the RTO) each for Fluid Beds 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, and 7560 (Emission Unit IDs 534, 538, 572, 574 – 578, and 580) if venting exhaust to the RTO for the purpose of controlling VOC emissions. When exhausting to the RTO, fluid bed emissions shall be placed on the RTO emission point. [R13-2068R 6.1.4.; R13-06100033-2012 MM04 5.1.4.]

Maximum total combined annual VOC emissions to the atmosphere from the Fluid Beds shall not exceed 74.0 tons/year. [R13-2068R 6.1.5.; R30-06100033-2012 MM04 5.1.5.]

Permit Shield

*Applicable Requirements (continued)*

**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.)**

For the purposes of demonstrating compliance with the minimum cartridge collection efficiency as given under 5.1.3.c, the permittee shall: a. Install, maintain, and operate the cartridge collectors consistent with safety and good air pollution control practices for minimizing emissions, and shall follow all manufacture's recommendations concerning control device maintenance and performance. b. Conduct a weekly visual inspection of the cartridge, cartridge connections, and dust hoppers of each cartridge collector, in order to ensure proper operation of cartridge collectors. Records shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any. c. Either conduct representative performance testing, pursuant to the performance testing procedures as outlined under 3.3.1. of this permit, on the cartridge collectors to determine a minimum collection efficiency or produce a vendor guarantee stating that the cartridge collectors (or associated filters) will meet a minimum collection efficiency of 95%. [R13-2068R 6.2.2.; R30-06100033-2012 MM04 5.2.1.]

Visible emissions monitoring shall be conducted initially at least once per month for all emission points subject to opacity limitations. After three consecutive monthly readings in which no visible emissions are observed from any of the subject emission points, those emission points will be allowed to conduct visible emissions checks once per calendar quarter. If visible emissions are observed during a quarterly monitoring from an emission point(s), then that emission point(s) with observed emissions or opacity shall be required to revert to monthly monitoring. Any emission point that has reverted to monthly monitoring shall be allowed to again conduct quarterly visible emissions checks only after three consecutive monthly readings in which no visible emissions are observed from the subject emission point.

These visible emission checks shall be conducted in accordance with 40 CFR 60, Appendix A, Method 22 during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct a 40 CFR 60, Appendix A, Method 9 evaluation within twenty four (24) hours. A Method 9 evaluation shall not be required if the visible emissions condition is corrected within twenty four (24) hours from the time the visible emission condition was identified and the unit is operated at normal operating conditions. [R13-2068R 6.2.1.; R30-06100033-2012 MM04 5.2.2.]

For the purposes of demonstrating compliance with maximum dry material loading set forth in 5.1.3.a., the permittee shall monitor and record the total dry material per load for each fluid bed. This requirement may be waived if the permittee is able to demonstrate that the maximum reasonable design capacity of each fluid bed is equal or less than the maximum load given under 5.1.3.a. or if the permittee is able to demonstrate that the maximum loading based on product formulations is equal or less than the maximum load given under 5.1.3.a. [R13-2068R 6.2.3.; R30-06100033-2012 MM04 5.2.3.]

For the purposes of demonstrating compliance with maximum annual aggregate dry material loading set forth in 5.1.3.b., the permittee shall monitor and record the aggregate monthly and rolling twelve month total amount of dry material into the fluid beds. [R13-2068R 6.2.4.; R30-06100033-2012 MM04 5.2.4.]

**Applicable Requirements (continued)**

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. (continued)**

For the purposes of demonstrating compliance with maximum annual VOC emission limit set forth in 5.1.5, the permittee shall: a. Monitor and record the aggregate monthly and rolling twelve month total amount of VOCs in pounds used in each fluid bed with the exception of Fluid Beds 473, 1855, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560 (Emission Unit IDs 534, 538, and 572 – 580). b. Monitor and record the aggregate monthly and rolling twelve month total amount of VOCs in pounds used in Fluid Beds 473, 1855, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560 (Emission Unit IDs 534, 538, and 572 – 580) when each bed is and is not venting exhaust to the RTO/Absorber (as applicable) for the purpose of controlling VOCs. c. Calculate and record the monthly and rolling twelve month aggregate VOC emissions from all fluid beds by summing the following: (1) The total amount of VOCs in pounds used in each fluid bed with the exception of Fluid Beds 473, 1855, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560 (Emission Unit IDs 534, 538, and 572 – 580). (2) The total amount of VOCs in pounds used in Fluid Beds 473, 1855, 2181, 2811, 3287, 3620, 3426, 3704, 3705, 4001, 7560 (Emission Unit IDs 534, 538, and 572 – 580) when not venting exhaust to the RTO/Absorber (as applicable) for the purpose of controlling VOCs. (3) The total amount of VOCs used in Fluid Beds 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, and 7560 (Emission Unit IDs 534, 538, 572, 574 – 578, and 580) when venting exhaust to the RTO for the purpose of controlling VOCs. Based on compliance with Requirement 8.1.7 of this permit, the permittee may apply a VOC destruction efficiency of 98% to the amount of VOCs used in Fluid Beds 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, and 7560 (Emission Unit IDs 534, 538, 572, 574 – 578, and 580) when venting exhaust to the RTO for the purpose of controlling VOCs. (4) The total amount of VOCs used in Fluid Beds 2811 and 4001 (Emission Unit IDs 573 and 579) when venting exhaust to the Absorber for the purpose of controlling VOCs. Based on compliance with Requirement 11.1.2 of this permit, the permittee may apply a VOC destruction efficiency of 95% to the amount of VOCs used in Fluid Beds 2811 and 4001 (Emission Unit IDs 573 and 579) when venting exhaust to the Absorber for the purpose of controlling VOCs. [R13-2068R 6.2.5.; R30-06100033-2012 MM04 5.2.5.]

The permittee shall maintain a record of all solvents used in the fluid beds and keep a copy of the associated MSDS/SDS to verify that the solvents did not contain any constituent HAPs. [R13-2068R 6.4.2.; R30-06100033-2012 MM04 5.4.1.]

Records of weekly inspections conducted on the cartridge collector shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any. [R13-2068R 6.4.1.; R30-06100033-2012 MM04 5.4.2.]

**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*

**Emission unit ID number:**

Various

**Emission unit name:**

Various pharmaceutical manufacturing rooms

**List any control devices associated with this emission unit:**

Rotoclones 2-7, 9, 10, 2317-2338, 3798, Cartridge Collectors 17034, 100023125

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

Compounding and formulating solid dose pharmaceuticals takes place in multiple production rooms containing manufacturing equipment. The rotoclone or cartridge collector control devices are used to provide ventilation and exhaust for the production rooms. This rotoclone or cartridge collector exhaust ventilation system, coupled with good manufacturing and housekeeping practices, ensures a clean room atmosphere for the manufacturing facility, as required by the Food and Drug Administration (FDA). The FDA (along with Mylan's quality control) limits the release/loss of pharmaceutical ingredients during manufacturing processes. This includes the release/loss of pharmaceutical ingredients to the atmosphere as air emissions of particulate matter. Particulate is removed by the exhaust system with a water spray inside of the rotoclones or with a filter cartridge collector prior to release into the atmosphere.

**Manufacturer:**

Varies

**Model number:**

Varies

**Serial number:**

Varies

**Construction date:**

**Installation date:**

Varies

**Modification date(s):**

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

Varies

**Maximum Hourly Throughput:**

Varies

**Maximum Annual Throughput:**

Varies

**Maximum Operating Schedule:**

24 hours/day, 7 days/week,  
52 weeks/year

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

**Does this emission unit combust fuel?**  Yes  No

**If yes, is it?**

Indirect Fired  Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

n/a

**Type and Btu/hr rating of burners:**

n/a

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

n/a

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

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

<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)	1.2 pph each (280, 281, 283); 0.4 pph each (287, 288, 291, 294, 295); 0.90 pph each (282, 296-300, 305- 323)	2.19 tpy each (280, 281, 283); 1.75 tpy each (287, 288, 291, 294, 295); 2.19 tpy each (282, 296-300, 305-323)
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Potential emissions derived from maximum operation with incorporation of rotoclone or cartridge collector control device efficiency of 98%.</p> <p>Emissions listed in R13-2068R and R30-06100033-2012 MM04.</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.

No person shall cause, suffer, allow or permit emission of smoke and /or particulate matter into the open air from any process source operation, which is greater than twenty (20) percent opacity. [45CSR§7-3.1.; R13-2068R 7.1.1.; R30-06100033-2012 MM04 6.1.1.]

No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified for each of the following emission points (under the appropriate source operation type in Table 45-7A found at the end of 45CSR7:

Emission Point	PM Emission Limit (lb/hr)
280, 281, 283	1.20 <sup>(1)</sup>

<sup>(1)</sup> Based on a PWR of 1,000 lb/hr for a Type "a" source operation.

[45CSR§7-4.1.; R13-2068R 7.1.2.; R30-06100033-2012 MM04 6.1.2.]

Maximum particulate matter emissions to the atmosphere shall not exceed the limits listed in Emissions Data above (287, 288, 291, 294, 295). [45CSR§7-4.1.; R13-2068R 7.1.3.; R30-06100033-2012 MM04 6.1.3.]

At all times the production rooms listed under Table 1.0 are in operation, exhaust from these shall be vented to the applicable control devices as listed under Table 1.0. [R13-2068R 7.1.5.; R13-06100033-2012 MM04 6.1.4.]

Maximum particulate matter (PM) emissions to the atmosphere from Emission Points 282, 296-300, and 305-323, as emitted through the applicable control devices listed under Table 1.0, shall not exceed a maximum hourly emission rate of 0.90 pounds per hour (lb/hr) and 2.19 tons per year (tpy). [45CSR§7-4.1.; R13-2068R 7.1.6.; R30-06100033-2012 MM04 6.1.5.]

The Rotoclone control devices and cartridge collector servicing production rooms shall be designed to achieve a collection efficiency of 98% for particulate matter emissions. [R13-2068R 7.1.4.; R30-06100033-2012 MM04 6.1.6.]

The permittee shall maintain and operate low water supply pressure sensors with control panel alarms for each Rotoclone to ensure adequate water supply and flow rate to the Rotoclones at each emission point specified, in order to ensure proper operation of the Rotoclone. [R13-2068R 7.1.7.; R30-06100033-2012 MM04 6.1.7.]

Permit Shield

**Applicable Requirements (continued)**

**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.)**

Visible emissions monitoring shall be conducted initially at least once per month for all emission points subject to opacity limitations. After three consecutive monthly readings in which no visible emissions are observed from any of the subject emission points, those emission points will be allowed to conduct visible emissions checks once per calendar quarter. If visible emissions are observed during a quarterly monitoring from an emission point(s), then that emission point(s) with observed emissions or opacity shall be required to revert to monthly monitoring. Any emission point that has reverted to monthly monitoring shall be allowed to again conduct quarterly visible emissions checks only after three consecutive monthly readings in which no visible emissions are observed from the subject emission point.

These visible emission checks shall be conducted in accordance with 40 CFR 60, Appendix A, Method 22 during periods of facility operation for a sufficient time interval to determine if the unit has visible emissions. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct a 40 CFR 60, Appendix A, Method 9 evaluation within twenty four (24) hours. A Method 9 evaluation shall not be required if the visible emissions condition is corrected within twenty four (24) hours from the time the visible emission condition was identified and the unit is operated at normal operating conditions. [R13-2068R 7.2.1.; R30-06100033-2012 MM04 6.2.1.]

For the purposes of demonstrating compliance with the minimum cartridge collection efficiency as given under 6.1.6, the permittee shall: a. Install, maintain, and operate the cartridge collectors consistent with safety and good air pollution control practices for minimizing emissions, and shall follow all manufacturer's recommendations concerning control device maintenance and performance; b. Conduct a weekly visual inspection of the cartridge, cartridge connections, and dust hoppers of each cartridge collector, in order to ensure proper operation of cartridge collectors. Records shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each cartridge collector inspection, the inspection results, and corrective actions taken, if any; and c. Either conduct representative performance testing, pursuant to the performance testing procedures as outlined under 3.3.1. of this permit, on the cartridge collectors to determine a minimum collection efficiency or produce a vendor guarantee stating that the cartridge collectors (or associated filters) will meet a minimum collection efficiency of 98%. [R13-2068R 7.2.2.; R30-06100033-2012 MM04 6.2.2.]

A record of each visible emission check shall be maintained on site for five (5) years from the record creation date. Such record shall include the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer. [R13-2068R 7.4.1.; R30-06100033-2012 MM04 6.4.1.]

Records of Rotoclone low water supply pressure sensor alarm shall be maintained on site for five (5) years from the record creation date. Records shall state the date and time of each Rotoclone low water supply pressure sensor alarm. [R13-2068R 7.4.2.; R30-06100033-2012 MM04 6.4.2.]

**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**

**Emission unit ID number:**

260, 261, 264

**Emission unit name:**

Oven 19, Oven 18, Oven 0021

**List any control devices associated with this emission unit:**

RTO (10008085)

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

The ovens are used for drying a wet granulated batch. Commonly, the ovens are used to dry off the aqueous or non-HAP solvent used in the granulated batch, which is controlled by the regenerative thermal oxidizer (RTO). Steam from the boilers is used to generate the oven heat for Oven 19 and Oven 18. Oven 0021 is electrically heated. The solvent emissions for the ovens have been controlled by the RTO beginning in 2011. The ovens are also authorized to emit to atmosphere (R13-2068R/R30-06100033-2012 MM04).

**Manufacturer:**

Unknown

**Model number:**

Unknown

**Serial number:**

Unknown

**Construction date:**

**Installation date:**

Oven 19, Oven 18 – Prior to 1973  
Oven 0021 – 2013

**Modification date(s):**

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

Varies

**Maximum Hourly Throughput:**

Varies

**Maximum Annual Throughput:**

Varies

**Maximum Operating Schedule:**

24 hours/day, 7 days/week,  
52 weeks/year

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

**Does this emission unit combust fuel?**  Yes  No

**If yes, is it?**

Indirect Fired  Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

N/A

**Type and Btu/hr rating of burners:**

N/A

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

N/A

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

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

<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)	529.2 pph each (without RTO) 10.59 pph each (as emitted from RTO)	5 tpy total
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
N/A		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		

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

Potential emissions derived from maximum operation within production limitations.

Emissions included in R13-2068R/R30-06100033-2012 MM04.

**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.

Maximum hourly volatile organic compound (VOC) emissions to the atmosphere from Oven Dryers 19, 18, 0021 (Emission Unit IDs 260, 261 and 264) shall not exceed: a. 529.2 lb/hr for each Oven Dryer if not venting exhaust to the RTO for the purpose of controlling VOC emissions. b. 10.59 lb/hr (as emitted from the RTO) for each Oven Dryers if venting exhaust to the RTO for the purpose of controlling VOC emissions. [R13-2068R 10.1.1.; R30-06100033-2012 M004 10.1.1.]

The maximum total combined annual volatile organic compound (VOC) emissions to the atmosphere from Oven Dryers 19, 18, 0021 (Emission Unit IDs 260, 261, and 264) shall not exceed 5.0 tons/year. [R13-2068R 10.1.2.; R30-06100033-2012 M004 10.1.2.]

Oven Dryers 260, 261, and 264 shall operate according to the following requirements: a. Each Oven Dryers shall have the capability of directing exhaust to RTO for control of VOCs or emitting directly to atmosphere; and. b. HAP-containing solvents shall be processed in any Oven Dryer. [R13-2068R 10.1.3.; R30-06100033-2012 M004 10.1.3.]

Permit Shield

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

For the purposes of demonstrating compliance with maximum annual VOC emission limit set forth in 10.1.2., the permittee shall: a. Monitor and record the aggregate monthly and rolling twelve month total amount of VOCs in pounds used in Oven Dryers 19, 18, 0021 (Emission Unit IDs 260, 261, and 264) when each Oven Dryer is and is not venting exhaust to the RTO for the purpose of controlling VOCs; and b. Calculate and record the monthly and rolling twelve month aggregate VOC emissions from Oven Dryers 19, 18, 0021 (Emission Unit IDs 260, 261, and 264) by summing the following: (1) The total amount of VOCs in pounds used in Oven Dryers 19, 18, 0021 (Emission Unit IDs 260, 261, and 264) when not venting exhaust to the RTO for the purpose of controlling VOCs; and (2) The total amount of VOCs used in Oven Dryers 19, 18, 0021 (Emission Unit IDs 260, 261, and 264) when venting exhaust to the RTO for the purpose of controlling VOCs. Based on compliance with Requirement 8.1.7 of this permit, the permittee may apply a VOC destruction efficiency of 98% to the amount of VOCs used in Oven Dryers 19, 18, 0021 (Emission Unit IDs 260, 261, and 264) when venting exhaust to the RTO for the purpose of controlling VOCs. [R13-2068R 10.2.1.; R30-06100033-2012 M004 10.2.1.]

The permittee shall maintain a record of all solvents used in Oven Dryers 19, 18, 0021 (Emission Unit IDs 260, 261, and 264) and keep a copy of the associated MSDS to verify that the solvents did not contain any constituent HAPs. [R13-2068R 10.4.1.; R30-06100033-2012 M004 10.4.1.]

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**

**Emission unit ID number:**

1911

**Emission unit name:**

Coating Line 1911

**List any control devices associated with this emission unit:**

RTO (10008085)

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

The coating line is used for drying solvent from product and adhesives that are applied to backing to manufacture transdermal patches. The wet product and adhesives are spread onto a plastic sheet or backing material and gradually moved through a dryer for a specified amount of time. This pilot coating line is for research and development, and the solvent emissions from the unit will be controlled by the RTO. The coating line is authorized to exhaust to the RTO and/or to atmosphere.

**Manufacturer:**

Werner-Mathis

**Model number:**

Unknown

**Serial number:**

Unknown

**Construction date:**

**Installation date:**

2014

**Modification date(s):**

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

10.77 lb/hr

**Maximum Hourly Throughput:**

10.77 lb/hr

**Maximum Annual Throughput:**

Varies

**Maximum Operating Schedule:**

6 hours/day, 5 days/week,  
50 weeks/year

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

**Does this emission unit combust fuel?**  Yes  No

**If yes, is it?**

Indirect Fired  Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

N/A

**Type and Btu/hr rating of burners:**

N/A

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

N/A

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

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

<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)	529.2 pph each (without RTO) 10.59 pph each (as emitted from RTO)	3.0 tpy
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Varies – examples include ethyl benzene, toluene, xylene	529.2 pph each (without RTO) 10.59 pph each (as emitted from RTO)	3.0 tpy
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
None		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Potential emissions derived from maximum operation, product type and forecast.</p> <p>Emissions included in R13-2068R/R30-06100033-2012 MM04.</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.**

Maximum hourly VOC/HAP emissions to the atmosphere from the Coating Line shall not exceed: a. 7.0 lb/hr for the Coating Line if not venting exhaust to the RTO for the purpose of controlling VOC/HAP emissions; and b. 0.14 lb/hr (as emitted from the RTO) for the Coating Line if venting exhaust to the RTO for the purpose of controlling VOC/HAP emissions. [R13-2068R 12.1.1.; R30-06100033-2012 M004 12.1.1.]

The maximum annual VOC/HAP emissions to the atmosphere from Coating Line shall not exceed 3.0 tons/year. [R13-2068R 12.1.2.; R30-06100033-2012 M004 12.1.2.]

The Coating Line shall have the capability of directing exhaust to RTO for control of VOC/HAPs or emitting directly to atmosphere. [R13-2068R 12.1.3.; R30-06100033-2012 M004 12.1.3.]

Permit Shield

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

For the purposes of demonstrating compliance with maximum annual VOC/HAP emission limit set forth in 12.1.2., the permittee shall: a. Monitor and record the aggregate monthly and rolling twelve month total amount of VOC/HAPs in pounds used in the Coating Line when it is and is not venting exhaust to the RTO for the purpose of controlling VOC/HAPs; and b. Calculate and record the monthly and rolling twelve month aggregate VOC/HAPs emissions from the Coating Line by summing the following: (1) The total amount of VOC/HAPs in pounds used in the Coating Line when not venting exhaust to the RTO for the purpose of controlling VOCs; and (2) The total amount of VOC/HAPs used in the Coating Line when venting exhaust to the RTO for the purpose of controlling VOCs. Based on compliance with Requirement 8.1.7 of this permit, the permittee may apply a VOC/HAPs destruction efficiency of 98% to the amount of VOC/HAPs used in the Coating Line when venting exhaust to the RTO for the purpose of controlling VOC/HAPs. [R13-2068R 12.2.1.; R30-06100033-2012 M004 12.2.1.]

The permittee shall maintain a record of all solvents used in the Coating Line and keep a copy of the associated MSDS/SDS. [R13-2068R 12.4.1.; R30-06100033-2012 M004 12.4.1.]

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**

**Emission unit ID number:**

N/A

**Emission unit name:**

Laboratory Operations

**List any control devices associated with this emission unit:**

None

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

Mylan's Chestnut Ridge facility utilizes a Quality Control laboratory to test raw materials coming into the facility to verify quantity, quality and potency. The QC lab also tests products in intermediate processing steps, and at the end of processing to verify quality. The lab utilizes a wide variety of organic and inorganic high quality pharmaceutical grade chemicals, which have the potential to escape the building through lab hood vents and via general exhaust ventilation.

**Manufacturer:**

N/A

**Model number:**

N/A

**Serial number:**

N/A

**Construction date:**

**Installation date:**

N/A

**Modification date(s):**

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

Varies

**Maximum Hourly Throughput:**

Varies

**Maximum Annual Throughput:**

Varies

**Maximum Operating Schedule:**

24 hours/day, 7 days/week,  
52 weeks/year

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

**Does this emission unit combust fuel?**  Yes  No

**If yes, is it?**

Indirect Fired  Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

N/A

**Type and Btu/hr rating of burners:**

N/A

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

N/A

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

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

<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)		9.4 tpy of any single HAP or 24.4 tpy of any combination of HAPs facility-wide
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Total HAPs		9.4 tpy of any single HAP or 24.4 tpy of any combination of HAPs facility-wide
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A		
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>Material balance based on purchasing records and evaporation potential calculations.</p>		

**Applicable Requirements**

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

Facility-wide emissions to the atmosphere of Hazardous Air Pollutants (HAPs) shall not exceed or equal 9.4 tons per year of any single HAP or 24.4 tons per year of any combination of HAPs. Yearly total HAPs will be determined using a 12-month rolling total. [R13-2068R 3.1.7.; R30-06100033-2012 MM04 3.1.11.]

Permit Shield

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

The facility shall monitor on a monthly and yearly basis facility-wide HAP usage. Yearly HAP calculations shall be based on a 12-month rolling total. [R13-2068R 3.2.1.; R30-06100033-2012 MM04 3.2.1.]

To demonstrate compliance with the facility-wide HAP limits, the permittee shall maintain monthly and yearly records of facility-wide HAP usage. The facility shall prepare monthly facility-wide calculations of the amount of each individual HAP emitted and the amount of aggregated HAPs emitted. Yearly HAP calculations shall be based on a 12-month rolling total. [R13-2068R 3.4.3.; R30-06100033-2012 MM04 3.4.5.]

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> 301, 302, 303, 304, 305, 306	<b>Emission unit name:</b> Tank 301, Tank 302, Tank 303, Tank 304, Tank 305, Tank 306	<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.):**  
 Four isopropyl alcohol (IPA) and two ethanol bulk liquid above ground storage tanks are utilized at Mylan. Two IPA and two ethanol tanks each have a capacity of 8,324 gallons. Two IPA tanks each have a capacity of 8,348 gallons. The tanks are fitted with relief valves that provide for relief of negative pressure inside the tank during discharge. This same valve will relieve positive pressure in the tank when the pressure gradient between the inside and the outside of the tank reaches the set point. The tanks are filled from tanker trucks equipped with capture systems designed to prevent release of fluid or vapor. The piping from the tanks goes directly into the production buildings and is above ground.

<b>Manufacturer:</b>	<b>Model number:</b>	<b>Serial number:</b>
<b>Construction date:</b> 301, 302: 1978 303, 304: 2010-2011 305, 306: 2015	<b>Installation date:</b> N/A N/A 2015	<b>Modification date(s):</b> N/A

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**  
 301, 302, 303, 304: 8,324 gallons per tank  
 305, 306: 8,348 gallons per tank

<b>Maximum Hourly Throughput:</b> Varies	<b>Maximum Annual Throughput:</b> Varies	<b>Maximum Operating Schedule:</b> 24 hours/day, 7 days/week, 52 weeks/year
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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> N/A	<b>Type and Btu/hr rating of burners:</b> N/A
---	--

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

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

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

<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)		1 tpy total for all tanks
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
None		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
N/A		

**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.).**

Potential emissions derived from maximum annual turnover.

**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.

N/A

Permit Shield

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

None

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

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

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description*

**Emission unit ID number:**

10007530, 10008594, 1053  
Emergency generators 10007530 and 10008594 are identical and have identical requirements

**Emission unit name:**

Kohler 100 REZG Natural Gas Fired Emergency Generator (2),  
750 kW Detroit Diesel/MTU

**List any control devices associated with this emission unit:**

None

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

Emergency generators 10007530 and 10008594 are Kohler 100 REZG natural gas fired emergency generators with design capacities of 162 bhp/1,800 rpm. Emergency generator 1053 is a 750 kW Detroit Diesel with a design capacity of 1,006 bhp/1800 rpm.

**Manufacturer:**

Kohler  
Detroit Diesel

**Model number:**

100 REZG  
N/A

**Serial number:**
**Construction date:**

N/A

**Installation date:**

10007530: 2010  
10008594: 2011  
1053: 2011

**Modification date(s):**

N/A

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

162 bhp/1,800 rpm  
1,006 bhp/1800 rpm

**Maximum Hourly Throughput:**

257 – 1,164 cubic feet natural gas per hour per emergency generator;  
17 cubic feet/hr #2 diesel

**Maximum Annual Throughput:**

0.52 MM cubic feet natural gas per year per emergency generator;  
26,300 gal. #2 diesel per year

**Maximum Operating Schedule:**

500 hours per year

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

Does this emission unit combust fuel?  Yes  No

If yes, is it?

Indirect Fired  Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

100kW / 162 bph / 1,800 rpm  
750 kW / 1,006 bhp/1800 rpm

Type and Btu/hr rating of burners:

N/A

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

Natural Gas: 1,164 cubic feet/hour per emergency generator; 0.52 million cubic feet/year per generator (based on a maximum fuel throughput at 500 hours per year)

#2 Low Sulfur Diesel Fuel: 52.6 gal./hr; 26,300 gal per year (based on a maximum fuel throughput at 500 hours per year)

No secondary fuel

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
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Page \_\_\_\_ of \_\_\_\_

Natural Gas	N/A	N/A	1,020 BTU/scf
#2 Low Sulfur Diesel Fuel	0.05%	N/A	129,488-138,490 Btu/gal
<b>Emissions Data</b>			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)	1.43 each (10007530, 10008594); 5.79 (1053)	0.36 each (10007530, 10008594) 1.45 (1053)	
Nitrogen Oxides (NO <sub>x</sub> )	0.71 each (10007530, 10008594) 10.58 (1053)	0.18 each (10007530, 10008594) 2.65 (1053)	
Lead (Pb)			
Particulate Matter (PM <sub>2.5</sub> )	0.01 each (10007530, 10008594) 0.33 (1053)	<0.01 each (10007530, 10008594) 0.1 (1053)	
Particulate Matter (PM <sub>10</sub> )	0.01 each (10007530, 10008594) 0.33 (1053)	<0.01 each (10007530, 10008594) 0.1 (1053)	
Total Particulate Matter (TSP)	0.01 each (10007530, 10008594) 0.33 (1053)	<0.01 each (10007530, 10008594) 0.1 (1053)	
Sulfur Dioxide (SO <sub>2</sub> )	0.41 (1053)	0.1 (1053)	
Volatile Organic Compounds (VOC)	0.36 each (10007530, 10008594) 10.58 (1053)	0.09 each (10007530, 10008594) 2.65 (1053)	
Hazardous Air Pollutants	Potential Emissions		
	PPH	TPY	
Total HAPs	0.004 (1053)	0.001 (1053)	
Regulated Pollutants other than Criteria and HAP	Potential Emissions		
	PPH	TPY	
Formaldehyde	0.02 each (10007530, 10008594);	<0.01 each (10007530, 10008594);	
<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>Potential emissions derived from AP-42 Emission Factors, Fifth Edition, Volume I, Chapter I, Section 4: Natural Gas Combustion (7/98) and Section 3: Fuel Oil Combustion (5/10) and Tier 2 Emissions Standards.</p> <p>Emissions listed in Permit R30-06100033-2012 (MM04) and G60-C.</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.

Only pipeline quality natural gas shall be burned in the Emergency Generators 10007530 and 10008594. [45CSR13, Permit No. G60-C035, R30-06100033-2012 MM04 9.1.1.]

Maximum emissions to the atmosphere for Emergency Generators 10007530 and 10008594 shall not exceed the values identified in the Emissions Data above. [45CSR13, Permit No. G60-C035, R30-06100033-2012 MM04 9.1.2.]

Maximum emissions to the atmosphere for Emergency Generator 1053 shall not exceed the values identified in the Emissions Data above. [45CSR13, Permit No. G60-C035, R30-06100033-2012 MM04 9.1.3.]

Emergency Generator 1053 shall not exceed a fuel oil sulfur content of 0.05%. [45CSR13, Permit No. G60-C035, R30-06100033-2012 MM04 9.1.4.]

Permit Shield

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

Monitoring requirements shall be based on requirements set forth in Class II General Permit G60-C. [R13-06100033-2012 MM04 9.2.1.]

Testing requirements shall be based on requirements set forth in Class II General Permit G60-C. [R30-06100033-2012 MM04 9.3.1.]

Recordkeeping requirements shall be based on requirements set forth in Class II General Permit G60-C. [R30-06100033-2012 MM04 9.4.1.]

Reporting requirements shall be based on requirements set forth in Class II General Permit G60-C. [R30-06100033-2012 MM04 9.5.1.]

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.

APPLICATION FOR  
TITLE V PERMIT RENEWAL

**Attachment G**

MYLAN PHARMACEUTICALS, INC.  
PLANT ID# 061-00033  
MORGANTOWN, WEST VIRGINIA

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF169	<b>List all emission units associated with this control device.</b> Coating Pan 169 (Emission Unit 210)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 1985
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device CC EF169 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permit R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF1390	<b>List all emission units associated with this control device.</b> Coating Pan 1390 (Emission Unit 215)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 1999
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC EF1390 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF186	<b>List all emission units associated with this control device.</b> Coating Pan 186 (Emission Unit 220)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 1986
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device 220 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permit R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF217	<b>List all emission units associated with this control device.</b> Coating Pan 217 (Emission Unit 230)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> 2DF12	<b>Installation date:</b> 1987
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC EF217 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 12 cartridge filters providing over 2000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permit R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF99	<b>List all emission units associated with this control device.</b> Coating Pan 99 (Emission Unit 240)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 1983
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device CC EF99 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permit R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 4553	<b>List all emission units associated with this control device.</b> Coating Pan 4549 (Emission Unit 241)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2009
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC EF 4553 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 4101	<b>List all emission units associated with this control device.</b> Coating Pan 4027 (Emission Unit 242)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T2-8	<b>Installation date:</b> 2008
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC EF 4101 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 8 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 4164	<b>List all emission units associated with this control device.</b> Coating Pan 3853 (Emission Unit 243)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2008

**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u> |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |   |

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC EF 4164 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permit R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 7674	<b>List all emission units associated with this control device.</b> Coating Pan 7552 (Emission Unit 244)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2010
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC EF 7674 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 8422	<b>List all emission units associated with this control device.</b> Coating Pan 8421 (Emission Unit 245)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2010
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC 8422 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 23583	<b>List all emission units associated with this control device.</b> Coating Pan 23581 (Emission Unit 246)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DFO 3-12	<b>Installation date:</b> 2015
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	99.9%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device CC 23583 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 12 cartridge filters providing over 1,068 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 527	<b>List all emission units associated with this control device.</b> Fluid Bed 527 (Emission Unit 533)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 1991

**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u> |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |   |

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC EF 527 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 473	<b>List all emission units associated with this control device.</b> Fluid Bed 473 (Emission Unit 534)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T2-8	<b>Installation date:</b> 1997

**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u> |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |   |

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC EF 473 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 8 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 1339	<b>List all emission units associated with this control device.</b> Fluid Bed 1339 (Emission Unit 535)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 1997

**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u> |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |   |

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC EF 1339 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 1222	<b>List all emission units associated with this control device.</b> Fluid Bed 1222 (Emission Unit 536)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T2-8	<b>Installation date:</b> 1997
<b>Type of Air Pollution Control Device:</b> ___ Baghouse/Fabric Filter      ___ Venturi Scrubber      ___ Multiclone ___ Carbon Bed Adsorber      ___ Packed Tower Scrubber      ___ Single Cyclone ___ Carbon Drum(s)      ___ Other Wet Scrubber      ___ Cyclone Bank ___ Catalytic Incinerator      ___ Condenser      ___ Settling Chamber ___ Thermal Incinerator      ___ Flare <u> X </u> Other (describe) <u>Cartridge Collector</u> ___ Wet Plate Electrostatic Precipitator      ___ Dry Plate Electrostatic Precipitator		
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b> Control Device CC EF 1222 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 8 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> ___ Yes <u> X </u> No If Yes, <b>Complete ATTACHMENT H</b> If No, <b>Provide justification.</b> Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b> Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 1552	<b>List all emission units associated with this control device.</b> Fluid Bed 1552 (Emission Unit 537)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 1997
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC EF 1552 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 1855	<b>List all emission units associated with this control device.</b> Fluid Bed 1855 (Emission Unit 538)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T2-8	<b>Installation date:</b> 2002
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC EF 1855 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 8 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 2113	<b>List all emission units associated with this control device.</b> Fluid Bed 2113 (Emission Unit 571)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T3-18	<b>Installation date:</b> 2004
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC EF 2113 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 18 cartridge filters providing over 3,400 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC EF 2181	<b>List all emission units associated with this control device.</b> Fluid Bed 2181 (Emission Unit 572)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T2-8	<b>Installation date:</b> 2004
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC EF 2181 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 8 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 3340	<b>List all emission units associated with this control device.</b> Fluid Bed 2811 (Emission Unit 573)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T2-8	<b>Installation date:</b> 2006
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC 3340 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 8 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 3416	<b>List all emission units associated with this control device.</b> Fluid Bed 3287 (Emission Unit 574)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2006
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC 3416 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 3643	<b>List all emission units associated with this control device.</b> Fluid Bed 3620 (Emission Unit 575)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T2-8	<b>Installation date:</b> 2007
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC 3643 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 8 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

**If Yes, Complete ATTACHMENT H**

**If No, Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 3407	<b>List all emission units associated with this control device.</b> Fluid Bed 3426 (Emission Unit 576)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2007
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC 3407 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 3881	<b>List all emission units associated with this control device.</b> Fluid Bed 3704 (Emission Unit 577)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T2-8	<b>Installation date:</b> 2008

**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u> |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input type="checkbox"/> Dry Plate Electrostatic Precipitator |   |

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC 3881 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 8 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 3879	<b>List all emission units associated with this control device.</b> Fluid Bed 3705 (Emission Unit 578)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2008
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device CC 3879 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 4287	<b>List all emission units associated with this control device.</b> Fluid Bed 4001 (Emission Unit 579)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2008
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC 4287 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 10007482	<b>List all emission units associated with this control device.</b> Fluid Bed 7560 (Emission Unit 580)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2010
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC 10007482 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 15982	<b>List all emission units associated with this control device.</b> Fluid Bed 15982 (Emission Unit 581)	
<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2011
<b>Type of Air Pollution Control Device:</b>		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Control Device CC 15982 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 16117	<b>List all emission units associated with this control device.</b> Fluid Bed 16117 (Emission Unit 582)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DF T4-16	<b>Installation date:</b> 2011
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device CC 16117 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 3,000 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

**ATTACHMENT G - Air Pollution Control Device Form**

<b>Control device ID number:</b> Rotoclone 4	<b>List all emission units associated with this control device.</b> Rooms 74-101 – 74-122, 74-129 (Emission Point 280)	
<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> W	<b>Installation date:</b> 1992

**Type of Air Pollution Control Device:**

Baghouse/Fabric Filter       Venturi Scrubber       Multiclone  
 Carbon Bed Adsorber       Packed Tower Scrubber       Single Cyclone  
 Carbon Drum(s)       Other Wet Scrubber       Cyclone Bank  
 Catalytic Incinerator       Condenser       Settling Chamber  
 Thermal Incinerator       Flare       Other (describe) \_\_\_\_\_  
 Wet Plate Electrostatic Precipitator       Dry Plate Electrostatic Precipitator

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 4 is an American Air Filter Type W, Arrangement A, size 27 wet scrubber. Rotoclone 4 commonly operates at a pressure of 45 psi, and uses approximately 324,000 gallons of water per month.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 3	<b>List all emission units associated with this control device.</b> Rooms 74-151, 74-153, 91-129, 91-130, 91-132, 91-134 – 91-137, 91-139, 91-229, 91-230, 91-232, 91-329, 91-330, 91-332, 91-334 – 91-337 (Emission Point 281)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> W	<b>Installation date:</b> 1991
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 3 is an American Air Filter Type W, Arrangement A, size 33 wet scrubber. Rotoclone 3 commonly operates at a pressure of 50 psi, and uses approximately 518,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 3798	<b>List all emission units associated with this control device.</b> Rooms 74-150, 74-152, 74-154, 74-159, 74-160, 74-161, 74-162, 74-212, 91-232, 91-233 (Emission Point 282)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> W	<b>Installation date:</b> 1982
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 3798 is an American Air Filter Type W, Arrangement A, size 27 wet scrubber. Rotoclone 3798 commonly operates at a pressure of 30 psi, and uses approximately 294,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2	<b>List all emission units associated with this control device.</b> Rooms 74-205 – 74-209, 99-217 – 99-219 (Emission Point 283)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 846493-6	<b>Installation date:</b> 1982
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2 commonly operates at a pressure of 30 psi, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 6	<b>List all emission units associated with this control device.</b> Rooms BL209, BL211, BL214, BL304, BL306, BL307, BL309- BL314, BL316, BL402 – BL404, BL406-BL414, BL416 (Emission Point 287)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 446419	<b>Installation date:</b> 1996
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 6 is an American Air Filter Type W, Arrangement A, size 30 wet scrubber. Rotoclone 6 commonly operates at a pressure of 35 psi, and uses approximately 307,000 gallons of water per month.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 5	<b>List all emission units associated with this control device.</b> Rooms BB101-BB103, BB 106, BB108-BB111, BB113-BB118, BB201- BB203, BB206- BB208, BB210-BB217, BB303, BB312 (Emission Point 288)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 446419	<b>Installation date:</b> 1996
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 5 is an American Air Filter Type W, Arrangement A, size 30 wet scrubber. Rotoclone 5 commonly operates at a pressure of 40 psi, and uses approximately 346,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 7	<b>List all emission units associated with this control device.</b> Rooms 85-205A – 85-208A, 99-105, 99-114 – 99-122, 99-209, ORG201A – ORG204A (Emission Point 291)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656297-9	<b>Installation date:</b> 1999
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 7 is an American Air Filter Type W, Arrangement A, size 30 wet scrubber. Rotoclone 7 commonly operates at a pressure of 50 psi, and uses approximately 307,000 gallons of water per month.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 9	<b>List all emission units associated with this control device.</b> Rooms BB112, 85-106, 85-108, 85-114, 85-115, 85-102, 85-104, 85-107, 85-110 (Emission Point 294)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656297-6	<b>Installation date:</b> 2003
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 9 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 9 commonly operates at a pressure of 40 psi, and uses approximately 194,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 10	<b>List all emission units associated with this control device.</b> Rooms BL218, BL219 (Emission Point 295)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656297-5	<b>Installation date:</b> 2004
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 10 is an American Air Filter Type W, Arrangement A, size 16 wet scrubber. Rotoclone 10 commonly operates at a pressure of 40 psi, and uses approximately 151,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2317	<b>List all emission units associated with this control device.</b> Rooms NEX140, NEX142, NEX144, NEX146, NEX159 - NEX162 (Emission Point 296)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-6	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2317 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2317 commonly operates at a pressure of 9,600 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2318	<b>List all emission units associated with this control device.</b> Rooms NEX139, NEX141, NEX143, NEX145, NEX152 - NEX158, NEX163, NEX164 (Emission Point 297)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-007	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2318 is an American Air Filter Type W, Arrangement A, size 24 wet scrubber. Rotoclone 2318 commonly operates at a pressure of 10,800 cfm, and uses approximately 229,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2319	<b>List all emission units associated with this control device.</b> Rooms NEX131 - NEX136, NEX138, NEX147, NEX148 (Emission Point 298)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2319 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2319 commonly operates at a pressure of 9,000 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2320	<b>List all emission units associated with this control device.</b> Rooms NEX175, NEX177, NEX179, NEX181, NEX183 (Emission Point 299)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2320 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2320 commonly operates at a pressure of 7,800 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2321	<b>List all emission units associated with this control device.</b> Rooms NEX176, NEX178, NEX180, NEX182, NEX186 - NEX189 (Emission Point 300)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2321 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2321 commonly operates at a pressure of 9,600 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2322	<b>List all emission units associated with this control device.</b> Rooms NEX231, NEX232, NEX234, NEX275-NEX283, NEX286-NEX289 (Emission Point 305)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2322 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2322 commonly operates at a pressure of 5,400 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2323	<b>List all emission units associated with this control device.</b> Rooms NEX211A-217A (Emission Point 306)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2323 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2323 commonly operates at a pressure of 9,600 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2324	<b>List all emission units associated with this control device.</b> Rooms NEX372, NEX374, NEX376, NEX378, NEX380 (Emission Point 307)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2324 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2324 commonly operates at a pressure of 9,600 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2325	<b>List all emission units associated with this control device.</b> Rooms NEX349, NEX362, NEX364, NEX366, NEX368, NEX369 (Emission Point 308)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-007	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2325 is an American Air Filter Type W, Arrangement A, size 24 wet scrubber. Rotoclone 2325 commonly operates at a pressure of 10,800 cfm, and uses approximately 229,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2326	<b>List all emission units associated with this control device.</b> Rooms NEX346, NEX355, NEX357, NEX359 - NEX361 (Emission Point 309)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2326 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2326 commonly operates at a pressure of 9,600 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2327	<b>List all emission units associated with this control device.</b> Rooms NEX375, NEX377, NEX379, NEX381 (Emission Pint 310)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2327 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2327 commonly operates at a pressure of 7,200 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2328	<b>List all emission units associated with this control device.</b> Rooms NEX 216A, NEX217A, NEX535-NEX538 (Emission Point 311)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-5	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2328 is an American Air Filter Type W, Arrangement A, size 16 wet scrubber. Rotoclone 2328 commonly operates at a pressure of 5,400 cfm, and uses approximately 134,000 gallons of water per month.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2329	<b>List all emission units associated with this control device.</b> Rooms NEX321 - NEX330, NEX421 – NEX430 (Emission Point 312)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-007	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2329 is an American Air Filter Type W, Arrangement A, size 24 wet scrubber. Rotoclone 2329 commonly operates at a pressure of 12,000 cfm, and uses approximately 229,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2330	<b>List all emission units associated with this control device.</b> Rooms NEX303, NEX405 - NEX412 (Emission Point 313)	
<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-007	<b>Installation date:</b> 2005
<b>Type of Air Pollution Control Device:</b> ___ Baghouse/Fabric Filter      ___ Venturi Scrubber      ___ Multiclone ___ Carbon Bed Adsorber      ___ Packed Tower Scrubber      ___ Single Cyclone ___ Carbon Drum(s) <u> X </u> Other Wet Scrubber      ___ Cyclone Bank ___ Catalytic Incinerator      ___ Condenser      ___ Settling Chamber ___ Thermal Incinerator      ___ Flare      ___ Other (describe) _____ ___ Wet Plate Electrostatic Precipitator      ___ Dry Plate Electrostatic Precipitator		
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b> Control Device Rotoclone 2330 is an American Air Filter Type W, Arrangement A, size 24 wet scrubber. Rotoclone 2330 commonly operates at a pressure of 10,800 cfm, and uses approximately 229,000 gallons of water per month.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> ___ Yes <u> X </u> No If Yes, <b>Complete ATTACHMENT H</b> If No, <b>Provide justification.</b> Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b> Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.		

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2331	<b>List all emission units associated with this control device.</b> Rooms NEX468, NEX469, NEX472 - NEX480 (Emission Point 314)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2331 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2331 commonly operates at a pressure of 9,600 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2332	<b>List all emission units associated with this control device.</b> Rooms NEX435 - NEX438, NEX413 - NEX416, NEX419 (Emission Point 315)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-5	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2332 is an American Air Filter Type W, Arrangement A, size 16 wet scrubber. Rotoclone 2332 commonly operates at a pressure of 4,800 cfm, and uses approximately 134,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2333	<b>List all emission units associated with this control device.</b> Rooms NEX464 - NEX467, NEX481, NEX482, NEX484 - NEX492 (Emission Point 316)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2333 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2333 commonly operates at a pressure of 7,800 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2334	<b>List all emission units associated with this control device.</b> Rooms NEX305-NEX312, NEX316 (Emission Unit 317)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-007	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2334 is an American Air Filter Type W, Arrangement A, size 24 wet scrubber. Rotoclone 2334 commonly operates at a pressure of 9,000 cfm, and uses approximately 229,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2335	<b>List all emission units associated with this control device.</b> Rooms NEX445B, NEX445C, NEC445D, NEX445E, NEX445F, NEX445G (Emission Point 318)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-007	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2335 is an American Air Filter Type W, Arrangement A, size 24 wet scrubber. Rotoclone 2335 commonly operates at a pressure of 9,000 cfm, and uses approximately 229,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2336	<b>List all emission units associated with this control device.</b> Rooms NEX514, NEX516A-D, NEX522 -NEX524, NEX526, NEX528, NEX530, NEX535 - NEX538 (Emission Point 319)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device Rotoclone 2336 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2336 commonly operates at a pressure of 9,000 cfm, and uses approximately 173,000 gallons of water per month.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2337	<b>List all emission units associated with this control device.</b> Rooms NEX503, NEX505, NEX507, NEX509, NEX511, NEX513 (Emission Point 320)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2337 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2337 commonly operates at a pressure of 9,600 cfm, and uses approximately 173,000 gallons of water per month.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> Rotoclone 2338	<b>List all emission units associated with this control device.</b> Rooms NEX506, NEX508, NEX510, NEX512, NEX515 (Emission Point 321)
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<b>Manufacturer:</b> American Air Filter	<b>Model number:</b> 1656305-006	<b>Installation date:</b> 2005
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**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"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**  
 Control Device Rotoclone 2338 is an American Air Filter Type W, Arrangement A, size 20 wet scrubber. Rotoclone 2338 commonly operates at a pressure of 8,400 cfm, and uses approximately 173,000 gallons of water per month.

**Is this device subject to the CAM requirements of 40 C.F.R. 64?**  Yes  No  
 If Yes, **Complete ATTACHMENT H**  
 If No, **Provide justification.**  
 Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

**Describe the parameters monitored and/or methods used to indicate performance of this control device.**  
 Each wet scrubber is continuously monitored for low water pressure. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 17034	<b>List all emission units associated with this control device.</b> Rooms 74-174, 74-175, 74-176, 74-177, 74-179, 74-179A, 74-180, 74-180A (Emission Point 322)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DFT 2-8	<b>Installation date:</b> 2012
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC 17034 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 16 cartridge filters providing over 1,500 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> CC 100023125	<b>List all emission units associated with this control device.</b> Rooms 87-103 to 87-117 (Emission Point 323)
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<b>Manufacturer:</b> Donaldson	<b>Model number:</b> DFT 3-48	<b>Installation date:</b> 2014
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Cartridge Collector</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100%	98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device CC 100023125 is a Donaldson Torit Downflo cartridge collector. It is a continuous, pulse-cleaning filtration system consisting of 48 cartridge filters providing over 12,192 square feet of filter area. Filter change out requirements are monitored through a Magnehelic pressure differential gauge.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

Each cartridge collector undergoes a weekly, visual multi-point inspection. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> 10008085 (RTO)	<b>List all emission units associated with this control device.</b> Fluid Beds: 473, 1855, 2181, 3287, 3620, 3426, 3704, 3705, 7560 (Emission Units: 534, 538, 572, 574, 575, 576, 577, 578, 580); Coating Pans: 7552, 8421, 23581 (Emission Units: 244, 245, 246); Ovens: 19, 18, 0021 (Emission Units: 260, 261, 264); Coating Line 1911 (Emission Unit 1911)
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<b>Manufacturer:</b> Anguil Environmental	<b>Model number:</b> n/a	<b>Installation date:</b> 2010
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**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 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 checked="" type="checkbox"/> Other (describe) <u>Regenerative Thermal Oxidizer</u>
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

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

Pollutant	Capture Efficiency	Control Efficiency
Volatile Organic Compounds		98%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device 10008085 is regenerative thermal oxidizer (RTO) which has a maximum capacity of 40,000 cfm or 3,070 lbs/hr of solvent and operates at approximately 1500°F. Unit 10008085 uses natural gas at a maximum rate of 16 mmBTU/hr to maintain the temperature inside the combustion chamber between batches of product that contains solvent.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

The exhaust flow rate and combustion chamber temperature are monitored and recorded continuously. Quarterly visual emission observations are required.

## ATTACHMENT G - Air Pollution Control Device Form

<b>Control device ID number:</b> 10008538 (Absorber)	<b>List all emission units associated with this control device.</b> Fluid Beds 2811, 4001(Emission Units 573, 579)
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<b>Manufacturer:</b> Verantis Corp.	<b>Model number:</b> n/a	<b>Installation date:</b> 2010
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**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 checked="" type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator		<input type="checkbox"/> Dry Plate Electrostatic Precipitator

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

Pollutant	Capture Efficiency	Control Efficiency
Volatile Organic Compounds		95%

**Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).**

Control Device 10008538 is a packed tower absorber that uses water to remove volatile organic compounds from the exhaust. Unit 10008538 commonly operates at 4,000 cfm, and uses approximately 80-100 gallons of water per minute. The water is collected in a tank during the absorption cycle, which is approximately one hour depending on the product.

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

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Emission limitations and continuous compliance determination methods are outlined in permits R13-2068R and R30-06100033-2012 MM04 for pollutant-specific emission units with a control device that meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

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

The water flow rate is continuously monitored and low water flow rate alarms are recorded.