State of Delaware Department of Natural Resources and Environmental Control Division of Air Quality

State Street Commons 100 W. Water Street, Suite 6A Dover, DE 19904

7 DE Admin. Code 1130 (Title V) Operating Permit Facility I.D. Number: 100300033 Draft/Proposed Permit Number: AQM-003/00033 - Renewal (04)

Effective Date: date Expiration Date: date

Renewal Application Due Date: date

Pursuant to 7 **Del. C.**, Ch 60, Section 6003, 7 **DE Admin. Code** 1102 Section 2.0, and 7 **DE Admin. Code** 1130 Section 7.2, approval by the Department of Natural Resources and Environmental Control ("Department") is hereby granted to operate the emission units listed in Condition 1 of this permit subject to the terms and conditions of this permit.

This approval is granted to:

Permitee/Owner	Operator
(hereafter referred to as "Company/Owner")	(hereafter referred to as "Operator")
Rohm and Haas Electronic Materials CMP, LLC 451 Bellevue Road, Newark, Delaware 19713 Responsible Official: Ryan Maus Title: Newark Site Leader	Rohm and Haas Electronic Materials CMP, LLC 451 Bellevue Road Newark, Delaware 19713
Plant Site Location	Plant Mailing Address
(hereafter referred to as "Facility")	Rohm and Haas Electronic Materials CMP, LLC
451 Bellevue Road	
Newark, Delaware 19713	451 Bellevue Road
Latitude: 39°38′59.7408″	Newark, Delaware 19713
Longitude: -75°34′45.0012″	

The nature of business of the Facility is Coated Fabrics, Not Rubberized. The Standard Industrial Classification code is 2295. The North American Industry Classification System code is 313320.

Richard Drazich/Date Engineer Engineering & Compliance Section (302) 323-4542 Amy S. Mann, P.E. /Date Administrator Engineering & Compliance Section (302) 323-4542

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Rohm and Haas Electronic Materials CMP, LLC

7 **DE Admin. Code** 1130 Operating Permit

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<u>Condition 1 – Emission Unit Identification</u> [Reference: 7 **DE Admin. Code** 1130 Section 3.3 dated 11/15/93]

a. **Emission Unit Information**

Emission Unit	Emission Unit Description		
Emission Unit 2-1	Building 2, SUBA 1 Line used in the manufacture of semiconductor polishing pad material. DMF emissions controlled by a scrubber shared with SUBA 2		
Emission Unit 2-2	Building 2, SUBA 2 Line used in the manufacture of semiconductor polishing pad material. DMF emissions controlled by a scrubber shared with SUBA 1		
Emission Unit 2-3	Building 2, Tank E-20: 20,000 gallon tank for the storage of dimethylformamide (DMF) and water		
Emission Unit 2-4	Building 2, Tank UHP-10: 10,000 gallon DMF storage tank		
Emission Unit 2-5	Building 2, Tank RUHP-15: 15,000 gallon DMF storage tank		
Emission Unit 2-6	Building 2, Tank E-33: 33,000 gallon DMF and water storage tank		
Emission Unit 2-7	Building 2, Tank R-18: 17,000 gallon reclaimed DMF storage tank		
Emission Unit 2-8	Building 2, Polymer Area, several reactors and mix tanks used in the preparation of polyurethane dispersions for use in the SUBA 1 line, the SUBA 2 line. This includes the TK-2587 powder delivery system		
Emission Unit 2-12	Building 2, Emergency Generator, 9.0 MMBtu/hr heat input		
Emission Unit 2-13	Building 2, Diesel Fire Protection Pump, 824,850 Btu/hr heat input		
Emission Unit 2-14	Building 2, Natural gas fired 500 HP Burnham Boiler		
Emission Unit 5-1	Building 5, Vacuum Pump pulling vacuum on urethane polishing pad manufacturing process. Toluene diisocyanate (TDI) emissions controlled by a cold trap condenser		
Emission Unit 5-2	Building 5, Pad Conditioner and Associated Baghouse		
Emission Unit 5-5	Building 5, Urethane Pad Production Unit "ACT" Process		
Emission Unit 5-6	Two Cold Solvent Degreasers and Carbon Absorber		
Emission Unit 9-1	Building 9, Emergency Generator, 527,000 Btu/hr heat input		
Emission Unit 15-1	Building 15, Air Classification System with Baghouse		

<u>Condition 1 – Emission Unit Identification</u>

b. 7 DE Admin. Code 1102 Permit Identification

This table identifies the underlying permits whose provisions have been incorporated into this Title V permit and specifies the reference number that will be used to identify the source of the underlying permit condition throughout this Title V permit.

Reference: Number	Full 7 DE Admin. Code 1102 Permit Description	
APC-1991/0580	APC-1991/0580-CONSTRUCTION (Amendment 4) (VOC RACT) and APC-	
APC-1996/0942	1996/0942-CONSTRUCTION (Amendment 4) (VOC RACT) (NSPS) and	
	APC-2005/0044-CONSTRUCTION (VOC RACT) (NSPS)	
APC-2005/0044	SUBA Lines 1 and 2, and Building 2 Polymer Area, with Associated	
	Scrubber	
400 4000 (0000	APC-1992/0263-OPERATION	
APC-1992/0263	"MAX" Urethane Processing System equipped with a cold trap for the	
	control of toluene diisocyanate (TDI) emissions. Located in Building 5	
ADC 1007/0555	APC-1997/0555-OPERATION (VOC RACT)	
APC-1997/0555	For use of industrial cleaning solvents: MEK, IPA, Acetone, and	
	miscellaneous spray cleaners APC-1997/0479-CONSTRUCTION/OPERATION (VOC RACT)	
APC-1997/0479	Cold Cleaning Solvent Degreaser located in Building 5	
	APC-2000/0286-CONSTRUCTION and OPERATION	
APC-2000/0286	1500 kW emergency generator located outside of Building 5, firing on	
711 6 2000, 6200	No. 2 fuel oil for less than 150 hours per year	
	APC-2002/0255-CONSTRUCTION/OPERATION	
APC-2002/0255	One 207 Horsepower Onan Model 125DGEA Diesel Emergency	
· ·	Generator for Building 9	
	APC-2002/0256-CONSTRUCTION/OPERATION	
APC-2002/0256	One 100 Horsepower Clarke Detroit Diesel Fire Protection Pump, Model	
	PDFP04YT for Bulk Storage Area Tank Farm	
APC-2011/0048-R	APC-2011/0048-REGISTRATION	
AI C 2011/0040 K	Mor Melt 503 Pressure Adhesive Application Station	
APC-2011/0144-O (A1)(FE)	APC-2011/0144-OPERATION (Amendment 1) (FE)	
7.11 G 2012/ G1 11 G (7.12)(1 2)	Building 5 Pad Conditioner and Associated Baghouse	
APC-2014/0021-O (FE)	APC-2014/0021-OPERATION (FE)	
, ()	Air Classifier System with Baghouse	
APC-2017/0069-O (FE)	APC-2017/0069-OPERATION (FE)	
. , ,	Building 5 Urethane Pad Production Unit "ACT" Process	
APC-2021/0002-O	APC-2021/0002-OPERATION (Amendment 1) Building 5 Urethane Pad Production Unit "ACT" Process	
	APC-2022/0086-OPERATION (Amendment 1)	
ADC 2022/0006 O	ALC 2022/0000-OF LIVATION (AIRCHUITICILE I)	
APC-2022/0086-O	One (1) Carbon Adsorber to control VOC emissions from two cold solvent	
	cleaners located in Building 5.	
ADG 2024 (2022 2	ADO 2004 (2000 ODER ATYON (AMIOR) (EE) P. IIII. 2. ECC. III. 2.	
APC-2021/0099-O	APC-2021/0099-OPERATION (MNSR)(FE) Building 2- 500 HP Burnham	
(MNSR)(FE)	Boiler (Emission Unit 2-11)	

Condition 2 – General Requirements

a. Certification.

- Each document submitted to the Department/EPA as required by this permit shall be certified by a Responsible Official as to truth, accuracy, and completeness. Such certification shall be signed by a Responsible Official and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [Reference: 7 DE Admin. Code 1130 Section 5.6 dated 11/15/93 and 6.3.1 dated 8/11/22]
- 2. Any report of deviations required under Conditions 3(c)(2)(ii) or 3(c)(2)(iii) that must be submitted to the Department within ten calendar days of discovery of the deviation, may be submitted in the first instance without a certification provided a certification meeting the requirements of Condition 2(a)(1) is submitted to the Department within ten calendar days thereafter, together with any corrected or supplemental information required concerning the deviation. (Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.3.4 dated 8/11/22)
- 3. Each document submitted to the Department/EPA pursuant to this permit shall be sent to the following addresses except as noted in Condition 2(a)(4):

State of Delaware – DNREC	U.S. Environmental Protection Agency Region III
Division of Air Quality	Enforcement and Compliance Assurance Division
State Street Commons	Air, RCRA and Toxics Branch (3ED21)
100 W. Water Street, Suite 6A	Four Penn Center
Dover, DE 19904	1600 John F. Kennedy Boulevard
ATTN: Division Director	Philadelphia, PA 19103-2852
No. of Originals: 1 & No. of Copies: 1	No. of Copies: <u>1</u>

4. In lieu of submitting a physical copy of the Compliance Certification report specified in Condition 3(c)(3) of this permit to the EPA, the Owner and/or Operator may, and is encouraged to, submit an electronic copy of the report to *R3 APD Permits@epa.gov* as a PDF document. The signed original annual General Certification report must be submitted to the Department at the address in Condition 2(a)(3).

b. Compliance.

The Owner and/or Operator shall comply with all terms and conditions of this permit. Any
noncompliance with this permit constitutes a violation of the applicable requirements under the
Clean Air Act, and/or 7 **DE Admin. Code** 1100, and is grounds for an enforcement action; for
permit termination, revocation, and reissuance or modification; or for denial of a permit renewal.
[Reference: 7 **DE Admin. Code** 1130 Section 6.1.7.1 dated 8/11/22]

2.

- i. For applicable requirements with which the source is in compliance, the Owner and/or Operator shall continue to comply with such requirements. [Reference: 7 **DE Admin. Code** 1130 Sections 5.4.8.3.1 dated 11/15/93 and 6.3.3 dated 8/11/22]
- ii. For applicable requirements that will become effective during the term of this permit, the Owner and/or Operator shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [Reference: 7 DE Admin. Code 1130 Sections 5.4.8.3.2 dated 11/15/93 and 6.3.3 dated 8/11/22]

Condition 2 – General Requirements

- 3. Nothing in Condition 2(b)(1) of this permit shall be construed to preclude the Owner and/or Operator from making changes consistent with Condition 2(m)(3) [Minor Permit Modifications] or Condition 4(a) [Operational Flexibility]. [Reference: 7 **DE Admin. Code** 1130 Sections 6.8 dated 8/11/22 and 7.5.1.5 dated 8/11/22]
- 4. The fact that it would have been necessary to halt or reduce an activity in order to maintain compliance with the terms and conditions of this permit shall not constitute a defense for the Owner and/or Operator in any enforcement action. Nothing in this permit shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.2 dated 8/11/22]
- Reserved.
- Reserved.
- Reserved.
- 8. If required, the schedule of compliance in Condition 5 of this permit is supplemental to and shall not sanction noncompliance with the applicable requirements upon which it is based. [Reference: 7 **DE Admin. Code** 1130 Section 5.4.8.3.3 dated 11/15/93]
- 9. Nothing in this permit shall be interpreted to preclude the use of any credible evidence to demonstrate noncompliance with any term of this permit. [Reference: 62 FR 8314 dated 2/24/97]
- 10. All terms and conditions of this permit are enforceable by the Department and by the U.S. Environmental Protection Agency ("EPA") unless specifically designated as "State Enforceable Only" [Reference: 7 **DE Admin. Code** 1130 Section 6.2.1 dated 8/11/22]
- c. <u>Confidentiality</u>. The Owner and/or Operator may make a claim of confidentiality for any information or records submitted to the Department. However, by submitting a permit application, the Owner and/or Operator waives any right to confidentiality as to the contents of its permit, and the permit contents will not be entitled to protection under 7 **Del. C.**, Ch 60, § 6014. [Reference: 7 **DE Admin. Code** 1130 Sections 5.1.4 dated 11/15/93, 6.1.3.3.5 dated 8/11/22, and 6.1.7.5 dated 8/11/22]
 - Confidential information shall meet the requirements of 7 Del. C., Ch 60, § 6014, and 29 Del. C., Ch 100. [Reference: 7 DE Admin. Code 1130 Section 5.1.4 dated 11/15/93]
 - 2. If the Owner and/or Operator submits information to the Department under a claim of confidentiality, the Owner and/or Operator shall also submit a copy of such information directly to the EPA, if the Department requests that the Owner and/or Operator do so. [Reference: 7 DE Admin. Code 1130 Section 5.1.4 dated 11/15/93]
- d. <u>Construction, Installation, or Alteration</u>. The Owner and/or Operator shall not initiate construction, installation, or alteration of any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department under 7 **DE Admin. Code** 1102, and, when applicable, 7 **DE Admin. Code** No. 1125, and receiving approval of such application from the Department; except as exempted in 7 **DE Admin. Code** 1102 Section 2.2. [Reference: 7 **DE Admin. Code** 1102 Section 2.1 dated 6/11/06 and 7 **DE Admin. Code** 1130 Section 7.2.3 dated 8/11/22]
- **e.** <u>Definitions/Abbreviations</u>. Except as specifically provided for below, for the purposes of this permit, terms used herein shall have the same meaning accorded to them under the applicable requirements of the Clean Air Act and 7 **DE Admin. Code** 1100.

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- 1. "Act" means the Clean Air Act, as amended by the Clean Air Act Amendments of November 15, 1990, 42 U.S.C. 7401 et seq. [Reference: 7 **DE Admin. Code** 1130 Section 2 dated 8/11/22]
- 2. "AP-42" means the Compilation of Air Pollutant Emission Factors, Fifth Edition, AP-42, dated January 15, 1995, as amended with Supplements and Updates.
- 3. "CFR" means Code of Federal Regulations.
- Reserved.
- Reserved.
- 6. "Number 2 fuel oil" and "No. 2 fuel oil" means distillate oil.
- 7. "Reg." and "Regulation" mean the regulations covered under 7 **DE Admin. Code** 1100.
- 8. "Regulations Governing the Control of Air Pollution" means the codification of those regulations enacted by the Delaware Department of Natural Resources and Environmental Control, in accordance with 7 **Del. C.,** Ch 60, § 6010.

f. **Duty to Supplement**.

- Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the Owner and/or Operator shall promptly submit to the Department such supplementary facts or corrected information. [Reference: 7 DE Admin. Code 1130 Section 5.2 dated 11/15/93]
- 2. The Owner and/or Operator shall promptly submit to the Department information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to the release of a corresponding draft permit. [Reference: 7 DE Admin. Code 1130 Section 5.2 dated 11/15/93]
- 3. The Owner and/or Operator shall furnish to the Department, upon receipt of a written request and within a reasonable time specified by the Department:
 - i. Any information that the Department determines is reasonably necessary to evaluate or take final action on any permit application submitted in accordance with Condition 2(l) or 2(m) of this permit. The Owner and/or Operator may request an extension to the deadline the Department may impose on the response for such information. [Reference: 7 DE Admin. Code 1130 Section 5.1.2.3 dated 11/15/93]
 - ii. Any information that the Department requests to determine whether cause exists to modify, terminate, or revoke this permit, or to determine compliance with the terms and conditions of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.5 dated 8/11/22]
 - iii. Copies of any records required to be kept by this permit. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.7.5.7 dated 8/11/22]
- **g. Emission Trading**. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.9 dated 8/11/22]
- **h.** <u>Fees</u>. The Owner and/or Operator shall pay fees to the Department consistent with the fee schedule established by the Delaware General Assembly. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.8 dated 8/11/22 and Section 9.0 dated 11/15/93]
- **i.** <u>Inspection and Entry Requirements</u>. Upon presentation of identification, the Owner and/or Operator shall allow authorized officials of the Department to perform the following:

Condition 2 – General Requirements

- 1. Enter upon the Owner and/or Operator's premises where a source is located or an emissions-related activity is conducted, or where records that must be kept under the terms and conditions of this permit are located. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.2.1 dated 811/22]
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.2.2 dated 8/11/22]
- 3. Inspect, at reasonable times and using reasonable safety practices, any facility, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. [Reference: 7 DE Admin. Code 1130 Section 6.3.2.3 dated 08/11/22]
- 4. Sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.2.4 dated 8/11/22]
- **j. Permit and Application Consultation**. The Owner and/or Operator is encouraged to consult with Department personnel before submitting an application or, at any other time, concerning the operation, construction, expansion, or modification of any installation, or concerning the required pollution control devices or system, the efficiency of such devices or system, or the pollution problem related to the installation. [Reference: 7 **DE Admin. Code** 1130 Section 5.1.1.7 dated 11/15/93]
- **k.** <u>Permit Availability</u>. The Owner and/or Operator shall have available at the facility at all times a copy of this permit and shall provide a copy of this permit to the Department upon request. [Reference: 7 **DE Admin. Code** 1102 Section 8.1 dated 6/1/97]
- **I.** <u>Permit Renewal</u>. This permit expires on <maximum is no more than the issue date plus 5 years> except as provided in Condition 2(l)(4) below. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.2 dated 8/11/22]
 - 1. Applications for permit renewal shall be subject to the same procedural requirements, including those for public participation, affected state comment, and EPA review, that apply to initial permit issuance under 7 **DE Admin. Code** 1130 Section 7.1, except that an application for permit renewal may address only those portions of the permit that the Department determines require revision, supplementing, or deletion, incorporating the remaining permit terms by Reference: from the previous permit. The Department may similarly, in issuing a draft renewal permit or proposed renewal permit, specify only those portions that will be revised, supplemented, or deleted, incorporating the remaining permit terms by Reference: [Reference: 7 DE Admin. Code 1130 Section 7.3.1 dated 8/11/22]
 - 2. The Owner and/or Operator's right to operate shall cease upon the expiration date unless a <u>timely and complete</u> renewal application has been submitted to the Department <<u>date renewal application is due; no later than 12 months prior to the expiration date of the permit</u>> The Owner and/or Operator may submit the renewal application beginning <<u>insert date 18 months prior to the expiration date of the permit</u>.> Early submission within the dates provided above is encouraged. [Reference: 7 **DE Admin. Code** 1130 Sections 5.1.1.5 dated 11/15/93 and 7.3.2 dated 8/11/22]
 - 3. The Department shall review each application for completeness and shall inform the applicant within 60 days of receipt if the application is incomplete. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness within 60 days of an application, an application will be deemed complete if it contains the information required by the application form and 7 **DE Admin. Code** 1130 Section 5.4. [Reference: 7 **DE Admin. Code** 1130 Section 5.1.2.1 dated 11/15/93]
 - 4. If a timely and complete application for a permit renewal is submitted to the Department pursuant to 7 **DE Admin. Code** 1130, Section 5.1.2.4 (dated 11/15/93) and Section 7.3.1 (dated 8/11/22) and the Department, through no fault of the Owner and/or Operator, fails to

Condition 2 – General Requirements

take final action to issue or deny the renewal permit before the end of the term of this permit, then this permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time. [Reference: 7 DE Admin. Code 1130 Section 7.3.3 dated 8/11/22]

m. Permit Revision and Termination.

1.

- i. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.7.3 dated 8/11/22]
- ii. Except as provided under Condition 2(m)(3) ["Minor Permit Modification"], the filing of a request by the Owner and/or Operator for a permit modification, revocation and reissuance, or termination, or of a modification of planned changes or anticipated noncompliance does not stay any term or condition of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.3 dated 8/11/22 and 7.5.1.5 dated 8/11/22]
- "Administrative Permit Amendment." When required, the Owner and/or Operator shall submit to the Department a request for an administrative permit amendment in accordance with 7 DE Admin. Code 1130 Section 7.4. [Reference: 7 DE Admin. Code 1130 Section 7.4 dated 8/11/22]
- 3. "Minor Permit Modification." When required, the Owner and/or Operator shall submit to the Department an application for a minor permit modification in accordance with 7 **DE Admin. Code** 1130 Section 7.5.1 and 7.5.2. [Reference: 7 **DE Admin. Code** 1130 Section 7.5.1 dated 8/11/22 and 7.5.2 dated 8/11/22]
 - i. For a minor permit modification, during the period of time between the time the Owner and/or Operator makes the change or changes proposed in the minor permit modification application and the time that the Department takes action on the application, the Owner and/or Operator shall comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period the Owner and/or Operator, at its own risk, need not comply with the existing terms and conditions of this permit that it seeks to modify. [Reference: 7 DE Admin. Code 1130 Section 7.5.1.5 dated 8/11/22 and 7.5.2.5 dated 8/11/22]
 - ii. If the Owner and/or Operator fail to comply with its proposed permit terms and conditions during this time period, the existing terms and conditions of this permit may be enforced against the Owner and/or Operator. [Reference: 7 DE Admin. Code 1130 Section 7.5.1.5 dated 8/11/22 and 7.5.2.5 dated 8/11/22]
- 4. "Significant Permit Modification." When required, the Owner and/or Operator shall submit to the Department an application for a significant permit modification in accordance with 7 **DE Admin. Code** 1130 Section 7.5.3. [Reference: 7 **DE Admin. Code** 1130 Section 7.5.3 dated 8/11/22]

5.

- i. When the Owner and/or Operator is required to meet the requirements under Section 112(g) of the Act or to obtain a preconstruction permit under 7 **DE Admin. Code** 1100, the Owner and/or Operator shall file a complete application to revise this permit within 12 months of commencing operation of the construction or modification. [Reference: 7 **DE Admin. Code** 1130 Section 5.1.1.4 dated 11/15/93]
- ii. When the Owner and/or Operator is required to obtain a preconstruction permit, the Owner and/or Operator may submit an application to revise this permit for concurrent processing. The revision request for this permit when submitted for concurrent processing shall be submitted to the Department with the Owner and/or Operator's preconstruction review

Condition 2 – General Requirements

application or at such later time as the Department may allow. Where this permit would prohibit such construction or change in operation, the Owner and/or Operator shall obtain a permit revision before commencing operation. [Reference: 7 **DE Admin. Code** 1102 Sections 11.2.10, 11.5, dated 6/11/06 and 12.4, dated 8/11/22, and 7 **DE Admin. Code** 1130 Section 5.1.1.4 dated 11/15/93]

- iii. Where an application is not submitted for concurrent processing, the Owner and/or Operator shall obtain an operating permit under 7 **DE Admin. Code** 1100 prior to commencing operation of the construction or modification to cover the period between the date operation is commenced and until such time as operation is approved under 7 **DE Admin. Code** 1130. [Reference: 7 **DE Admin. Code** 1102 Section 2.1 dated 6/11/06]
- 6. "Permit Termination." The Owner and/or Operator may at any time apply for termination of this permit in accordance with 7 **DE Admin. Code** 1130 Section 7.8.4 or Section 7.8.5. [Reference: 7 **DE Admin. Code** 1130 Sections 7.8.4 dated 8/11/22 and 7.8.5 dated 8/11/22]

n. Permit Transfer.

- 1. A change in ownership or operational control of this facility shall be treated as an administrative permit amendment where the Department has determined that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new owner has been submitted to the Department. [Reference: 7 DE Admin. Code 1130 Section 7.4.1.4 dated 8/11/22]
- 2. In addition to any written agreement submitted by the Owner and/or Operator in accordance with Condition 2(n)(1), the Owner and/or Operator shall have on file at the Department a statement meeting the requirements of 7 **Del. C.,** Ch 79, Section 7902. *This permit condition is state enforceable only.* [Reference: 7 **Del. C.,** Ch 79 Section 7902 dated 8/28/2007]
- 3. The written agreement required in Condition 2(n)(1) of this permit shall be provided to the Department within a minimum of 30 calendar days prior to the specific date for transfer and shall indicate that the transfer is agreeable to both the current and new owner. [Reference: 7 DE Admin. Code 1102 Section 7.1 dated 6/1/97]
- **o.** <u>Property Rights</u>. This permit does not convey any property rights of any sort, or any exclusive privilege. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.7.4 dated 8/11/22]

p. Risk Management Plan Submissions.

- In the event this stationary source, as defined in the State of Delaware 7 **DE Admin. Code** 1201 "Accidental Release Prevention Regulation" Section 4.0, is subject to or becomes subject to Section 5.0 of 7 **DE Admin. Code** 1201 (as amended March 11, 2006), the owner or operator shall submit a risk management plan (RMP) to the Environmental Protection Agency's RMP Reporting Center by the date specified in Section 5.10 and required revisions as specified in Section 5.190. A certification statement shall also be submitted as mandated by Section 5.185. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.4 dated 8/11/22, 7 **DE Admin. Code** 1201 as amended March 11, 2006 and Delaware; Approval of Accidental Release Prevention Program, Federal Register Vol. 6, No. 11 pages 30818-22 dated June 8, 2001]
- 2. If this stationary source, as defined in 7 **DE Admin. Code** 1201 Section 4.0, is not subject to Section 5.0 but is subject or becomes subject to Section 6.0 (as amended March 11, 2006), the owner or operator shall submit a Delaware RMP to the State of Delaware's Accidental Release Prevention group by the date as specified in Section 6.6.10 and required revisions as specified by Section 6.6.1. *Note: State enforceable only.* [Reference: 7 **DE Admin. Code** 1201 as amended March 11, 2006]

Condition 2 – General Requirements

q. Protection of Stratospheric Ozone.

When applicable, this Facility shall comply with the following requirements: [Reference: 40 CFR Part 82 "Protection of Stratospheric Ozone" revised as of 7/1/97 and 7 DE Admin. Code 1130 Section 2.0 dated 8/11/00]

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - i. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a process that uses a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - ii. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - iii. The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - iv. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2. Any person servicing, maintaining, or repairing appliances, except for motor vehicles, shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B. In addition, Subpart F applies to refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment.
 - i. Persons owning appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to §82.154 and §82.156.
 - ii. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - iii. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - iv. Persons performing maintenance, service, repair, or disposal of appliances must certify with the Administrator pursuant to §82.158 and §82.162.
 - v. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152)
 - vi. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
- 3. Owners/Operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR Part 82, Subpart F §82.166.
- 4. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
- 5. If the permittee performs a service on motor (fleet) vehicles when this service involves ozonedepleting substance refrigerant (or regulated substitute substance) in the MVAC, the permittee

Condition 2 – General Requirements

is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners".

- i. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. These systems are regulated under 40 CFR Part 82, Subpart F.
- 6. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed as acceptable in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program.
- **r. Severability**. The provisions of this permit are severable. If any part of this permit is held invalid, the application of such part to other persons or circumstances and the remainder of this permit shall not be affected thereby and shall remain valid and in effect. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.6 dated 8/11/22]

Condition 3 – Specific Requirements

- **a.** Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards. The Owner and/or Operator shall comply with the limitations and standards detailed in Condition 3 Table 1 of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.1 dated 8/11/22]
- **b.** Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping). The Owner and/or Operator shall maintain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all original strip-chart recordings, where appropriate, for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, the permit may specify that records may be maintained in computerized form. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.2 dated 8/11/22]

1.

- i. <u>Specific Requirements</u>. The Owner and/or Operator shall comply with the operational limitations, monitoring, testing, and record keeping requirements detailed in Condition 3 Table 1 which are in addition to those in Conditions 3(b)(1)(ii) and 3(b)(2) of this permit. [Reference: 7 **DE Admin. Code** 1130 Sections 6.1.1 dated 8/11/22, 6.1.3.1 dated 8/11/22, and 6.1.10 dated 8/11/22]
- ii. General Testing Requirements. Upon written request of the Department, the Owner and/or Operator shall, at the Owner and/or Operator's expense, sample the emissions of, or fuel used by, an air contaminant emission source, maintain records, and submit reports to the Department on the results of such sampling. [Reference: 7 DE Admin. Code 1117 Section 2.2 dated 7/17/84]
- 2. <u>General Record Keeping Requirements</u>. The Owner and/or Operator shall record, at a minimum, all of the following information:

Condition 3- Specific Requirements (Cont.)

- i. If required, for each operating scenario identified in Condition 3 Table 1 of this permit, a log that indicates the operating scenario under which each particular emission unit is operating. The Owner and/or Operator shall, contemporaneously with changing from one operating scenario to another, record in this log the time at which the operating scenario under which it is operating is changed. [Reference: 7 DE Admin. Code 1130 Section 6.1.10 dated 8/11/22]
- i. The following information to the extent specified in Condition 3 Table 1 of this permit. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.2.1 dated 8/11/22]
 - A. The date, place, and time of the sampling or measurements. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.2.1.1 dated 8/11/22]
 - B. The dates analyses were performed. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.2.1.2 dated 8/11/22]
 - C. The Owner and/or Operator or entity that performed the analyses. [Reference: 7 **DE Admin.** Code 1130 Section 6.1.3.2.1.3 dated 8/11/22]
 - D. The analytical techniques or methods used. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.2.1.4 dated 8/11/22]
 - E. The results of such analyses. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.5 dated 8/11/22]
 - F. The operating conditions as existing at the time of sampling or measurement. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.2.1.6 dated 8/11/22]
- ii. Reserved.
- iii. A copy of the written notice required by Condition 3(c)(2)(iii) for each change made under Condition 4(c) [Operational Flexibility] of this permit shall be maintained with a copy of this permit. [Reference: 7 **DE Admin. Code** 1130 Section 6.8.1 dated 8/11/22]

c. Reporting and Compliance Certification Requirements.

1. Specific Reporting/Certification Requirements. The Owner and/or Operator shall comply with the Reporting/Certification Requirements detailed in Condition 3— Table 1 of this permit, which are in addition to those of Conditions 3(c)(2) and 3(c)(3) of this permit. Each report that contains any deviations from the terms of Condition 3— Table 1 shall identify the probable cause of the deviations and any corrective actions or preventative measures taken. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3 dated 8/11/22, 6.1.3.3.3.3 dated 8/11/22, and 6.1.3.3.3.4 dated 8/11/22]

2. <u>General Reporting Requirements</u>.

i. The Owner and/or Operator shall submit to the Department a report of any required monitoring not later than the first day of August (covering the period from January 1 through June 30 of the current calendar year) and the first day of February (covering the period July 1 through December 31 of the previous calendar year) of each calendar year. Each report shall identify any deviations from the monitoring, record keeping, and reporting requirements under this permit; and the probable cause of the deviations; and any corrective actions or preventative measures taken. If no deviations have occurred, such shall be stated in the

Condition 3- Specific Requirements (Cont.)

report. [Reference: 7 **DE Admin. Code** 1130 Sections 6.1.3.3.1 dated 8/11/22, 6.1.3.3.2 dated 8/11/22, and 6.1.3.3.3.4 dated 8/11/22]

ii. In addition to the semiannual monitoring reports required under Condition 3(c)(2)(i), the Owner and/or Operator shall submit to the Department supplemental written reports and/or notices identifying all deviations from permit conditions, probable cause of the deviations, and any corrective actions or preventative measures as follows: [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.3 dated 8/11/22 and 6.1.3.3.3.4 dated 8/11/22]

A. Reserved.

- B. Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery and after activating the appropriate site emergency plan, in the following manner: [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.3 dated 8/11/22 and 6.1.3.3.3.2 dated 8/11/22]
 - <u>1.</u> Emissions that pose an imminent and substantial danger to public health, safety or the environment must be reported by calling the Department's Environmental Emergency Notification and Complaint number (800) 662-8802. [Reference: 7 DE Admin. Code No 1130, Section 6.1.3.3.3.2 dated 8/11/22]
 - 2. Emissions in excess of any permit condition or emissions which create a condition of air pollution but do not pose an imminent and substantial danger to public health, safety or the environment must either be called in to the Environmental Emergency Notification and Complaint number (800) 662-8802 or faxed to (302) 855-1902. The ability to fax notifications to the Department may be revoked by the Department upon written notice to the Company and at the Department's sole discretion. [Reference: 7 DE Admin. Code No 1130, Section 6.1.3.3.3.2 dated 8/11/22]
- C. All emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department in a written report pursuant to Condition 3(c)(2)(i) and/or the specific reporting requirements listed in Condition 3 Table 1 of this permit. [Reference: 7 **DE Admin. Code** 1130 Sections 6.1.3.3.3.3 dated 8/11/22 and 6.1.3.3.3.4 dated 8/11/22]
- D. Discharges to the atmosphere in excess of any quantity specified in the 7 **DE Admin. Code** 1203 ("**Reporting of a Discharge of a Pollutant or an Air Contaminant**") shall be reported, immediately upon discovery and after activating the appropriate site emergency plan, either in person or to the Department's 24-hour Environmental Emergency Notification and Complaint line (1-800-662-8802). Discharges in compliance with this permit and excess emissions previously reported under Condition 3(c)(2)(ii)(B) of this permit are exempt from this reporting requirement. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.3.3.5 dated 8/11/22 and 7 **DE Admin. Code** 1203]
- iii. Prior to making a change as provided in Condition 4 [Operational Flexibility] of this permit the Owner and/or Operator shall give written notice to the Department and EPA at least seven calendar days before the change is to be made. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 8/11/22]
 - A. The seven day period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 8/11/22]

Condition 3- Specific Requirements (Cont.)

- B. If less than seven calendar days notice is provided because of a need to respond more quickly to such unanticipated conditions, the Owner and/or Operator shall provide notice to the Department and EPA as soon as possible after learning of the need to make the change, together with the reasons why advance notice could not be given. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 8/11/22]
- C. The written notice shall include all of the following information: [Reference: 7 **DE Admin. Code** 1130 Section 6.8.1 dated 8/11/22]
 - <u>1.</u> The identification of the affected emission units and a description of the change to be made.
 - 2. The date on which the change will occur.
 - 3. Any changes in emissions.
 - <u>4.</u> Any permit terms and conditions that are affected, including any new applicable requirements.
- iv. The Owner and/or Operator shall submit to the Department an annual emissions statement in accordance with 7 **DE Admin. Code** 1117 Section 7.0 not later than April 30 of each year, or other date as established by the Department, unless an extension by the Department is granted. Such emissions statement shall cover the preceding calendar year. [Reference: 7 **DE Admin. Code** 1117 Section 7.0 dated 1/11/93]
- v. If required, the Owner and/or Operator shall submit to the Department a progress report for applicable requirements identified in Condition 5 Table 1 of this permit. Such reports shall be submitted not later than the first day of August (covering the period from January 1 through June 30 of the current calendar year) and the first day of February (covering the period July 1 through December 31 of the previous calendar year) of each calendar year. Each progress report shall include the following: [Reference: 7 DE Admin. Code 1130 Sections 5.4.8 dated 11/15/93 and 6.3.4 dated 8/11/22]
 - A. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved. [Reference: 7 DE Admin. Code 1130 Section 6.3.4.1 dated 8/11/22]
 - B. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [Reference: 7 DE Admin. Code 1130 Section 6.3.4.2 dated 8/11/22]
- vi. Nothing herein shall relieve the Owner and/or Operator from any reporting requirements under federal, state, or local laws. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.3.3.5 dated 8/11/22]
- 3. General Compliance Certification Requirements.
 - i. Compliance with terms and conditions of this permit shall be certified to the Department not later than the first day of February of each year unless the terms or conditions in Condition 3– Table 1 of this permit require compliance certifications to be submitted more frequently. Such certification shall cover the previous calendar year and shall be submitted on Form AQM-1001BB. The Compliance Certification shall include the following information: [Reference: 7 DE Admin. Code 1130 Section 6.3.5.1 dated 8/11/22]

Condition 3- Specific Requirements (Cont.)

- A. The identification of each term or condition of the permit that is the basis of the certification. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.5.3.1 dated 8/11/22]
- B. The Owner and/or Operator's current compliance status, as shown by monitoring data and other information reasonably available to the Owner and/or Operator. [Reference: 7 **DE Admin.** Code 1130 Section 6.3.5.3.2 dated 8/11/22]
- C. Such certification shall indicate whether compliance was continuous or intermittent during the covered period. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.5.3.3 dated 8/11/22]
- D. The methods used for determining the compliance status of the Owner and/or Operator, currently and over the reporting period as required by the monitoring, record keeping, and reporting required under Condition 3. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.5.3.4 dated 8/11/22]
- E. Such other facts as the Department may require to determine the compliance status of the source. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.5.3.5 dated 8/11/22]
- ii. Each compliance certification shall be submitted to the Department and EPA and shall be certified in accordance with Condition 2(a) of this permit. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.5.4 dated 8/11/22]
- iii. Any additional information possessed by the Owner and/or Operator that demonstrates non-compliance with any applicable requirement must also be used as the basis for compliance certifications. [Reference: 62 CFR 8314 dated 2/24/97]

Condition 3 – Table 1: Specific Requirements

En	nission Limitations, Emission Standards,	Co	ompliance Determination Methodology		
ĮO	Operational Limitations, and Operational		Nonitoring, Testing, QA/QC Procedures, and	Re	porting and Compliance Certification
	Standards		ecord Keeping)	L_	
		es 1	and 2, and Building 2 Polymer Area with Ass	ocia	ited Scrubber
1.	Volatile Organic Compounds (VOCs)	1		1	
i.	Emission Standard	٧.		х.	-1 3
	None.		Compliance with this emission standard and these operation limitations will be demonstrated		In addition to Conditions 2(b)(9) and 3(c)(2) of this permit:
l ii.	Emission Limitation		by adherence to the appropriate monitoring,		tilis permit.
"'	VOC emission levels shall not exceed the		testing, QA/QC, and recordkeeping		For each occurrence of excess emissions, within
	following:		requirements. [Reference: 7 DE Admin. Code 1130,		thirty (30) calendar days of becoming aware of
	A. Including fugitives, air contaminant		Section 6.3.1 dated 8/11/22]		such occurrence, the Company shall supply the
	emissions from SUBA Line 1, SUBA Line 2,				Department in writing with the following
	the Polymer Area, and all associated	vi.	Monitoring		information:
	equipment, combined, shall not exceed 2.0		[Reference: 40 CFR Part 64.3 and 64.4 dated 7/1/09]		 The name and location of the facility;
	pounds per hour and 8.9 tons per year, on		A. Data Representativeness: In order to ensure that the data obtained		
	a 12 month rolling basis, of		through the monitoring required in this		2. The subject source(s) that caused the
	dimethylformamide (DMF).		condition, the following requirements are		excess emissions;
	One wasticated Chandraid		applicable:		3. The time and date of the first observation
.	Operational Standard None.		1. The magnetic flow meter used to		of the excess emissions;
	Notic.		measure scrubber water throughput		of the excess emissions,
iv	Operational Limitations		rate shall be installed in the inlet water		4. The cause and expected duration of the
'''	A. Inlet loading to the packed bed scrubber		line. It shall have a measurement		excess emissions;
	shall not exceed 62 pounds per hour of		range of 0-30 gallons per minute (or		,
	DMF or an inlet loading that has been		other range as approved by the		5. For sources subject to numerical emission
	demonstrated to the Department to meet		Department) with a minimum standard		limitations, the estimated rate of emissions
	the emission limits of Condition 3 – Table		accuracy of $\pm 1\%$ of the reading.		(expressed in the units of the applicable
	1(a)(1)(ii)(A) from all process equipment		2.		emission limitation) and the operating data
	ducted to the scrubber. [Reference: Condition		a. The differential flow meter used to		and calculations used in determining the
	2.1.1 of Permits:APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/04/05]		measure the volumetric flow rate of		magnitude of the excess emissions; and
	, , , ,		air exhaust from the scrubber shall		
	B. Indicators:		be properly installed (in accordance		

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
The following indicators shall be used as surrogate limits indicating proper operation of the control device and process equipment and thereby, compliance status with regard to the emission limits above. 1. Scrubber water throughput rate. 2. a. Volumetric flow rate of air exhaust from the scrubber; or b. In the event of a failure of the Volumetric flow rate of air exhaust from the scrubber, and with prior approval of the Department, the Scrubber blower Variable Frequency Drive (VFD) Output%. 3. Pressure drop across the scrubber. 4. Scrubber water outlet DMF concentration. [Reference: 40 CFR Part 64.6(c)(1)(i) dated 7/1/09] C. Indicator Ranges: The following indicator ranges shall establish the allowable operational ranges for the indicators listed above. 1. The scrubber water throughput rate shall be greater than a value 10% below the average rate measured	with manufacturer's specifications). It shall have a measurement range from 7,236 to 30,000 cfm or other range approved by the Department. Its standard accuracy from 0-20% of range shall be at least within ±1%, its standard accuracy from 20%-100% of range shall be at least within ±2%. b. A signal from the scrubber blower VFD is sent to the Human Machine Interface (HMI) for data logging. 3. The magnehelic gauge used to measure the pressure drop across the scrubber shall be installed across the scrubber media bed. It shall have a range of 0-30 inches of water (or other range approved by the Department) and shall have an accuracy of ±0.5%. 4. The gas chromatograph (GC) used to test the manually collected samples of scrubber water from the outlet of the scrubber shall be capable of determining the concentration of DMF in the water to an accuracy of ±3% to be proved based on mid-range calibration standard verifications as specified in the October 4, 2006	 6. The proposed corrective actions and schedule to correct the conditions causing the excess emissions. [Reference: Condition 6.3 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05] xi. Certification None in addition to Conditions 2(a) and 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.2 dated 8/11/22]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
during the most recent performance test that demonstrated compliance on a three hour average basis. 2. a. The volumetric flow rate of air exhaust from the scrubber shall be within 5%(+/-) of the average rate measured during the most recent performance test that demonstrated compliance on a three hour average basis; or b. In the event of a volumetric flow rate indicator failure, the company shall provide to the Department, included in the approval request, the Correlation Range between air flow and VFD Output% and the VFD Output% Compliance Range, per procedure developed by the Company. 3. The pressure drop across the scrubber shall be greater than a value 10% below the average pressure drop measured during the most recent	"Proposed Method [for] The Analysis of N,N,-Dimethylformamide in Scrubber Water by GC/FID" (as amended by the Department's letter of October 19, 2006, signed by Stephen S. Ours, P.E.) or any update of that protocol approved by the Department. The precision shall meet the requirements specified in Table 2 of this protocol (as amended and approved by the Department). [Reference: 40 CFR Part 64.4(b)(1) dated 7/1/09] B. In addition to the monitoring required by 1(a)(1)(vi)(A), the Company shall have this data continuously monitored in a run chart that an area engineer will monitor for the trends and any signs of irregularities. C. The chemicals introduced into the scrubber water input shall be monitored weekly to insure proper levels in the feed tanks. D. The scrubber water distribution system (WDS) and dispersion media shall be visually inspected annually. Should the WDS and/or the dispersion media appear to be hindering the efficiency of the scrubber, quarterly inspections shall be performed	
performance test that demonstrated compliance on a three hour average basis.	until the unit is functioning properly.	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 4. The scrubber water outlet DMF concentration shall not exceed 10% above the average value measured during the most recent performance test that demonstrated compliance. [Reference: 40 CFR Part 64.6(c)(1)(i) dated 7/1/09] D. Excursions: If the 3-hour average scrubber water throughput rate drops below a value 10% below the average value measured during the most recent performance test that demonstrated compliance, this shall be considered an excursion. 	 vii. Testing A. Emissions Testing At least once every five (5) years of the owner or operator shall conduct performance tests to determine compliance with Conditions 1(a)(1)(ii), (a)(1)(iv)(A), (a)(2)(iii)(B) and (a)(5)(ii) and of this permit and shall furnish the Department with a written report of the results of such performance tests in accordance with the following provisions. [Reference: 40 CFR Part 60.8(a) dated 7/1/09] B. One (1) original and one (1) copy of the test protocol shall be submitted a minimum of forty-five (45) days in advance of the tentative test date to the following address: 	
a. If the 3-hour average volumetric flow rate of air exhaust from the scrubber varies outside the range between 5% below the "low" average exhaust flow and 5% above the "high" average exhaust value measured during the most recent performance test that demonstrated compliance, this shall be considered an excursion; or	DNREC – Division of Air Quality State Street Commons 100 W. Water Street, Suite 6A Dover, Delaware 19904 C. The tests shall be conducted in accordance with the State of Delaware and Federal requirements. D. The test protocol shall be approved by the Department prior to initiating any testing. Upon approval of the test protocol, the	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
b. When applicable, if the 3-hour average scrubber blower VFD Output% varies outside the VFD Output% Compliance Range provided by the company and approved by DNREC, this shall be considered an excursion.	operator. The owner or operator shall then schedule the compliance demonstration with the Source Testing Engineer. The Department must have the opportunity to observe the test for the results to be considered for acceptance.	
3. If the 3-hour average pressure drop across the scrubber drops below a value 10% below the average pressure drop measured across the scrubber during the most recent performance test that demonstrated compliance, this shall be considered an excursion.	E. The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original hard copy and one (1) PDF copy of the test report shall be submitted to the addresses below: One (1) original hard copy to: Engineering & Compliance Branch	
4. If the scrubber water outlet DMF concentration exceeds 10% above the average value measured during the most recent performance test that demonstrated compliance, this shall be considered an excursion. [Reference: 40 CFR Part 64.6(c)(2) dated 7/1/09]	Attn: Source Testing Engineer DNREC – Division of Air Quality 715 Grantham Lane New Castle, DE 19720 One (1) PDF copy to: Engineering & Compliance Section	
E. Monitoring/Measurement Approach: 1. The scrubber water throughput rate shall be measured with the use of a magnetic flow meter.	Email of Source Testing Engineer Email of Permit Engineer dnrec_daq_stacktest@delaware.gov	
2.	F. The final report of the results must meet the following requirements to be considered valid:	

Draft/Proposed Permit: <u>AQM-003/00033 - Renewal (04)</u> Rohm and Haas Electronic Materials CMP, LLC

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 a. The volumetric flow rate of air exhaust from the scrubber shall be measured with the use of a differential flow meter; or b. The scrubber blower VFD %Output is determined from the blower Variable Frequency Drive output measurement. 	 The full report shall include the emissions test report (including raw data from the test) as well as a summary of the results and statement of compliance or non-compliance with permit conditions. Summary of Results and Statement of Compliance or Non-Compliance 	
3. The pressure drop across the scrubber shall be measured with a magnehelic differential pressure gauge.	The owner or operator shall supplement the report from the emissions testing firm with a summary of results that includes the following information:	
4. The Company shall use manual sampling in conjunction with a gas chromatograph or another equivalent method subject to approval by the Department to measure the scrubber water outlet DMF concentration. [Reference: 40 CFR Part 64.6(c)(1)(ii) dated 10/22/97]	 a. A statement that the owner or operator has reviewed the report from the emissions testing firm and agrees with the findings. b. Permit number(s) and condition(s) which are the basis for the compliance evaluation. 	
F. At all times, the Company shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [Reference: 40 CFR Part 64.7(b) dated 10/22/97]	c. Summary of results with respect to each permit condition.d. Statement of compliance or non-compliance with each permit	
G. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control	condition.	

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Emission Limitations, Emission Standards,	Compliance Determination Methodology	
Operational Limitations, and Operational Standards	(Monitoring, Testing, QA/QC Procedures, and	Reporting and Compliance Certification
	Record Keeping)	
activities (including, as applicable,	G. The results must demonstrate to the	
calibration checks and required zero and	Department's satisfaction that the emission	
span adjustments), the Company shall	units are operating in compliance with the	
conduct all monitoring in continuous	applicable regulations and conditions of this	
operation (or shall collect data at all	permit; if the final report of the test results	
required intervals) at all times that the	show non-compliance the owner or operator	
pollutant-specific emissions unit is	shall propose corrective action(s). Failure	
operating. Data recorded during	to demonstrate compliance through the test	
monitoring malfunctions, associated	may result in enforcement action. Testing	
repairs, and required quality assurance or	to determine compliance with Conditions	
control activities shall not be used for	1(a)(1)(iv)(A) and 1(a)(5)(ii)(B) of this	
purposes of this permit, including data	permit shall be performed in accordance	
averages and calculations, or fulfilling a	with the test methods found in 7 DE	
minimum data availability requirement, if	Admin. Code 1124 Appendix "A" through	
applicable. The Company shall use all the	Appendix "D" and the method specified in	
data collected during other periods in	40 CFR 60.745(a). Testing to determine	
assessing the operation of the control	compliance with Conditions 1(a)(1)(ii)(A),	
device and associated control system. A	(a)(2)(iii)(B) and (a)(5)(ii)(A), and of this	
monitoring malfunction is any sudden,	permit shall be performed in accordance	
infrequent, not reasonably preventable	with the provisions of 40 CFR 60.743(b)(2)	
failure of the monitoring to provide valid	dated July 1, 2004 as specified in Condition	
data. Monitoring failures that are caused	3 - Table 1(a)(3)(iv)(c)(4) of this permit.	
in part by poor maintenance or careless	[Reference: Condition 4.1 of Permits: APC-1991/0580,	
operation are not malfunctions. [Reference:	APC-1996/0942, and APC-2005/0044 dated 11/4/05]	
40 CFR Part 64.7(c) dated 10/22/97]		
	viii. Quality Assurance/Quality Control	
	A. The magnetic flow meter used to measure	
	the scrubber water flow rate shall be	
	calibrated in accordance with the	
	manufacturer's specifications on the	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	frequency recommended by the manufacturer.	
	B. A measurement in accordance with Reference Methods 1 and 2 (40 CFR 60, Appendix A) shall be performed in the scrubber air exhaust line on at least a quarterly basis. The measured values shall be compared with the measured values using the flow meter. If appropriate, the calibration factor in the data acquisition system shall be adjusted to ensure similar results from the two measurement procedures.	
	C. The magnehelic gauge used to measure the pressure drop across the scrubber shall be calibrated in accordance with the manufacturer's specifications on the frequency recommended by the manufacturer.	
	D. The QA/QC procedures included in the Company's December 14, 2009 updated "Proposed Method [for] the Analysis of N,N,-Dimethylformamide in Scrubber Water by GC/FID" or any update of that protocol approved by the Department, shall be used to ensure proper calibration of the gas chromatograph used for determination of the DMF concentration of the scrubber	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	water outlet. These procedures include the following: 1. Initial four-point calibrations shall be performed in accordance with the procedures specified in the protocol where the relative percent difference between duplicate injections of each calibration standard shall be less than 5% to complete a proper calibration and develop a proper calibration curve. 2. Initial calibrations shall be verified with the use of a mid-range second primary stock standard (from that used for the four-point calibration). The percent recovery must be between 97% and 103%. 3. Preparation and analysis of one laboratory blank sample shall occur per analytical bath run whenever samples require dilution before analysis. 4. Calibration verification with the second mid-range primary stock standard prior to analysis and after every 10 source samples analyzed shall occur. This verification must meet the requirement specified in Table 2 of the aforementioned protocol.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	Replication of results must be verified as specified in the aforementioned protocol.	
	E. Frequency: 1. The scrubber water throughput rate shall be obtained by the data acquisition system, regularly, at least once every five minutes.	
	2. a.The volumetric flow rate of air exhaust from the scrubber shall be obtained by the data acquisition system, regularly, at least once every five minutes.	
	b. In the event of a failure of the volumetric flow measurement and DNREC approval to utilize VFD Output %, the VFD Output% shall be obtained from the data acquisition system at least once every five minutes.	
	 The pressure drop across the scrubber shall be obtained by the data acquisition system, regularly, at least once every five minutes. 	
	The scrubber water outlet DMF concentration shall be measured at	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	least once per shift during coating operations. [Reference: 40 CFR 64.3(b)(4) dated 7/1/09]	
	F. Data Collection Procedures: 1. For each 15 minutes worth of scrubber water throughput rate data, a computerized data acquisition system shall record electronically a 15 minute average.	
	 a.For each 15 minutes worth of volumetric flow rate of air exhaust from the scrubber data, a computerized data acquisition system shall record electronically a 15 minute average. 	
	b. In the event of a failure of the volumetric flow measurement and DNREC approval to utilize VFD Output %, each 15 minutes worth of VFD Output% data, a computerized data acquisition system shall record electronically a 15 minute average.	
	 For each 15 minutes worth of pressure drop across the scrubber data, a computerized data acquisition system shall record electronically a 15 minute average. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	4. The scrubber water outlet DMF concentration shall be obtained with the use of manual sampling and GC analysis. The results shall be recorded in a log at least once per shift during coating operations. [Reference: 40 CFR 64.3(b)(4) dated 7/1/09]	
	G. Averaging Period:1. The averaging period used for the scrubber water throughput rate is to be each 3-hour rolling period.	
	 a. The averaging period for the scrubber exhaust flow rate of air exhaust from the scrubber and is to be each 3-hr rolling period. 	
	b. In the event of a failure of the volumetric flow measurement and DNREC approval to utilize VFD Output %, the averaging period for the VFD Output% is to be each 3-hr rolling period.	
	 The averaging period for the pressure drop across the scrubber is to be each 3-hour rolling period. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	4. There should be no averaging period for scrubber water outlet DMF concentration. Each measurement is a discrete data point which must meet applicable requirements. [Reference: 40 CFR 64.3(b)(4) dated 7/1/09]	
	 ix. Record Keeping A. The Company shall retain records of the results of the testing performed in accordance with the testing requirements of this condition in a readily accessible location for a minimum of five (5) years or until the results of a more recent test are available whichever is longer. At a minimum these records shall include: The date, place as defined in the permit, and time of sampling or measurements; 	
	2. The date(s) the analyses were performed;3. The company or entity that performed	
	the analyses; 4. The analytical techniques or methods used;	
	5. The results of such analyses; and	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	6. The operating conditions as existing at the time of sampling or measurement. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.2.1 dated 8/11/22]	
	B. The Company shall maintain records of the following: 1. Monitoring data;	
	2. Monitor performance data;	
	3. Corrective actions taken;	
	4. All supporting information used to demonstrate compliance. [Reference: 40 CFR 64.9(b) dated 10/22/97]	
	 C. The Company shall maintain records of the following scrubber inspection and maintenance activities: 1. The weekly levels of chemicals introduced into the scrubber water inlet feed tanks. 	
	Any scrubber water distribution system (WDS) and dispersion media inspection and corrective actions, if any.	
	3. The parameters monitored under Condition 3 – Table 1(a)(1)(vi)(A) shall be recorded in a run chart format.	

Condition 3 – Table 1: Specific Requirements (Continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
2. Streamlined Condition		
Compliance with this streamlined condition assures compliance with the provisions specified in 7 DE	v. Compliance Method Compliance with this emission standard and	x. Reporting In addition to Conditions 2(b)(9) and 3(c)(2) of
Admin. Code 1124, Section 17 (VOC RACT) dated 1/11/93, Conditions 3.1, 3.2, 3.4, 3.5, 3.8, 3.9,	these operation limitations will be demonstrated by adherence to the appropriate monitoring,	this permit: A. A. Any record showing non-compliance with

- and 3.10 of Permits: APC-1991/0580 (Amendment 4), APC-1996/0942 (Amendment 4), and APC-2005/0044, and 40 CFR 60, Subpart VVV, Sections 60.743(b)(1), 60.743(e), 60.747(d)(6) dated 7/1/04. Note that a violation of these conditions will be considered a violation of all streamlined requirements, not just the most stringent.
- i. Emission Standard None.

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- **Emission Limitation** None.
- iii. Operational Standard
 - A. The owner or operator shall maintain a total enclosure around each of SUBA Line 1, SUBA Line 2, and their associated drying ovens. Captured emissions shall be directed to the scrubber. These enclosures shall comply with the following operational limits:
 - 1. The only openings in the enclosures are forced makeup air and exhaust ducts and natural draft openings (NDOs) such as those through which

- testing, QA/QC, and record keeping requirements. [Reference: 7 DE Admin. Code 1130, Section 6.3.1 dated 8/11/11]
- vi. Monitoring
 - A. The Company shall perform quarterly inspections of the SUBA Line 1 and SUBA Line 2 enclosures (including the associated drying ovens). These inspections shall include a smoke test of all NDOs to ensure inward air flow and visual inspection of door and window seals. Any apparent deterioration of seals. Any apparent deterioration of seals or non-NDO gaps in the enclosure shall be repaired as soon as practicable, but not later than 30 days from the date of discovery. [Reference: Condition 4.3.1 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]
 - B. The Company shall monitor the following scrubber parameters on the frequencies noted:

Continuously:

- Scrubber water throughput flow rate
- Scrubber air exhaust

- the applicable requirements for control devices [Condition 3 – Table 1(a)(2)(iii)(B) of this permit] shall be reported by sending a copy of the record to the Department within forty-five (45) calendar days following the occurrence. [Reference: Condition 6.4 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/95; Regulation 1124 Section 4.5.]
- B. At least thirty (30) calendar days before changing the method of compliance from control devices to the use of complying coatings or daily-weighted averaging for SUBA Line 1 or SUBA Line 2, the owner or operator shall comply with all the requirements of 7 **DE Admin. Code** 1124, Section 4.3.1 or Section 4.4.2, respectively, as well as 7 **DE Admin. Code** 1102. Upon changing the method of compliance from control devices to the use of complying coatings or daily-weighted averaging, the owner or operator shall comply with all requirements of the Section or 7 **DE Admin. Code** 1124 applicable to the coating unit, line, or operation referenced in 7 **DE Admin. Code** 1124, Section 4.5. [Reference: Condition 6.5 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]

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Emission Limitations, Emission Standa Operational Limitations, and Operation Standards	, , , , , , , , , , , , , , , , , , , ,	
raw materials enter and exit the coating operation.	Scrubber pressure dropVFD Output% (when applicable)	C. The Company shall submit quarterly reports to the Department documenting all 3-hour
2. The total area of natural draft openings (NDOs) shall exceed percent of the total surface are walls, floor, and ceiling of each enclosure.	ea of the • Scrubber water outlet DMF concentration [Reference: Condition 4.3.2 of Permits: APC- 1991/0580, APC-1996/0942, and APC-2005/0044 dated	periods (during actual coating operations) during which the average scrubber monitoring parameters vary by the percentages in parentheses or more from the average value measured during the most recent performance
3. All access doors and windows kept closed during normal ope the enclosed coating operation for brief, occasional openings accommodate process equipm adjustments. If such openings frequent, or if the access door window remains open for a signamount of time during the prooperation, it must be considered natural draft opening.	vii. Testing A. When conducting a performance test or design evaluation for a non-flare control device used to control emissions from batch process vents, the owner or operator must establish emission profiles and conduct the test under worst-case conditions according to 40 CFR 863 1257(b)(8) instead of under	 Scrubber water throughput flows (minus 10%) Scrubber air exhaust (±5%0 Scrubber pressure drop (minus 10%) In addition, the Company shall report in these quarterly reports all instances where the scrubber water outlet DMF concentration exceeds 10% above the average value measured, with all emission sources in operation, during the most
4. Average inward face velocity (across all natural draft opening be at least 3,600 meters per h determined by the following procedures:	FV) Is shall B. The requirements in 40 CFR	recent performance test that demonstrated compliance. [Reference: Condition 6.6 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05; 40 CFR Part 60.747(d)(4 and 6) requirement]
a. All forced makeup air duct exhaust ducts shall be con so that the volumetric flow each can be accurately de	structed C. References in 40 CFR §63.997(b)(1) to	D. For both SUBA Lines, and associated equipment, the Company shall: 1. Submit quarterly reports to document any condition of noncompliance including all

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<u>Condition 3 – Table 1: Specific Requirements (Continued)</u>			
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	tional Limitations, and Operational (Monitoring, Testing, QA/QC Procedures, and		
by EPA Reference Method 1 or 1A (40 CFR 60, Appendix A) for sample and velocity traverses and EPA Reference Method 2, 2A, 2C, or 2D (40 CFR 60, Appendix A) for velocity and volumetric flow rates. Volumetric flow rates shall be calculated without adjustment normally made for moisture content. b. FV shall be determined by the following equation: where: $FV = \frac{\sum_{j=1}^{n} Q_{out,j} - \sum_{i=1}^{p} Q_{in,i}}{\sum_{k=1}^{q} A_k}$ Oout,j = the volumetric flow rate of each gas stream (j) exiting the total enclosure through an exhaust duct or good, in standard cubic meters per hour (wet basis)	include the methods specified in 40 CFR §63.1257(b)(8). [Reference: 40 CFR Part 63.2460(c)(2)(ii) dated 7/14/06] D. The owner or operator must conduct a subsequent performance test or compliance demonstration equivalent to an initial compliance demonstration within 180 days of a change in the worst-case conditions. [Reference: 40 CFR Part 63.2460(c)(2)(vi) dated 7/14/06] viii. Quality Assurance/Quality Control None. ix. Record Keeping The following information shall be recorded, initialed (except data collected electronically), and maintained in a log in accordance with the frequency noted. A. Records of the quarterly enclosure inspections for both SUBA Lines. These records shall include the date of the inspections, the identified deficiencies a description of any corrective action(s) were taken, and whether the deficiency was corrected as a result of the action taken. [Reference: Condition 5.2.2 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]	periods during actual mixing, coating, or curing when the control device or the vapor capture system was malfunctioning or not operating. [40 CFR Part 60.747(d)(4 and 6)] E. In the event of a failure of the scrubber exhaust flow indicator, and approval of VFD Output % indicator, the Company shall additionally submit to the Department, on a weekly basis (3-hour rolling average): 1. VFD Output% 2. Pressure Drop 3. Water Flow 4. Scrubber water outlet DMF concentration (once per shift) F. The Company shall submit required quarterly and/or Semi-Annual reports postmarked within thirty (30) days of the end of the reporting period. [Reference: Condition 6.9 of Permits: APC-1991/0580, APPC-1996/0942, and APC-2005/0044 dated 11/4/05] xi. Certification None in addition to Conditions 2(a) and 3(c)(3) of this permit.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards			(Monit	iance Determination Methodology toring, Testing, QA/QC Procedures, and d Keeping)	Reporting and Compliance Certification
		the volumetric flow rate of each gas stream (i) entering the total enclosure through a forced makeup air duct, in standard cubic meters per hour (wet basis), and	В.	The actual overall emission reduction achieved for each product run or each day, whichever is shorter, for each SUBA coating line as determined in Appendix D.3 of 7 DE Admin. Code 1124. As long as the owner/operator maintains the permanent total enclosure capture system as required in this permit, it can be assumed that the	
	A _k =	the area of each natural draft opening (k) in a total enclosure, in square meters.		capture efficiency is 100%. Control efficiency shall be based on the results of the most recent valid emissions test. The results of any valid test may be used for each day until superseded by the results of	
C.	draft of enclose any per SUBA is air flow periodi tubes, other is Adminias dire	r passing through all natural openings flows into the ures continuously. During erformance testing of the Lines, the continuous inward w shall by verified by ic observation using smoke streamers, tracer gases, or means approved by the istrator of the U.S. EPA, and exted by the DNREC		a valid test subsequently performed. <i>Note:</i> It is not necessary to keep a distinct record for each product run or each day as discussed above for each line. The owner/operator must, however, be able to document the overall emission reduction for each product run or each day, as applicable, based on records available at the facility. [Reference: Condition 5.2.7 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]	
d.	volume to dete All emi minimi	rer, over the period that the etric flow rate tests required ermine FV are carried out. sission sources shall be a turn of four (4) equivalent ters (D _e) from each natural	C.	A maintenance log for the capture system, control devices (including the PVC Powder Delivery System filters), and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages. [Reference: Condition 5.2.8 of Permits: APC-	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
draft opening. D_e is calculated by the following equation:	1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]	
 De = 1.128 x (Area of NDO)^{0.5} [Reference: Condition 3.2 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05 and 40 CFR 60, Subpart VVV, Section 60.743(b)(1) dated 7/1/04] B. The owner or operator shall operate the packed bed scrubber handling emissions from SUBA Line 1, SUBA Line 2, the Polymer Area at its highest achievable efficiency, or at least 98.2%, whenever VOCs are in any of the equipment ducted to the scrubber, except during times when production is halted and induced flow to the scrubber is deactivated to perform maintenance on the scrubber or when a power outage occurs. 	 D. The following scrubber parameters on the frequencies noted: Continuously: Scrubber water throughput flow rate Scrubber air exhaust Scrubber pressure drop VFD Output% (when applicable) Once per shift (minimum) during coating operations: Scrubber water outlet DMF concentration [Reference: Condition 5.2.9 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/004 dated 11/4/05] 	
C. The Company shall maintain the following scrubber parameters, during all 3-hour periods (during actual coating operations), within the ranges shown in parentheses of the average value of that parameter measured during the most recent performance test that demonstrated compliance. 1. Scrubber water throughput flows (minus 10% or higher)		

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
2. Scrubber air exhaust (±5%)		
Scrubber pressure drop (minus 10% or higher)		
 VFD Output% 3-hour range (as determined by DNREC approval in the event of volumetric air exhaust flow failure and averaging range provided by the company) 		
In addition, the Company shall not allow the scrubber water outlet DMF concentration to exceed 10% above the average value measured, with all emission sources in operation, during the most recent performance test that demonstrated compliance. [Reference: 40 CFR 60.743(e) and 60.747(d)(6) dated 7/1/04 and Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]		
D. Proper operation and maintenance of the control device monitoring and recording equipment indicating performance of the control device shall be considered a necessary part of proper operation of the control device. [Reference: Condition 3.8 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]		

	Table El Specific Result differences (Co.	_
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 E. At all times, including period of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Reference: Condition 3.9 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05] F. All structural and mechanical components of Emission Units 2-1, 2-2, and 2-8, shall 		
be maintained in proper operating condition. [Reference: Condition 3.10 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05] iv. Operational Limitation None.		
3. Polymer/Coating Mix Preparation Area		
a. General Conditions		
i. Emission Standard	v. Compliance Method	x. Reporting
None.	Compliance shall be demonstrated by the Monitoring/Testing and Record Keeping	

Op	nission Limitations, Emission Standards, perational Limitations, and Operational andards	(M	mpliance Determination Methodology onitoring, Testing, QA/QC Procedures, and cord Keeping)	Re	eporting and Compliance Certification
Op Sta ii.	perational Limitations, and Operational andards Emission Limitation None.	(M Re	onitoring, Testing, QA/QC Procedures, and		None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22]
	1(a)(3)(iv)(A)(2)(d) below).b. Agitators.c. Pumps in light liquid service.d. Valves in light liquid service.		 Unsafe-to-monitor valves and difficult-to-monitor valves may be identified and monitored in accordance with 7 DE Admin. Code 1124. [Reference: Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 as amended 11/06] The Company shall perform quarterly monitoring of the coating mix preparation 		
	e. Valves in gas/vapor service.		equipment covers to ensure that they meet the requirements of 40 CFR 60.743(c) and Condition 3 – Table 1(a)(3)(iv)(C) of this		

	itations, Emission Standards, Limitations, and Operational	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
f.	Pressure relief valves in gas/vapor service.	permit. [Reference: Condition 4.3.4 of Permits: APC- 1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]	
cov a.	components found to be leaking shall be considered subject to the repair and record keeping requirements described in Condition 3 – Table 1(a)(3)(iv)(A)(3) and (4) and Condition 3 – Table 1(a)(3)(ix)(A) of this permit, but need only be included in the regular monitoring program at the Company's discretion. The following equipment is not expected by this LDAR program. Any equipment in vacuum service. Any pressure-relief valve that is	 viii. Testing None. viii. Quality Assurance/Quality Control None. ix. Record Keeping A. Records of the quarterly inspections of the coating mix preparation (polymer area) equipment covers shall be maintained. These records shall include the date of the inspections, the identified deficiencies, a description of any corrective actions taken, the date the corrective action(s) were taken, and whether the deficiency was corrected as a result of the action taken. [Reference: Condition 5.2.10 of Permits: APC- 1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05] 	
C.	connected to an operating flare header or vapor recovery device. This shall be interpreted to include the Building 2 scrubber. Any liquid pump that has a duel mechanical pump seal with a barrier fluid system.	 B. When each leak is detected in accordance with Condition 3 – Table 1(a)(3)(vi)(A) of this permit, the following information shall be recorded in a log and shall be kept for five (5) years in a readily accessible location: 1. The name or initials of the operator or inspector who identified the leak. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
d. Any compressor with a degassing vent that is routed to an operating VOC control device.	The identification number of the equipment component found leaking.	
 Whenever any indication of a leak is observed during the monitoring specified in Condition 3 – Table 1(a)(3)(vi)(A) or at any other time, one of the following procedures shall be implemented: 	3. The date the leak was detected and the dates of each attempt to repair the leak.4. The repair methods employed in each attempt to repair the leak.	
 a. For all components found visibly dropping, the leak shall be repaired such that no further dripping is apparent. b. For all other identified leaks, the owner/operator shall either: 	 A notation indicating the results of the follow-up inspection following each repair attempt. This should include a specific notation if the portable monitor reading exceeded the value specified in Condition 3 – Table 1(a)(3)(iv)(A)(3)(b)(ii) of this permit. 	
i. Repair the equipment such that the visual, audible, olfactory and other indications of a leak to the atmosphere have been eliminated; that no	 The notation "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after the leak is discovered. 	
bubbles are observed at the potential leak site during a leak check using soap solution; or that the system will hold a test pressure, or	 The signature of the owner/operator (or designate) whose decision it was that repair could not be effected without a process shutdown. 	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
ii. The owner/operator may use a handheld monitor meeting the requirements of 40 CFR 60, Appendix A, Method 21 and calibrated in accordance with 7 DE Admin. Code 1124, Section 40.9 and Appendix "F" as referenced therein to show that a leak is not occurring, where a leak is defined as any condition resulting in a reading greater than or equal to: a. 500 ppm as n-hexane for valves. b. 2,000 ppm as n-hexane	8. The expected date of successful repair if a leak is not to be repaired within 15 days. 9. The dates of process unit shutdowns that occur while the equipment is unrepaired. 10. The date of successful repair of the leak. [Reference: Condition 5.2.1 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05] C. The following records shall also be kept in accordance with Condition 3(b) of this permit: 1. A list of identification numbers of	
for pumps. c. 10,000 ppm as n-hexane for all other equipment covered by this LDAR program. If this option is chosen, the owner/operator must perform this monitoring and make this determination within five (5) calendar days after the component through visual,	equipment in vacuum service shall be recorded in a log that is kept in a readily accessible location. 2. The following information for valves complying with 7 DE Admin. Code 1124 Section 40.5 as referenced in Condition 3 – Table 1(a)(3)(vi)(A)(2) above: a. A schedule of monitoring. b. The percent of valves found leaking during each monitoring period.	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
audible, or olfactory observation.	The following information pertaining to all valves subject to the requirements of	
4. Repairs shall be made on the following schedule:	7 DE Admin. Code 1124, Section 40.6 as referenced in Condition 3 – Table 1(a)(3)(vi)(A)(3) above:	
a. The owner/operator shall make a first attempt at repair [as defined in 40 CFR 63.169(d)] for any leak, not later than five (5) calendar days after the leak is detected.	a. A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each such designation, and the plan for monitoring the valve.	
b. The owner/operator shall repair any leak as soon as practicable, but not later than 15 calendar days after it is detected except as provided in Section C of this Condition.	b. A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each such designation, and the plan for monitoring the valve.	
c. Delay of Repair: i. Delay of repair of equipment for which a leak has been detected is allowed if repair is technically infeasible without a process unit shutdown. Repair of such equipment shall occur before the end of the first	 4. The following information shall be recorded in a log for use in determining exemptions as provided in 7 DE Admin. Code 1124, Section 40.1: a. An analysis demonstrating the design capacity of the affected facility. 	
process unit shutdown after the leak is detected.	 b. Information and data used to demonstrate that a piece of equipment is not in VOC service. 	

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Contactor o Table 21 Openie Resultantenes (Contantacta)				
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification		
ii. Delay of repair of equipment is also allowed for equipment that is isolated from the process and that does not remain in VOC service after the leak is detected.	[Reference: Condition 5.2.11.3 through 5.2.11.6 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]			
iii. Delay of repair beyond a process unit shutdown is allowed for a valve, if valve assembly supplies have been depleted, where valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the first process unit shutdown is not allowed unless the next process unit shutdown occurs sooner than six (6) months after the first process unit shutdown. [Reference: Condition 3.3 of Permits: APC-1991/0580, APC-1996/0942, and APC-2005/0044 dated 11/4/05]				
B. The Company shall operate and maintain a cover on each piece of coating mix				
preparation equipment and vent VOC				
emissions from the covered mix equipment				
to the scrubber while preparation of the				
coating is taking place within the vessel.				

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 C. To demonstrate compliance with 40 CFR 60.742(c)(1), the Company shall demonstrate that: 1. Covers meeting the following specifications have been installed and are being used properly: 		
 Each cover shall be closed at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspection when such activities cannot be carried out with the cover in place. Such activities shall be carried out through ports of the minimum practical size; 		
 Each cover shall extend at least 2 centimeters beyond the outer rim of the opening or shall be attached to the rim; 		
 Each cover shall be of such design and construction that contact is maintained between the cover and the rim along the entire perimeter; 		
d. Any breach in the cover (such as a slit for insertion of a mixer shaft or		

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
port for addition of ingredients) shall be covered consistent with Conditions 3 – Table 1(a)(3)(iv)(C)(1)(a), (b), and (c) of this permit when not actively in use. An opening sufficient to allow safe clearance for a mixer shaft is acceptable during those periods when the shaft is acceptable during those periods when the shaft is acceptable during those periods when the shaft is in place; and e. A polyethylene or nonpermanent cover may be used provided it meets the requirements of Conditions 3 – Table 1(a)(3)(iv)(C)(1)(b), (c), and (d) of this permit. Such cover shall not be reused after once being removed.		
 Procedures detailing the proper use of covers, as specified in Condition 3 – Table 1(a)(3)(iv)(C)(1)(a) of this permit, have been posted in all areas where affected coatings mix preparation equipment is used; 		
The coating mix preparation equipment is vented to a control		

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
device while preparation of the coating is taking place within the vessel; and 4. The control device efficiency		
determined using 40 CFR 60.743, Equation (1) or Equations (3) and (4), and the test methods and procedures specified in 40 CFR 60.745(b) through (g) is equal to or greater than 0.95. [Reference: Condition 3.3 of Permits: APC- 1991/0580, APC-1996/0942, and APC- 2005/0044 dated 11/4/05 and 40 CFR 60, Subpart VVV]		
b. Hydrazine/J Polymer Process		
 i. Emission Standard A. The sum of actual organic HAP emissions from all of batch process vents within a CMPU must be determined using process knowledge, engineering assessment, or test data. [Reference: 40 CFR §63.11496(a)(1) dated 10/29/09] 1. Emissions for a standard batch in a process may be used to represent actual emissions from each batch in that process. 2. Calculations of annual emissions are not required if you meet the emission standards for batch process vents in Condition 3 – Table 1(a)(3)(b)(i)(C). 	 v. Compliance Method Compliance shall be demonstrated by the Monitoring, Testing, Record Keeping and Reporting requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.3.1 dated 8/11/22 vi. Monitoring A. Inspections of process vessels and equipment for each CMPU in organic HAP service must be inspected as specified in Condition 3 – Table 1(a)(3)(b)(vi)(A)(1) through (A)(5) to demonstrate compliance with Condition 3 – Table 1(a)(3)(b)(i)(A)(1) and to determine that the process vessels and equipment are sound and free of leaks. Alternatively, except when the subject CMPU contains metal HAP as particulate, 	x. Reporting In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, and any other notification requirements to the EPA, the Permittee is required to submit to the DNREC DAQ Administrator, in writing, the following: [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22] A. Notification of Compliance Status – The Permittee shall submit a Notification of Compliance Status no later than June 26, 2013, or 60 days after startup, whichever is later. This certification of compliance, signed by a Responsible Official, shall also state that: [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22 and 40 CFR §63.11501(b) dated 10/29/09]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 B. As an alternative to calculating actual emissions for each affected CMPU at the facility, the owner or operator may elect to estimate emissions for each CMPU based on the emissions for the worst-case CMPU. The worst-case CMPU means the CMPU at the affected source with the highest organic HAP emissions per batch. The worst-case emissions per batch are used with the number of batches run for other affected CMPU. Process knowledge, engineering assessment, or test data may be used to identify the worst-case process. [Reference: 40 CFR §63.11496(a)(2) dated 10/29/09] C. The owner or operator must reduce collective uncontrolled total organic HAP emissions from the sum of all batch process vents by ≥85 percent by weight or to ≤20 ppm by routing emissions from a sufficient number of the batch process vents through a closed vent system to any combination of control devices (except a flare) in accordance with the requirements of 40 CFR Part 63.982(c). [Reference: 40 CFR §63.982(c) Table 2 dated 10/29/09] 1. Compliance may be based on either total organic HAP or total organic carbon (TOC); and 	inspections may be conducted while the subject process vessels and equipment are in VOC service, provided that leaks can be detected when in VOC service. [Reference: 40 CFR §63.11495 dated 12/21/12] 1. Inspections must be conducted at least quarterly. 2. For these inspection, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstrate in the next quarterly monitoring period. 3. As an alternative to conducting inspections as specified in Condition 3 — Table 1(a)(3)(b)(iii)(C)(2), the Company may use Method 21 of 40 CFR Part 60, Appendix A-7, with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection conducted in accordance with Condition 3 — Table 1(a)(3)(b)(iii)(C)(2) are due to a condition other than loss of HAP.	 This facility complies with the management practices in 40 CFR §63.11495, This facility complies with the requirements in 40 CFR §63.11496 for HAP emissions from process vents, This facility complies with the requirements in 40 CFR §63.11498 to treat wastewater streams. Xi. Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22]

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
2. As specified in 40 CFR Part 63.11946(g).	Inspections must be conducted while the subject CMPU is operating.	
 ii. Emission Limitation None. iii. Operational Standard A. Each process vessel must be equipped with a cover or lid that must be closed at all times when it is in organic HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. [Reference: 40 CFR §63.11495(a)(1) 	 5. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required. B. Each closed vent system shall be inspected as follows: [Reference: 40 CFR §63.983(b) dated] 	
B. For each wastewater system, the owner or operator must discharge to onsite or offsite wastewater treatment or hazardous waste treatment. [Reference: 40 CFR §63.11498(a)(1) and §63 Table 6(1)(a) both dated 12/21/12]	 7/12/02] 1. If the closed vent system is constructed of hard piping: a. Conduct an initial inspection according to the procedures that follow: 	
C. The scrubber shall be operated at all times when emissions are vented to them. [Reference: 40 CFR §63.995(a)(2) 7/12/02]	i. The procedures listed in Condition 3 – Table 1(a)(3)(b)(vi)(C); and	
iv. Operational Limitation When any condition in this permit which originates from 40 CFR Part 63 Subpart SS National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices	ii. Conduct annual inspections for visible, audible, or olfactory indications of leaks.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
and Routing to a Fuel Gas System or Process uses the term "a range" or "operating range" of a monitored parameter, it means an "operating limit" for a monitored parameter for the purposes of that subpart. [Reference: 40 CFR §63.2450(k)(2) dated 7/14/06]	 If the closed vent system is constructed of ductwork, the owner or operator shall conduct an initial and annual inspection according to the procedures that follow: 	
	a. The procedures listed in Condition 3– Table 1(a)(3)(b)(vi)(C).	
	 Any parts of the closed vent system that are designated as difficult to inspect, according to the definition in 40 CFR 63.998(d)(1)(i), are exempt from the inspection requirements above if: 	
	a. The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 7 feet above a support surface; and	
	b. The owner or operator has a written plan that requires inspection of the equipment at least once every five (5) years.	
	C. Closed vent system inspection procedures: 1. Each closed vent system subject to this paragraph shall be inspected according to the following: [Reference: 40 CFR §63.983(c)(1) dated 7/12/02]	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	a. Inspections shall be conducted in accordance with Method 21 of 40 CFR Part 60, Appendix A, except as specified herein.	
	b. Except as provided in Condition 3 – Table 1(a)(3)(b)(vi)(C)(3) of this section, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR Part 60, Appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 must be for the representative composition of the process fluid and not of each individual VOC in the stream. For process streams that contain nitrogen, air, water, or other inerts that are not organic HAP or VOC, the representative stream response factor must be determined on an inert-free basis. The response factor may be determined at any concentration for which the monitoring for leaks will be conducted.	
	c. If no instrument is available at the plant site that will meet the performance criteria of Method 21	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	specified in Condition 3 – Table 1(a)(3)(b)(vi)(C)(2), the instrument readings may be adjusted by multiplying by the representative response factor of the process fluid, calculated on an inert-free basis as described in Condition 3 – Table 1(a)(3)(b)(vi)(C)(2) of this section. d. The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR Part 60, Appendix A.	
	 e. Calibration gases shall be as specified as follows: i. Zero air (less than 10 parts per million bydrospybon in girly and 	
	ii. Mixtures of methane in air at a concentration less than 10,000 parts per million. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (c)(1)(ii) of this section. In such cases,	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	the calibration gas may be a mixture of one or more than the compounds to be measured in air.	
	iii. If the detection instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,500 parts per million.	
	f. An owner or operator may elect to adjust or not adjust instrument readings for background. If an owner or operator elects not to adjust readings for background, all such instrument readings shall be compared directly to 500 parts per million to determine whether there is a leak. If an owner or operator elects to adjust instrument readings for background, the owner or operator shall measure background concentration using the procedures in this section. The owner or operator shall subtract the background reading from the maximum concentration indicated by the instrument.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	 g. If the owner or operator elects to adjust for background, the arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared with 500 parts per million for determining whether there is a leak. 2. The instrument probe shall be traversed around all potential leak interfaces as described in Method 21 of 40 CFR Part 60, Appendix A. 3. Except as provided in paragraph (c)(4) of this section, inspections shall be performed when the equipment is in regulated material service, or in use with any other detectable gas or vapor. 4. Inspections of the closed vent system collecting regulated material from a transfer rack shall be performed only while a tank truck or railcar is being loaded or is otherwise pressurized to normal operating conditions with regulated materials or any other detectable gas or vapor. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	 D. Closed vent system leak repair provisions. The provisions of this paragraph apply to closed vent systems collecting regulated material from a regulated source. 1. If there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections required by Condition 3 – Table 1(a)(3)(b)(vi)(B)(1)(a)(ii), the owner or operator shall follow the procedure specified in Condition 3 – Table 1(a)(3)(b)(vi)(D)(a) or (b) below: a. The owner or operator shall eliminate the leak. b. The owner or operator shall monitor the equipment according to the procedures in Condition 1(a)(3)(b)(vi)(C) of this permit. 2. Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practical, except as provided in Condition 3 – Table 1(a)(3)(b)(vi)(D)(3). Records shall be generated as specified in §63.998(d)(1)(iii) when a leak is detected. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	a. First attempt at repair shall be made no later than five (5) days after the leak is detected.	
	b. Except as provided in Condition 3 – Table 1(a)(3)(b)(vi)(D)(3), repairs shall be completed no later than fifteen (15) days after the leak is detected or at the beginning of the next introduction of vapors to the system, whichever is later.	
	3. Delay of repair of a closed vent system for which leaks have been detected is allowed if repair within fifteen (15) days after a leak is detected is technically infeasible or unsafe without a closed vent system shutdown, as defined in 40 CFR §63.981, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed as soon as practical, but not later than the end of the next closed vent system shutdown.	
	E. The Company must repair any leak within fifteen (15) calendar days after detection of	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	the leak, or document the reason for any delay of repair. For the purposes of this section, a leak will be considered "repaired" if any of the three following conditions is met. 1. The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or 2. No bubbles are observed at potential leak sites during a leak check using soap solution, or 3. The system will hold a test pressure.	
	 F. Operation and maintenance of continuous parameter monitoring systems associated with the production of any hydrazine utilizing materials. [Reference: 40 CFR §63.996 dated 7/12/02] 1. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. 	
	The owner or operator of a regulated source shall maintain and operate each	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	CPMS as specified in this section, or in a relevant Subpart, and in a manner consistent with good air pollution control practices.	
	a. The owner or operator of a regulated source shall ensure the immediate repair or replacement of CPMS parts to correct "routine" or otherwise predictable CPMS malfunctions. The necessary parts for routine repairs of the affected equipment shall be readily accessible.	
	b. The Administrator's determination of whether acceptable operation and maintenance procedures are being used from the CPMS will be based on information that may include, but is not limited to, review of operation and maintenance procedures, operation and maintenance records as specified in 40 CFR §63.998(c)(1)(i) and (ii), manufacturer's recommendations and specifications, and inspection of the CPMS.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	3. All CPMS's shall be installed and operation, and the data verified as specified in this Subpart either prior to or in conjunction with conducting performance tests. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.	
	 All CPMS's shall be installed such that representative measurements of parameters from the regulated source are obtained. 	
	5. In accordance with the referencing Subpart, except for system breakdowns, repairs, maintenance periods, instrument adjustments, or checks to maintain precision and accuracy, calibration checks, and zero and span adjustments, all continuous parameter monitoring systems shall be in continuous operation when emissions are being routed to the monitored device.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	6. The owner or operator shall establish a range for monitored parameters that indicates proper operation of the control or recovery device. In order to establish the range, the information required in 40 CFR §63.999(b)(3) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. The range may be based upon a prior meeting the specifications of 40 CFR §63.997(b)(1) or a prior TRE index value determination, as applicable, or upon existing ranges or limits established under a referencing Subpart.	
	G. Alternatives to monitoring requirements: 1. An owner or operator may request approval to use alternatives to the continuous operating parameter monitoring and record keeping provisions listed in 40 CFR §63.988(c), 63.990(c), 63.993(c), 63.994(c), 63.998(a)(2) through (4), 63.998(c)(2) and (3), as specified in 40 CFR §63.999(d)(1).	
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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	parameter than those established in paragraph (c)(6) of this section or to set unique monitoring parameters if directed by 40 CFR §63.994(c)(2) or §63.995(c), as specified in 40 CFR §63.999(d)(2).	
	3. The owner or operator shall establish a range for monitored parameters that indicates proper operation to the control or recovery device. The information shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. [Reference: 40 CFR §63.999(b)(3) dated 11/22/99]	
	vii. Testing The owner or operator must conduct a subsequent performance test or compliance demonstration equivalent to an initial compliance demonstration within 180 days of a change in the worst-case conditions. [Reference: 40 CFR §63.2460(c)(2)(vi) dated 7/14/06] viii. Quality Assurance/Quality Control None.	
	ix. Record Keeping The owner or operator must maintain records of:	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	A. The dates and results of each inspection event as listed in Condition 3 – Table 1(a)(3)(b)(iii)(A), the dates of equipment repairs, and, if applicable, the reasons for any delay in repair. [Reference: 40 CFR §63.11495(a)(5) dated 12/21/12]	
	B. The calculations used to determine the sum of actual organic HAP emissions from all of batch process vents within a CMPU required under Condition 3 – Table 1(a)(3)(b)(i)(C). [Reference: 40 CFR §63.11496(a)(1) dated 12/21/12]	
	C. The information and procedures used to identify the worst-case process described in Condition 3 – Table 1(a)(3)(b)(i)(B). [Reference: 40 CFR §63.11496(a)(1) dated 12/21/12]	
	D. Records identifying each wastewater stream and documenting the type of treatment that it receives. Multiple wastewater streams with similar characteristics and from the same type of activity in a CMPU may be grouped together for recordkeeping purposes. [Reference: 40 CFR §63.11501(c)(1)(vi) and (vii) dated 10/29/09]	
	E. The date, time, and duration of each malfunction of operation of process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with this Subpart that	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standards, and a description of the method used to estimate the emissions. [Reference: 40 CFR §63.11501(c)(1)(viii) dated 10/29/09]	
	F. Performance tests, monitoring systems and the monitored parameters, and of the closed-vent system, as specified in 40 CFR §63.998(d)(1). [Reference: 40 CFR §63.11501(c)(2)(i) dated 10/29/09]	
	G. Upon request, the owner or operator shall make available such records as may be necessary to determine the conditions performed pursuant to the procedures in 40 CFR §63.997. [Reference: 40 CFR §63.998(a)(2)(i) dated 4/20/06]	
	H. The owner or operator shall keep up-to-date, readily accessible continuous records of the data measured during each performance test and also include that data in the Notification of Compliance Status and shall be submitted in the reports of all subsequently required performance efficiency or the outlet concentration of TOC or regulated material is determined.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and	Reporting and Compliance Certification
Standards	Record Keeping)	
	[Reference: 40 CFR §63.998(a)(2)(ii)(A) dated 4/20/06]	
	 The owner or operator shall maintain records for the scrubber while running any hydrazine containing materials as follows: A record of values measured at least once every fifteen (15) minutes or each measured value for systems which measure more frequently than once every fifteen (15) minutes; or 	
	 A record of block average values for fifteen (15) minutes or shorter periods calculated from all measured data values during each period or from at least one measured data value per minute if measured more frequently than once per minute. 	
	3. Where data is collected from an automated continuous parameter monitoring system, the owner or operator may calculate and retain block hourly average values from each fifteen (15) minute block average period or from at least one measured value per minute if measured more frequently than once per minute, and discard all but the most recent three valid hours of continuous (fifteen (15) minute or	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	shorter) records, if the hourly averages do not exclude periods of CPMS records the measured data and calculates the hourly averages through the use of computerized data acquisition system.	
	Any records as required by an alternative approved under a referencing Subpart.	
	 J. Monitoring data recorded during periods identified in below shall not be included in any average computed to determine compliance with an emission limit in a referencing Subpart: 1. Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments; 	
	Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and	
	3. Startups, shutdowns, and malfunctions, if the owner or operator operates the source during such periods in accordance with 40 CFR §63.1111(a) and maintains the records specified in paragraph (d)(3) of this section.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	 K. The owner or operator shall keep records as specified: Except as specified in paragraph (ii) of this section, daily average values of each continuously monitored parameter shall be calculated from data meeting the specifications of paragraph (b)(2) of this section for each operating day and retained for five (5) years. The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the period of operation per operating day if operation is not continuous (e.g., for transfer racks the average shall cover periods of loading). If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the daily average instead of all measured values. 	
	b. The operating day shall be the period defined in the operating permit or in the Notification of	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	Compliance Status. It may be from midnight to midnight or another daily period.	
	2. If all recorded values for a monitored parameter during an operating day are within the range established in the Notification of Compliance Status or in the operating permit, the owner or operator may record that all values were within the range and retain this record for five (5) years rather than calculating and recording a daily average for that operating day. in such cases, the owner or operator may not discard the recorded values as allowed in paragraph (b)(1)(iii) of this section.	
	L. The owner or operator shall keep the following records: 1. For a CPMS used to comply with this part, a record of the procedure used for calibrating the CPMS.	
	 For a CPMS used to comply with this Subpart, records of the information specified in paragraphs (c)(ii)(A) through (H) of this section, as indicated in a referencing Subpart. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	a. The date and time of completion of calibration and preventive maintenance of the CPMS.	
	b. The "as found" and "as left" CPMS readings, whenever an adjustment is made that affects the CPMS reding and "no adjustment" statement otherwise.	
	c. The start time and duration or start and stop times of any periods when the CPMS is inoperative.	
	d. Records of the occurrence and duration of each start-up, shutdown, and malfunction of CPMS used to comply with this Subpart during which excess emissions (as defined in a referencing subpart) occur.	
	e. Records documenting each start-up, shutdown, and malfunction event.	
	f. Records of CPMS start-up, shutdown, and malfunction event that specify that there were no excess emissions during the event, as applicable.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	g. Records of the total duration of operating time.	
	 M. For closed vent systems the owner or operator shall record the information specified below: 1. Identification of all parts of the closed vent system that are designated as unsafe or difficult to inspect, and the plan for inspecting the equipment. 	
	 The plan for inspecting the equipment shall be a written plan that requires inspection of the equipment as frequently as practical during safe-to- inspect times. 	
	Inspection is not required more than once annually.	
	 N. For a closed vent system collecting regulated material from a regulated source, when a leak is detected, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, the source of the leak shall be repaired as soon as practical. 1. A first attempt at repair shall be made no later than five (5) days after the leak is detected. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	2. Repairs shall be completed no later than fifteen (15) days after the leak is detected or at the beginning of the next introduction of vapors to the system, whichever is later.	
	3. Delay of repair of a closed vent system for which leaks have been detected is allowed if repair within fifteen (15) days after a leak is detected is technically infeasible or unsafe without a closed vent system shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed as soon as practical, but no later than the end of the next closed vent system shutdown.	
	 O. When a leak is detected as specified in Condition 3 – table 1(a)(3)(b)(ix)(P), information specified below shall be recorded and kept for five (5) years. 1. The instrument and the equipment identification number and the operator name, initials, or identification number. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	The date the leak was detected and the date of the first attempt to repair the leak.	
	The date of successful repair of the leak.	
	4. The maximum instrument reading measured by the procedures in 40 CFR §63.983(c) after the leak is successfully repaired or determined to be nonrepairable.	
	5. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak. The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.	
	6. Copies of the Periodic Reports as specified in 40 CFR §63.999(c), if records are not maintained on a computerized database capable of generating summary reports from the records.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
Standards	P. For each instrumental or visual inspection conducted in accordance with 40 CFR §63.983(b)(1) for closed vent systems collecting regulated material from a regulated source during which no leaks are detected, the owner or operator shall record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. Q. Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or of air pollution control equipment used to comply with this part during which excess emissions (as defined in a referencing Subpart) occur.	
	R. The owner or operator shall maintain records of the information specified below for closed vent systems and control devices if specified by the equipment leak provisions in a referencing Subpart. The records specified in paragraph (i) below shall be retained for the life of the equipment. The records specified in paragraph (ii) of this section shall be retained for five (5) years. 1. The design specifications and performance demonstrations specified below:	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	a. Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.	
	b. The dates and descriptions of any changes in the design specifications.	
	c. A description of the parameter or parameters monitored, as required in a referencing Subpart, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.	
	Records of operation of closed vent systems and control devices, as specified below:	
	a. Dates and durations when the closed vent systems and control devices required are not operated as designed as indicated by the monitored parameters.	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	 Dates and durations during which the monitoring system or monitoring device in inoperative. 	
	 Dates and durations of start-ups and shutdowns of control devices required in this Subpart. 	
	S. Records of monitored parameters outside of range. The owner or operator shall record the occurrences and the cause of periods when the monitored parameters are outside of the parameter ranges documented in the Notification of Compliance Status report. This information shall also be reported in the Periodic Report. [Reference: 40 CFR §63.998 dated 4/20/06]	
	T. Retention of the records of the 1996 performance test used as a substitute for the initial performance test required under 40 CFR §63.997 and the EPA letter of approval.	
4. Compliance Assurance Monitoring (CAM) Plan: So	crubber for VOC Control	
i. Emission Standard None.ii. Emission Limitation VOC emission levels shall not exceed the	v. Compliance Method Compliance shall be demonstrated by records of the required monitoring. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 dated 12/11/00 and 6.2.1 dated 8/11/22]	 x. Reporting A. Quality Improvement Plan (QIP) 1. The Company shall submit a QIP in accordance with 40 CFR Part 64.8(b) if any stack tests reveal higher than
following:	vi. Monitoring [Reference: 40 CFR Part 64.3 and 64.4 dated 10/22/97]	permitted emission rates. [Reference: 40 CFR Part 64.7(e) dated 10/22/97]

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 A. Including fugitives, air contaminant emissions from SUBA Line 1, SUBA Line 2, and the Polymer Area, combined, shall not exceed 2.0 pounds per hour and 8.9 tons per year, 12 month rolling basis of dimethylformamide (DMF). B. Inlet loading to the packed bed scrubber shall not exceed 62 pounds per hour of DMF or an inlet loading that has been demonstrated to the Department to meet the emission limits of Condition 3 – Table 1(a)(1)(ii)(A) from all process equipment ducted to the scrubber. [Reference: Condition 2.1.1 of Permits: APC-2019/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05] iii. Operational Standard None. iv. Operational Limitation A. Indicators: The following indicators shall be used as surrogate limits indicating proper operation of the control device and process equipment and thereby, compliance status with regard to the emission limits above. 1. Scrubber water throughput rate. 2. 	A. Data Representativeness: [Reference: 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97] In order to ensure that the data obtained through the monitoring required in this condition, the following requirements are applicable: 1. The magnetic flow meter used to measure scrubber water throughput rate shall be installed in the inlet water line. It shall have a measurement range of 0-30 gallons per minute (or other range as approved by the Department) with a minimum standard accuracy of ±1% of the reading. 2. a. The differential flow meter used to measure the volumetric flow rate of air exhaust from the scrubber shall be properly installed (in accordance with manufacturer's specifications). It shall have a measurement range of 7,236 to 30,000 cfm or other range approved by the Department. Its standard accuracy from 0-20% of range shall be at least within ±1%; its standard accuracy from 20%-100% of range shall be at least within ±2%; or	 The Company shall submit a QIP in accordance with 40 CFR Part 64.8(b) if excursions exceed five (5) percent of the unit's operating time for a reporting period. [Reference: 40 CFR Part 64.8(a) dated 10/22/97] The Company shall notify the Department at least thirty (30) days prior to any reestablishment of excursion values. [Reference: 40 CFR Part 64.6(c)(2) dated 10/22/97] The report required by Condition 3(c)(2) of this permit shall also contain the following information: [Reference: 40 CFR Part 64.9(a)(2) dated 10/22/97] Summary information on the number, duration, and cause of excursions or exceedances. The corrective actions taken after an excursion or exceedance. Summary information on the number, duration, and cause of monitor downtime incidents. If triggered, a description of the actions taken to implement a QIP.
		xi. Certification

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
a. Volumetric flow rate of air exhaust from the scrubber; or	 A signal from the scrubber blower VFD is sent to the Human Machine Interface (HMI) for data logging. 	None in addition to that required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.2 dated 8/11/22]
 b. In the event of a failure of the scrubber air exhaust volumetric flow rate indicator, the Scrubber blower Variable Frequency Drive (VFD) Output%. 3. Pressure drop across the scrubber. 	3. The magnehelic gauge used to measure the pressure drop across the scrubber shall be installed across the scrubber media bed. It shall have a range of 0-30 inches of water (or other range approved by the Department) and shall have an accuracy of ±0.5%.	
4. Scrubber water outlet DMF concentration. [Reference: 40 CFR Part 64.6(c)(1)(i) dated 10/22/97]	 The gas chromatograph (GC) used to test the manually collected samples of scrubber water from the outlet of the 	
 B. Indicator Ranges: The following indicator ranges shall establish the allowable operational ranges for the indicators listed above. 1. The scrubber water throughput rate shall be greater than a value 10% below the average rate measured during the most recent performance test that demonstrated compliance, on a three hour average basis. 	scrubber shall be capable of determining the concentration of DMF in the water to an accuracy of ±3% to be proved based on mid-range calibration standard verifications as specified in the October 4, 2006 "Proposed Method [for] the Analysis of N,N,-Dimethylformamide in Scrubber Water by GC/FID" (as amended by the Department's letter of October 19, 2006, signed by Stephen S. Ours, P.E.)	
2. a. The volumetric flow rate of air exhaust from the scrubber shall be within 5% (+/-) of the average	or any update of that protocol approved by the Department. The precision shall meet the requirements specified in Table 2 of this protocol (as amended and approved by the Department).	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
rate measured during the most recent performance test that demonstrated compliance on a three hour average basis; or b. The volumetric flow rate of air from the scrubber blower VFD Output shall be within VFD Output% Compliance Range submitted by the Company in the approval request. Correlation between air flow and VFD Output% per procedure developed by the Company. 3. The pressure drop across the scrubber shall be greater than a value 10% below the average pressure drop measured during the most recent performance test that demonstrated compliance, on a three hour average. 4. The scrubber water outlet DMF concentration shall not exceed 10% above the average value measured during the most recent performance test that demonstrated compliance. [Reference: 40 CFR Part 64.6(c)(1)(i) dated	 [Reference: 40 CFR Part 64.4(b)(1) dated 10/22/97] B. QA/QC Practices: [Reference: 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97] 1. The magnetic flow meter used to measure the scrubber water flow rate shall be calibrated in accordance with the manufacturer's specifications on the frequency recommended by the manufacturer. 2. a. A measurement in accordance with Reference Methods 1 and 2 (40 CFR 60, Appendix A) shall be performed in the scrubber air exhaust line on at least a quarterly basis. The measured values shall be compared with the measured values using the flow meter. If appropriate, the calibration factor in the data acquisition system shall be adjusted to ensure similar results from the two measurement procedures; or 3. The magnehelic gauge used to measure the pressure drop across the scrubber 	
10/22/97] C. Excursions:	shall be calibrated in accordance with the manufacturer's specifications on the	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
If the 3-hour average scrubber water throughput rate drops below a value 10% below the average value	frequency recommended by the manufacturer.	
measured during the most recent performance test that demonstrated compliance, this shall be considered an excursion. 2. a. If the 3-hour average volumetric flow rate of air exhaust from the scrubber varies outside the range between 5% below the "low" average exhaust flow and 5% above the "high" average exhaust	4. The QA/QC procedures included in the Company's December 14, 2009 updated "Proposed Method [for] the Analysis of N,N,-Dimethylformamide in Scrubber Water by GC/FID" or any update of that protocol approved by the Department, shall be used to ensure proper calibration of the gas chromatograph used for determination of the DMF concentration of the scrubber water outlet. These procedures include the following:	
value measured during the most recent performance test that demonstrated compliance, this shall be considered an excursion; or b. If the 3-hour average scrubber blower VFD Output% varies outside the VFD Output% Compliance Range submitted by the company and approved by	a. Initial four-point calibrations shall be performed in accordance with the procedures specified in the protocol where the relative percent difference between duplicate injections of each calibration standard shall be less than 5% to complete a proper calibration and develop a proper calibration curve.	
DNREC, this shall be considered an excursion. 3. If the 3-hour average pressure drop	 Initial calibrations shall be verified with the use of a mid-range second primary stock standard (from that used for the four-point calibration). 	
If the 3-hour average pressure drop across the scrubber drops below a	. ,	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
value 10% below the average pressure drop measured across the scrubber during the most recent performance	The percent recovery must be between 97% and 103%.	
test that demonstrated compliance, this shall be considered an excursion.	 c. Preparation and analysis of one laboratory blank sample shall occur per analytical batch run whenever 	
4. If the scrubber water outlet DMF concentration exceeds 10% above the average value measured during the	samples require dilution before analysis.	
most recent performance test that demonstrated compliance, this shall be considered an excursion. [Reference: 40 CFR Part 64.6(c)(2) dated 10/22/97]	 d. Calibration verification with the second mid-range primary stock standard prior to analysis and after every 10 source samples analyzed shall occur. This verification must 	
D. Monitoring/Measurement Approach: The following instruments shall be used to measure the applicable indicators. 1. The scrubber water throughput rate	meet the requirement specified in Table 2 of the aforementioned protocol.	
shall be measured with the use of a magnetic flow meter.	e. Replication of results must be verified as specified in the	
a. The volumetric flow rate of air	aforementioned protocol. [Reference: 40 CFR Part 64.3(b)(3) dated 10/22/97]	
exhaust from the scrubber shall be measured with the use of a differential flow meter; or	 C. Frequency: [Reference: 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97] 1. The scrubber water throughput rate shall be obtained by the data acquisition system, regularly, at least 	
The pressure drop across the scrubber shall be measured with a magnehelic differential pressure gauge.	once every five minutes. 2.	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 4. The Company shall use manual sampling in conjunction with a gas chromatograph or another equivalent method subject to approval by the Department to measure the scrubber water outlet DMF concentration. [Reference: 40 CFR Part 64.6(c)(1)(ii) dated 10/22/97] E. At all times, the Company shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [Reference: 40 CFR Part 64.7(b) dated 10/22/97] F. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Company shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a 	 a. The volumetric flow rate of air exhaust from the scrubber shall be obtained by the data acquisition system, regularly, at least once every five minutes; or b. In the event of a failure of the volumetric flow rate air exhaust meter, the VFD Output % shall be obtained by the data acquisition system, regularly, at least once every five minutes. 3. The pressure drop across the scrubber shall be obtained by the data acquisition system, regularly, at least once every five minutes. 4. The scrubber water outlet DMF concentration shall be measured at least once per shift. [Reference: 40 CFR Part 64.3(b)(4) dated 10/22/97] D. Data Collection Procedures: [Reference: 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97] 1. For each fifteen (15) minutes worth of scrubber water throughput rate data, a computerized data acquisition system shall record electronically a fifteen (15) minute average. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
minimum data availability requirement, if applicable. The Company shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [Reference: 40 CFR Part 64.7(c) dated 10/22/97]	 a. For each fifteen (15) minutes worth of volumetric flow rate of air exhaust from the scrubber data, a computerized data acquisition system shall be recorded electronically on a fifteen (15) minute average; or b. In the event of a failure of the volumetric flow rate air exhaust meter, for each fifteen (15) minutes worth of the VFD Output%, a computerized data acquisition system shall be recorded electronically on a fifteen (15) minute average. 	
	3. For each fifteen (15) minutes worth of pressure drop across the scrubber data, a computerized data acquisition system shall record electronically a fifteen (15) minute average.	
	4. The scrubber water outlet DMF concentration shall be obtained with the use of manual sampling and GC analysis. The results shall be recorded in a log at least once per shift during coating operations. [Reference: 40 CFR Part 64.3(b)(4) dated 10/22/97]	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	 E. Averaging Period: [Reference: 40 CFR Part 64.6(c)(1)(iii) dated 10/22/97] 1. The averaging period used for the scrubber water throughput rate is to be each 3-hour rolling period. 	
	2. a. The averaging period used for the volumetric flow rate of air exhaust from the scrubber is to be each 3-hour rolling period; or	
	b. In the event of a failure of the volumetric flow rate air exhaust meter , the averaging period used for the VFD Output% is to be each 3-hour rolling period.	
	The averaging period for the pressure drop across the scrubber is to be a 3- hour rolling period.	
	4. There shall be no averaging period for scrubber water outlet DMF concentration. Each measurement is a discrete data point which must meet applicable requirements. [Reference: 40 CFR Part 64.3(b)(4) dated 10/22/97]	
	vii. Testing [Reference: 40 CFR Part 64.6 dated 10/22/97]	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	In order to meet CAM testing requirements, the Company shall perform the compliance testing describer in Condition 3 – Table 1(a)(1)(vii) of this permit.	
	viii. Quality Assurance/Quality Control None.	
	 ix. Record Keeping [Reference: 40 CFR Part 64.9(b) dated 10/22/97] The Company shall maintain records of the following: A. Monitoring data; 	
	B. Monitor performance data;	
	C. Corrective actions taken;	
	D. Any written quality improvement plan (QIP) required pursuant to 40 CFR Part 64.8;	
	E. Any activities undertaken to implement a QIP; and	
	F. All supporting information used to demonstrate compliance.	
5. Particulate Matter Emissions (PM)		
i. Emission Standard Fuel burning equipment shall not emit particulate matter in excess of 0.3 lb/MMBtu heat input, maximum two (2) hour average.	v. Compliance Method A. Compliance shall be demonstrated by the Monitoring/Testing and Record Keeping	x. Reporting None in addition to that required by Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22

Emission Limitations, Emission Standards,	Compliance Determination Methodology	
Operational Limitations, and Operational	(Monitoring, Testing, QA/QC Procedures, and	Reporting and Compliance Certification
Standards [Reference: Condition 2.1.2.1 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05 and 7 DE Admin. Code 1104, Section 2 dated 2/1/81] ii. Emission Limitation A. The PVC Powder Delivery System shall not emit particulate matter in excess of 0.01	Record Keeping) requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.3.1 dated 8/11/22] B. The drying ovens associated with SUBA Lines 1 and 2 shall fire natural gas only. [Reference: Condition 3.6 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05]	xi. Certification None in addition to that required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.2 dated 8/11/22]
pound per day. [Reference: Condition 2.1.2.2 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05] B. Particulate matter emissions from the PVC Powder Delivery System and all other sources at the facility shall not exceed 0.2 grains per standard cubic foot. [Reference: Condition 2.1.2.3 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05 and 7 DE Admin. Code 1105, Section 2 dated 2/1/81] iii. Operational Standard None. iv. Operational Limitation None.	 C. The Company shall install a particulate matter filtration system to control emissions from the pneumatic PVC Powder Delivery System to tank TK-2587 in the Polymer Area. Note that manual powder delivery may still be performed without the use of this system. This pneumatic system shall meet the following requirements: It shall be comprised of an unifilter receiver assembly filter and two cartridge-type HEPA filters in series. Based on filter ratings, the filter system shall be greater than 99.9% efficient for the PVC powder handled in this system. All emissions from pneumatic powder delivery to tank TK-2587 shall be routed through this system. This system shall be properly operated at all times during pneumatic powder delivery. 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	 A differential pressure gauge shall be maintained across the first HEPA filter (the second filter in the series, also known as the primary HEPA filter). a. The maximum allowable differential 	
	pressure shall be 5.0 inches of water during powder transfer. If the differential pressure is above this maximum, the Company shall shut down the system, inspect and replace the filters or complete any necessary repairs or maintenance prior to the next loading event.	
	b. The minimum allowable differential pressure shall be 0.05 inches of water during powder transfer. If the differential pressure drops below 0.05 during powder transfer, the Company shall shut the system down, replace the filters as appropriate, and complete any necessary repairs or maintenance prior to the next loading event. [Reference: Condition 3.3.4 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05]	
	vi. Monitoring A. The Company shall use the differential pressure gauge required in Condition 3 –	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	Table 1(a)(6)(v)(C)(5) to monitor the differential pressure across the primary filter associated with the PVC Powder Delivery System. [Reference: Condition 4.3.7 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05]	
	B. The Company shall inspect all filters associated with the PVC Powder Delivery System at least annually to ensure that they are in good condition. If they are found not to be in good condition, they shall be replaced prior to further operation of the PVC Powder Delivery System. [Reference: Condition 4.3.8 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05]	
	vii. Testing None.	
	viii. Quality Assurance/Quality Control None.	
	ix. Record Keeping A. The Company shall maintain records of the type of fuel used in fuel burning equipment. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]	
	B. The Company shall record the differential pressure across the second filter (the primary HEPA filter) in the filter series	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	associated with the PVC Powder Delivery System at least once per loading event while powder is being transferred. [Reference: Condition 5.2.12 of Permits: APC- 1991/0580. APC-1996/0492, and APC-2005/0044 dated 11/4/05] C. Records of all monitoring/testing and maintenance activities performed in accordance with this condition shall be kept on site. [Reference: Condition 5.2.15 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05]	
6. Visible Emissions PVC Powder Delivery System		1
 i. Emission Standard None. ii. Emission Limitation No person shall cause or allow the emission of visible air contaminants and/or smoke from a stationary or mobile source, the shade or appearance of which is greater than twenty (20%) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour or more than fifteen (15) minutes in any twenty-four (24) hour period. [Reference: 7 DE Admin. Code 1114, Section 2.1 dated 7/17/84 and Condition 2.2 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/05] iii. Operational Standard None. 	 v. Compliance Method Compliance with Condition 3 – Table 1(a)(6) shall be demonstrated by the Monitoring/Testing and Record Keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.7.3 dated 8/11/22] vi. Monitoring At least once per quarter, during PVC powder delivery to tank TK-2587, the Company shall observe the outlet of the bin vent associated with the PVC Powder Delivery System for the presence or absence of visible emissions. This observation shall occur for a minimum of five minutes and shall be performed in a way similar to that described in 40 CFR Part 60, Appendix A, Method 22. If visible emissions are observed, the Company shall either shut down the loading 	 x. Reporting None in addition to that required by Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] xi. Certification None in addition to that required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.2 dated 8/11/22]

	TO TABLE 1: Specific Requirements (Con	1
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
iv. Operational Limitation None.	process immediately and commence repairs or shall implement the procedures described in Condition 3 – Table 1(j)(1)(vi) and (vii) of this permit. [Reference: Condition 4.3.9 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/004 dated 11/4/05] vii. Testing None. viii. Quality Assurance/Quality Control	
	ix. Record Keeping Records of all monitoring/testing and maintenance activities performed in accordance with this condition shall be kept on site. [Reference: Condition 5.2.15 of Permits: APC-1991/0580, APC-1996/0492, and APC-2005/0044 dated 11/4/95] ling 2 Storage Tanks — Tanks E-20, UHP-10, RUH	P-15, E-33, and R-18
1. Volatile Organic Compounds (VOCs)		Т
i. Emission Standard None. i. Emission Limitation	i. Compliance Method Compliance shall be demonstrated by Record Keeping. [Reference: 7 DE Admin. Code 1124, Section 49.2.5 dated 11/29/94]	i. Reporting None in addition to that required by Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]
None. strea i. Operational Standard None.	i. Monitoring None.	i. Certification None in addition to that required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin.]
i. Operational Limitation None.	i. Testing None.i. Quality Assurance/Quality Control	Còdè 1130, Sections 6.1.3.2.3 and 6.2.2 dated 8/11/22]

Operational Limitations, and Operational		(M	mpliance Determination Methodology lonitoring, Testing, QA/QC Procedures, and cord Keeping)	Re	eporting and Compliance Certification
Star	iduius	i.	None. Record Keeping The Company shall keep readily accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. [Reference: 7 DE Admin. Code 1124, Section 49.2.5 dated 11/29/94]		
	Reserved				
	imission Unit 5-1 Urethane Processing – Va	acui	um Pump with Cold Trap Condenser		
	Toluene diisocyanate (TDI)			ı	
ii. E	Emission Standard None. Emission Limitation Air contaminant emission levels shall not exceed 3.2 x 10-4 pounds per hour and 2.8 pounds per year of toluene diisocyanate (TDI). [Reference: Permit: APC-1993/0263 dated 5/5/93] Operational Standard None.		Compliance Method Compliance shall be demonstrated by the Monitoring/Testing and Record Keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] Monitoring The Company shall continuously monitor the trap temperature whenever the vacuum pump is operating. [Reference: Permit: APC-1993/0263 dated 5/5/93]	xi.	None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]
	Operational Limitation A. The cold trap temperature shall not exceed -20°C (-4°F) whenever the vacuum pump is in operation and the process isolation valve is open (process is venting).	viii	Testing None. Quality Assurance/Quality Control None. Record Keeping		

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
B. Proper operation and maintenance of the temperature and vacuum gauges on the cold trap shall be considered a necessary part of proper operation of the vacuum pump. [Reference: Permit: APC-1993/0263 dated 5/5/93]	The Company shall continuously record the cold trap temperature, whenever the vacuum pump is operating. [Reference: Permit: APC-1993/0263 dated 5/5/93]	
e. Emission Unit 5-2 Building 5, Pad Condition	er and Associated Baghouse	
Particulate Emissions Emission Standard A. No person shall cause or allow particulate emissions into the atmosphere from any source not provided for in subsequent sections of this Regulation in excess of 0.2 grains per standard cubic foot. [Reference: 7 DE Admin. Code 1105, Section 2.1 dated 2/1/81]	v. Compliance Method Compliance with the emission standard, emission limitation, operational standard, and operational limitations of this section shall be demonstrated by adherence to the appropriate record keeping requirements. [Reference: 7 DE Admin. Code 1130, Section 6.3.1 dated 18/11/22]	x. Reporting In addition to Condition 2(b)(9) and 3(c)(2) of this permit: For each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, the Company shall supply the Department in writing with the following
ii. Emission Limitation Particulate Matter emissions shall not exceed 0.37 lb/hr and 0.96 tons per twelve (12) month rolling period. [Reference: Permit: APC-2011/0144 (A1) dated 11/6/14]	vi. Monitoring None. vii. Testing None in addition to Condition 3(b)(2) of this permit. [Reference: Permit: APC-2011/0144 (A1) dated]	information: A. The name and location of the facility; B. The subject source(s) that caused the excess emissions;
iii. Operational Standard None.	viii. Quality Assurance/Quality Control	C. The time and date of the first observation of the excess emissions;
iv. Operational Limitation [Reference: Permit: APC-2011/0144 (A1) dated 11/6/14] A. The total number of pads processed in the	None. ix. Record Keeping	D. The cause and expected duration of the excess emissions;
new pad sanding machine shall not exceed 55,000 in any calendar month.	A. The Company shall maintain, at a minimum, all of the information required by this permit for a minimum of five (5) years from such	E. For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable

		iance Determination Methodology toring, Testing, QA/QC Procedures, and d Keeping)	Reporting and Compliance Certification	
B.	The minimum filter efficiency of the baghouse cartridges shall be no less than 99%.		information's date of record. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.2.2 dated 8/11/22 and Permit: APC-2011/0144 (A1) dated 11/6/14]	emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
C.	The baghouse shall be operating properly whenever the pad conditioner is in operation.		Records of all test data shall be maintained. This data includes, but may not be limited to: [Reference: 7 DE Admin. Code 1130, Section 6.1.3.2 dated 8/11/22 and Permit: APC-2011/0144 (A1) dated 11/6/14]	F. The proposed corrective actions and schedule to correct the conditions causing the excess emissions. [Reference: Condition 6.3 of Permit: APC-2011/0144 (A1) dated 11/6/14]
D.	The baghouse shall be operated with a functional differential pressure gauge and within a pressure drop range of 0.15 and 3.0 inches of water column across the baghouse inlet and outlet ductwork.		1 The date place and time of sampling	xi. Certification None in addition to Conditions 2(a) and 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.2 dated 8/11/22]
E.	In the event of a ripped bag alarm, all associated equipment will cease operation until the malfunction is corrected.		3. The Company or entity that performed the analyses;4. The analytical techniques or methods	
F.	When the pad conditioner and associated equipment is in operation, the owner or operator shall monitor the performance of the filter media through the ripped bag alarm system.	C.	used; 5. The results of such analyses; and 6. The operating conditions existing at the time of sampling or measurement. The following information on the pad	
			conditioning system and baghouse shall be recorded, initialed, and maintained in a log (except data collected electronically): [Reference: 7 DE Admin. Code 1130, Section 6.1.3.2 dated 8/11/22 and Permit: APC-2011/0144 (A1) dated 11/6/14]	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	 The daily, monthly, and cumulative rolling twelve (12) month total hours of operation for the pad conditioning system and associated baghouse. 	
	 The daily, monthly, and cumulative rolling twelve (12) month total of polishing pads processed in the system. 	
	3. The daily operating condition of the baghouse.	
	 The daily pressure drop readings, as measured across the inlet and outlet ductwork of the baghouse whenever the baghouse is in operation. 	
	Results of any visible emissions monitoring observations.	
	 The dates and descriptions of inspections and maintenance performed on the baghouse and pad conditioning system. 	
	7. The occurrence and duration of any malfunction of the baghouse and/or the pad conditioning system.	
	 The rolling twelve (12) month total emissions shall be calculated and recorded 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
2. Visible Emissions	each month in a log for the following pollutant: 1. Particulate Matter (PM). [Reference: Permit: APC-2011/0144 (A1) dated 11/6/14]	
 i. Emission Standard	 v. Compliance Method Compliance shall be demonstrated by the Monitoring/Testing and Record Keeping requirements of this Condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] vi. Monitoring If visible emissions are observed, the Company shall either cease activities until corrective action can be taken to eliminate visible emissions of conduct visual observations at fifteen-second intervals for a period of not less than one (1) hour except that the observations may be discontinued whenever a violation of the standard is recorded. The additional procedures, qualification, and testing to be used for visually determining the opacity shall be those specified in Sections 2 and 3 (except for Section 2.5 and the second sentence of Section 2.4) of Reference Method 9 set forth in Appendix A, 40 CFR Part 60, Revised July 1, 1982. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.1.2 dated 8/11/22 and Permit: APC-2011/0144 (A1) dated 11/6/14] vii. Testing None. 	x. Reporting None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] xi. Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.2 dated 8/11/22]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards		Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping) Record Keeping)	
f.	Emission Unit 5-5 Building 5, Urethane Pad I	viii. Quality Assurance/Quality Control None. ix. Record Keeping The Company shall maintain a record of each Reference Method 9 test performed and a copy of the qualifications of the individual performing the test. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] Production Unit "ACT" Process	
1.	Particulate Matter (PM) Emissions	Trouble Act Troubs	
i.	Emission Standard Particulate Matter emissions shall not exceed 0.2 grains per standard cubic foot of exhaust air from the ACT Process. [Reference: Permit: APC-2021/0002-O dated 28/31/20] Emission Limitation	v. Compliance Method None. X. Reporting A. Emissions in excess of any permit condition or emissions which create a condition of pollution shall be reported to the Department: 1. Immediately upon discovery and after a critical in a paragraphic site.	air
	Particulate Matter emissions shall not exceed 23.5 pounds per day and 3.595 tons per twelve (12) month rolling period. [Reference: Permit: APC-2021/0002-O dated 8/31/20]	vii. Testing None. None. activating the appropriate site emergency plan to the Department's 24-hour complaint line (1-800-662- viii. Quality Assurance/Quality Control None. None. base activating the appropriate site emergency plan to the Department's 24-hour complaint line (1-800-662- 8802) any deviation that poses an imminent and substantial danger to public health, safety, or the	
.	Operational Standard All structural and mechanical components of the equipment or process covered by this permit shall be maintained in proper operating conditions. [Reference: 7 DE Admin. Code 1101, Section 3 dated 2/1/81, 7 DE Admin. Code 1102, Section 11.6 dated 6/1/97 and Permit: APC-2017/0069 dated 2/2/17]	ix. Record Keeping A. The owner or operator shall maintain all records necessary for determining compliance with this permit in a readily accessible location for five (5) years and shall make these records available to the Department upon written or verbal request. environment. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.3.3.2 dated 8/11/2. 2. Immediately upon discovery by calling the Environmental Emergency notification and Complaint number, 1 (800) 662-8802. (State Enforceable)	22] ng 1

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
iv. Operational Limitation None.	 [Reference: 7 DE Admin. Code 1130, Section 6.1.3.2.2 dated 8/11/22 and Permit: APC-2017/0069 dated 2/2/17] B. The rolling twelve (12) month total emissions shall be calculated and recorded each month in a log for each of the following pollutants: Particulate Matter (PM); Volatile Organic Compounds (VOC); Hazardous Air Pollutants (HAPs). 	Only). [Reference: 7 DE Admin. Code 1130, Section 6.1.3.3.3.2 dated 8/11/22] B. Discharges to the atmosphere in excess of any quantity specified in 7 DE Admin. Code 1203 "Reporting of a Discharge of a Pollutant or an Air Contaminant" shall be reported, immediately upon discovery and after activating the appropriate site emergency plan, either in person or to the Department's 24-hourcomplaint line (1-800-662-8802). Discharges in compliance with this permit and excess emissions previously reported under Condition 6.1 of this permit are exempt from this reporting requirement. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.3.3.5 dated 8/11/22 and 7 Del. C. Chapter 60, Section 6028] C. In addition to complying with Condition 6.1 and 6.2 of this permit, any reporting required by 7 DE Admin. Code 1203 "Reporting of a Discharge of a Pollutant or an Air Contaminant" and any other reporting requirements mandated by the State of Delaware, the owner or operator shall for each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, supply the Department in writing with the following information:

Emission Limitations Emission Standards	Compliance Determination Methodology	
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
Standards	Record Recping)	The name and location of the facility;
		The subject source(s) that caused the excess emissions;
		The cause and expected duration of the excess emissions;
		4. For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
		5. The proposed corrective actions and schedule to correct the conditions causing the excess emissions. [Reference: 7 DE Admin. Code 1112, Section 7.3, Paragraphs 1, 2, 3, 4, and 5 dated 11/24/93]
		xi. Certification A. Each document submitted to the Department/EPA pursuant to this permit shall be certified by a Responsible Official as to truth, accuracy, and completeness. Such certification shall be signed by a Responsible Official and shall contain the language: "I certify, based on information and belief formed after reasonable inquiry,

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
		the statements and information in the document are true, accurate, and complete. [Reference: 7 DE Admin. Code 1130, Section 5.6 dated 11/15/93 and 6.3.1 dated 8/11/22]
		B. Each document submitted to the Department/EPA pursuant to this permit shall be sent to the following addresses: 1. One (1) original: State of Delaware – DNREC Division of Air Quality State Street Commons 100 W Water Street, Suite 6A Dover, DE 19904 ATTN: Division Director
		2. One (1) copy: United States Environmental Protection Agency Office of Air Enforcement and Compliance Assurance (3AP20) 1650 Arch Street Philadelphia, PA 19103-2029
2. Visible Emissions		
i. Emission Standard No person shall cause or allow the emission of visible air contaminants and/or smoke from a stationary or mobile source, the shade or appearance of which is greater than twenty (20%) percent opacity for an aggregate of more than three (3) minutes in any one (1)	 v. Compliance Method Compliance shall be demonstrated by record keeping. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] vi. Monitoring 	x. Reporting That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22 xi. Certification

Gonardon D. Table B. Speeme Requirements (Gonardon)				
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards		nal Limitations, and Operational (Monitoring, Testing, QA/QC Procedures, and		
	re than fifteen (15) minutes in any (24) hour period.	Weekly monitoring of visible emissions shall occur for the process. If visible emissions are observed, the Company shall either cease	That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22]	
ii. Emission Lir None.	mitation	activities until corrective action can be taken to eliminate visible emissions or conduct visual observations at fifteen-second intervals for a		
iii. Operational None.	Standard	period of not less than one hour except that the observations may be discontinued whenever a violation of the standard is recorded. The		
iv. Operational None.	Limitation	additional procedures, qualification and testing to be used for visually determining the opacity shall be those specified in Sections 2 and 3 (except for Section 2.5 and the second sentence of Section 2.4) of EPA Reference Method 9. [Reference: Method 9, Appendix A, 40 CFR Part 60 dated 7/1/82]		
		vii. Testing None.		
		viii. Quality Assurance/Quality Control None.		
		ix. Record Keeping The Company shall maintain records to demonstrate compliance with the Emission Standards of Condition 3 – Table 1(f)(2)(i). [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]		
3. Volatile Org	anic Compounds (VOC) Emissions			
i. Emission Sta		v. Compliance Method	x. Reporting	
None.				

	5 - Table 1. Specific Requirements (col	<u> </u>
Operational Limitations, and Operational	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 ii. Emission Limitation VOC emissions shall not exceed 5.0 pounds per day or 0.65 tons per twelve (12) month rolling period. [Reference: Permit: APC-2017/0069-C dated 2/2/17] iii. Operational Standard None. iv. Operational Limitation A. The Cold Trap temperature shall not exceed -20°C (-4°F) whenever the vacuum pump is operating and the process isolation valve is open (process is venting) 	Compliance with the emission standard, emission limitation, operational standard and operation limitations of this section shall be demonstrated by adherence to the appropriate monitoring, record keeping, and reporting requirements. [Reference: 7 DE Admin. Code 1130, Section 6.3.1 dated 8/11/22] vi. Monitoring The Company shall continuously monitor the cold trap temperature whenever the vacuum pump is operating. [Reference: Permit: APC-1993/0263 dated 5/5/93 and Permit: APC-2017/0069-C dated 2/2/17] vii. Testing The Department reserves the right to require that the owner or operator perform emission test using methods approved in advance by the Department. [Reference: Permit: APC-2017/0069-C	 A. Emission in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department: Immediately upon discovery and after activating the appropriate site emergency plan to the Department's 24-hour complaint line (1-800-662-8802) any deviation that poses an imminent and substantial danger to public health, safety, or the environment. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.3.3.2 dated 8/11/22] Immediately upon discovery by calling the Environmental Emergency Notification and Complaint number, (800) 662-8802 (State Enforceable Only). [Reference: 7 DE Admin. Code 1130, Section 6.1.3.3.3.3 dated 8/11/22
C. The unit shall be limited to production of	viii. Quality Assurance/Quality Control None. ix. Record Keeping A. The owner or operator shall maintain all records necessary for determining compliance with this permit in a readily accessible location for five (5) years and shall make these records available to the Department upon written or verbal request.	B. Discharges to the atmosphere in excess of any quantity specified in 7 DE Admin. Code 1203 "Reporting of a Discharge of a Pollutant or an Air Contaminant" shall be reported, immediately upon discovery and after activating the appropriate site emergency plan, either in person or to the Department's 24-hour complaint line (1-800-662-8802). Discharges in compliance with this permit and excess emissions

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	 B. The following information shall be recorded, initialed, and maintained in a log (except data collected electronically): The Cold Trap temperature whenever the vacuum pump is operating. Records of the number of cakes produced per day from the ACT line. C. The rolling twelve (12) month total emissions shall be calculated and recorded each month in a log for each of the following pollutants. Volatile Organic Compounds (VOCs); and Hazardous Air Pollutants (HAPs). 	previously reported under Condition 6.1 of this permit and excess emissions previously reports under Condition 6.1 of this permit are exempt from this reporting requirement. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.3.3.5 dated 8/11/22 and 7 Del. C. Chapter 60, Section 6028] C. In addition to complying with Condition 6.1 and 6.2 of this permit, any reporting required by 7 DE Admin. Code 1203 "Reporting of a Discharge of a Pollutant or an Air Contaminant" and any other reporting requirements mandated by the State of Delaware, the owner or operator shall for each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, supply the Department in writing with the following information: 1. The name and location of the facility; 2. The subject source(s) that caused the excess emissions; 3. The time and date of first observation of the excess emissions;

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
		 For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the appliable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
		6. The proposed corrective actions and schedule to correct the conditions causing the excess emissions. [Reference: 7 DE Admin. Code 1112, Section 7.3, Paragraphs 1, 2, 3, 4, and 5 dated 11/24/93]
		xi. Certification A. Each document submitted to the Department/EPA pursuant to this permit shall be certified by a Responsible Official as to truth, accuracy, and completeness. Such certification shall be signed by a Responsible Official and shall contain the language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [Reference: 7 DE Admin. Code 1130, Section 5.6 dated 11/15/93 and 6.3.1 dated 8/11/22]
		B. Each document submitted to the Department/EPA pursuant to this permit shall be sent to the following addresses:

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
		One (1) original: State of Delaware – DNREC Division of Air Quality State Street Commons 100 W Water Street, Suite 6A Dover, DE 19904 ATTN: Division Director One (1) copy: U.S. Environmental Protection Agency Region III Enforcement and Compliance Assurance Division Air, RCRA and Toxics Branch (3ED21) Four Penn Center 1600 John F. Kennedy Boulevard
4. Hazardous Air Pollutants (HAPs)		Philadelphia, PA 19103-2852
i. Emission Standard None.ii. Emission Limitation Total HAP emissions shall not exceed 0.33	v. Compliance Method Compliance shall be demonstrated by the record keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]	x. Reporting That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.2.3 and 6.2.1 dated 8/11/22]
pounds per day or 0.043 tons per twelve (12) month rolling period. iii. Operational Standard None.	vi. Monitoring None. vii. Testing None.	xi. Certification That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22]
iv. Operational Limitation None.	viii. Quality Assurance/Quality Control	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification	
	ix. Record Keeping The Company shall maintain records to demonstrate compliance with the Emission Standards of Condition 3 – Table 1(f)(2)(i). [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]		
g. Emission Unit 15-1 Air Classifier System wi	th Baghouse		
 i. Emission Standard Particulate Matter emissions shall not exceed 0.2 grains per standard cubic foot of exhaust air from the baghouse vent. [Reference: Permit: APC-2014/0021 dated 8/13/14] ii. Emission Limitation Particulate Matter emissions shall not exceed 0.0013 lb/hr and 0.0056 tons per twelve (12) month rolling period. [Reference: Permit: APC-2014/0021 dated 8/13/14] iii. Operational Standard All structural and mechanical components of the equipment covered by this permit and in use shall be maintained in proper operating condition. [Reference: 7 DE Admin. Code 1101, Section 3 dated 2/1/81, 7 DE Admin. Code 1102, Section 11.6 dated 6/1/97, and Permit: APC-2011/0144 (A1) dated 11/6/14] 	 v. Compliance Method Compliance with the emission standard, emission limitation, operational standard and operational limitations of this section shall be demonstrated by adherence to the appropriate monitoring, record keeping, and reporting requirements. [Reference: 7 DE Admin. Code 1130, Section 6.3.1 dated 8/11/22] vi. Monitoring The owner or operator shall monitor the loading rate of Component C into the cyclone separators. [Reference: Permit: APC-2014/0021 dated 8/13/14] vii. Testing None in addition to Condition 3(b)(2) of this permit. [Reference: Permit: APC-2014/0021 dated 8/13/14] 	 x. Reporting In addition to Conditions 2(b)(9) and 3(c)(2) of this permit: For each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, the Company shall supply the Department in writing with the following information: A. The name and location of the facility; B. The subject source(s) that caused the excess emissions; C. The time and date of the first observation of the excess emissions; D. The cause and expected duration of the excess emissions; 	
iv. Operational Limitation	viii. Quality Assurance/Quality Control None.		

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification		
 [Reference: Permit: APC-2014/0021 dated 8/13/14] A. The air classifier system, including the sifter, shall not be operated unless the associated baghouse is operating properly. B. Maximum charge to the inlet of the baghouse from the sifter and sorting hoppers shall not exceed 12.6 pounds per hour (303 pounds per day). C. The owner or operator shall follow the manufacturer's maintenance schedule and procedures to assure that the baghouses' serviceable components are well maintained. D. The baghouse shall be operated with a functional differential pressure gauge. The pressure differential across the baghouse shall be maintained between 2 and 14 inches of water column. E. The flow rate of material (Component C) during material transfer into the cyclone separators, sifter and the sorting hoppers shall be regulated to minimize particulate emissions. F. If, in the opinion of the Department, the operation of this facility causes a condition of air pollution, the Department may 	 ix. Record Keeping A. The owner or operator shall maintain all records necessary for determining compliance with this permit in a readily accessible location for five (5) years and shall make these records available to the Department upon written or verbal request. [Reference: 7 DE Admin. Code 1130, Section 6.1.3.2.2 dated 8/11/22 and Permit: APC-2014/0021 dated 8/13/14] B. The following information on the air classifier system shall be recorded, initialed, and maintained in a log (except data collected electronically): [Reference: 7 DE Admin. Code 1130, Section 6.1.3.2 dated 8/11/22 and Permit: APC-2014/0021 dated 8/13/14] 1. The daily, monthly, and cumulative rolling twelve (12) month total hours of operation for the air classification system, including the sifter, and baghouse. 2. The daily, monthly, and cumulative rolling twelve (12) month total tons of Component C loaded into the sifter and cyclone hoppers, when in operation. 3. The daily operating condition of the baghouse. 	E. For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and F. The proposed corrective actions and schedule to correct the conditions causing the excess emissions. [Reference: Condition 6.3 of Permit: APC-2011/0144 dated 11/6/14] xi. Certification None in addition to Conditions 2(a) and 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Sections 6.1.3.2.3 and 6.2.2 dated 8/11/22]		

	on Limitations, Emission Standards, tional Limitations, and Operational ards	(M	mpliance Determination Methodology onitoring, Testing, QA/QC Procedures, and cord Keeping)	Re	porting and Compliance Certification
	require additional emission control measures.		 The daily pressure drop readings, as measured across the inlet and outlet ductwork of the baghouse whenever the baghouse is in operation. 		
			 The dates and descriptions of inspections and maintenance performed on the baghouse and air classification system, including the sifter. 		
			The occurrence and duration of any malfunction of the baghouse and air classification system, including the sifter.		
			 C. The rolling twelve (12) month total emissions shall be calculated and recorded each month in a log for the following pollutant: 1. Particulate Matter (PM). [Reference: Permit: APC-2014/0021 dated 8/13/14] 		
2. Visi	ble Emissions		· · · · · · · · · · · · · · · · · · ·		
Em smo per	ission Standard issions of visible air contaminants and/or oke shall not be greater than twenty cent (20%) opacity for an aggregate of re than three (3) minutes in any one (1)	V.	Compliance Method Compliance shall be demonstrated by the record keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]	x.	Reporting None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]
twe <i>Adn</i>	ur, or more than fifteen minutes in any enty-four (24) hour period. [Reference: 7 DE min. Code 1114, Section 2.1 dated 7/17/84 and mit: APC-2014/0021 dated 8/13/14]	vi.	Monitoring None.	xi.	Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.2.2 dated 8/11/22]

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Op	nission Limitations, Emission Standards, perational Limitations, and Operational andards	(M	mpliance Determination Methodology Ionitoring, Testing, QA/QC Procedures, and ecord Keeping)	Re	eporting and Compliance Certification
ii.	Emission Limitation None.		Testing None.		
iii.	Operational Standard None.		. Quality Assurance/Quality Control None.		
iv.	Operational Limitation None.	IX.	Record Keeping The Company shall maintain records to demonstrate compliance with the Emission Standards of Condition 3 – Table 1(g)(2)(i). [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]		
h.	Emergency Generators Emission Units 2-1	2 an			
1.	Criteria Pollutants				
i. ii.	Emission Standard None. Emission Limitation None.	V.	Compliance Method Compliance shall be demonstrated by the monitoring/testing and record keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]	x.	In addition to Conditions 2(b)(9) and 3(c)(2) of this permit: If any emergency generator is to be reclassified
iii.	Operational Standard A. An emergency may operate for an unlimited number of hours during an emergency as defined in Condition 3 – Table 1(h)(1)(iii)(D). [Reference: 7 DE Admin. Code 1144, Section 4.1 dated 1/11/06]	vi.	Monitoring A. The owner or operator shall monitor the following information: 1. The date, time, duration, and reason for each emergency generator start-up, and		from an emergency generator to a distributed generator, the owner or operator shall submit to the Department a letter stating that the generator is to be reclassified. Reclassification shall not occur without written permission from the Department. [Reference: 7 DE Admin. Code 1144, Section 1.3.3 dated 1/11/06]
	B. An emergency generator may operate for a maximum of 100 hours per calendar year for maintenance purposes, pursuant to the definition of an emergency generator as	vii.	2. The monthly fuel usage. [Reference: 7 DE Admin. Code 1144, Section 6.1 dated 1/11/06] Testing	xi.	Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.2.2 dated 8/11/22]

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
defined in 7 DE Admin. Code 1144, except as restricted by Condition 3 – Table 1(h)(1)(iii)(E). [Reference: 7 DE Admin. Code 1144, Section 4.2 dated 1/11/06 and 40 CFR Part 63.6640 dated 1/30/13] C. For distillate fuel, on and after July 1, 2016, no person shall offer for sale, sell, deliver, or purchase any fuel having a sulfur content greater than fifteen (15) ppm (0.0015%) by weight. [Reference: 7 DE Admin. Code 1108, Section 2.3.1 dated 7/11/13]	The sulfur content of each shipment of diesel fuel or biodiesel blend shall be determined using the following sampling and testing methods as described in 40 CFR 80.580 (July 1, 2004): A. Manual Sampling: American Society for Testing and Materials (ASTM) method D4057-95 or D5842-95 if there is no contamination present that could affect sulfur testing requirements; B. Automatic Sampling: ASTM method D4177-95;	
 D. Each emergency generator may only operate during an emergency as defined below: 1. An electrical power outage due to: a failure of the electrical grid; on-site disaster; local equipment failure; or public service emergencies such as flood, fire, natural disaster, or severe weather conditions (e.g., hurricane, tornado, blizzard, etc.); or 	 C. Sulfur Testing Method: ASTM method 2622-03; D. Alternative Sulfur Testing Method: ASTM methods D4294-03, D5453-03a, or D6428-99, provided that the refiner or importer test result is correlated with the appropriate method specified in Condition 3 – Table 1(h)(1)(vii)(A). 	
2. When there is a deviation of voltage or frequency from the electrical provider to the premise of three percent (3%) or greater above, or five percent (5%) or greater below standard voltage or frequency. [Reference: 7 DE Admin. Code 1144, Section 2.0 dated 1/11/06]	E. <u>Alternative Sulfur Testing Method</u> : Sulfur content may be determined using any test method approved under 40 CFR Part 80, Subpart I, Section 80.585. [Reference: 7 DE Admin. Code 1144, Section 7.5.2.1 dated 1/11/06] viii. Quality Assurance/Quality Control None.	

	ion Limitations, Emission Standards, tional Limitations, and Operational ards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	No emergency generator shall be operated for testing or maintenance purposes before 5:00 PM on any day which has a Ground Level Ozone Pollution Forecast or Particulate Forecast of "Code Purple", "Code Red", or "Code Orange" as announced by the Department. Despite Condition 3 – Table 1(h)(1)(iii)(E), each emergency generator may be tested on any day that such testing is required to meet National Fire Protection Association (NFPA) or Joint Commissions on	 ix. Record Keeping The following information shall be recorded, initialed, and maintained in a log as follows: A. The date, time, duration, and reason for each start-up of the emergency generator. The log shall include the dates and descriptions of inspections, testing, operator training, and maintenance performed; B. The total hours of operation for each month and the cumulative twelve (12) month rolling period shall be calculated and 	
G.	permit shall not be operated in conjunction with a voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant, or system operator	recorded within fifteen (15) days of the end of each calendar month; C. The sulfur content of the diesel fuel or biodiesel blend to include the shipping receipt and fuel certification for each diesel fuel or biodiesel blend shipment which identifies the type of fuel delivered and the percentage of sulfur (by dry weight basis) and method used to determine the sulfur	
н.	(e.g., Delmarva Power, Delaware Electric Cooperative, PJM, etc.). [Reference: 7 DE Admin. Code 1144, Section 2.0 dated 1/11/06] Each emergency generator shall be equipped with a properly functioning non-resettable hour metering device. [Reference: 7 DE Admin. Code 1144, Section 6.1.2 dated 1/11/06]	content. D. As an alternative to Condition 3 – Table 1(h)(1)(ix)(C), the owner or operator may have the fuel in the generator's associated storage tank certified by a third party laboratory after each shipment of fuel. This certification shall identify the percentage of	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification	
 The emergency generators shall operate in conformance with the generator manufacturer's instructions, such as following maintenance and operating requirements to help minimize emissions. [Reference: 7 DE Admin. Code 1144, Section 3.1.1 dated 1/11/06] For each emergency generator the owner or operator must: Change oil and filter every 500 hours of operation or annually, whichever comes first, or perform an oil analysis to determine if the total base is less than 30%, whether viscosity has been changed more than 20% from new and the water content is less than 0.5%. If so, no oil change is necessary. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [Reference: 40 CFR Part 60, Subpart ZZZZZ, Table 2d.4, and Parts 63.6625(i) and 66.6590(a)(1)(iii) dated 1/30/13] 	sulfur (by weight dry basis) and the method used to determine the sulfur content. [Reference: 7 DE Admin. Code 1144, Section 6.1 dated 1/11/06] E. The owner or operator shall maintain a record of proper initial notification as required by 7 DE Admin. Code 1144. [Reference: 7 DE Admin. Code 1144, Section 6.1.3 dated 12/11/00] F. The owner or operator shall maintain a copy of each emergency generator's manufacturer's maintenance and operating recommendations at the facility. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]		

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification	
iv. Operational Limitation None. i. Insignificant Activities			
	1), Sulfur Dioxide (SO ₂), and Nitrogen Oxides (NO _x)		
 ii. Emission Standard Fuel burning equipment with a rated heat input greater than one (1) mmBTU/hr shall not emit particulate matter in excess of 0.3 Ib/mmBTU heat input, maximum two (2) hour average. [Reference: 7 DE Admin. Code 1104, Section 2.1 dated 2/1/81] iii. Emission Limitation None. iv. Operational Standard A. No person shall offer for sale, sell, deliver, or purchase any fuel having a sulfur content greater than the limits specified in Condition 3 – Table 1(i)(1)(iv)(B)(1) through (3) of this permit, when such fuel is intended for use in any fuel burning equipment in Delaware. [Reference: 7 DE Admin. Code 1108, Section 2.3 dated 7/11/13] B. No person shall use any fuel having a sulfur content greater than the limits specified in Condition 3 – Table 1(i)(1)(iv)(B)(1) through (3) of this permit in any fuel burning equipment in 	vi. Compliance Method A. Compliance shall be demonstrated by the monitoring/testing and record keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] B. All fuel burning equipment shall fire natural gas only, with the exception of diesel generators, diesel fire protection pumps, and equipment covered by 7 DE Admin. Code 1130 Appendix A Section 17, which shall burn only diesel fuel or natural gas. [Reference: 7 DE Admin. Code 1130, Section 6.1.3. dated 8/11/22] C. The Company shall ensure compliance with the sulfur in fuel standard through the review and maintenance of fuel supplier certifications for each fuel oil delivery. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] vii. Monitoring None.	xi. Reporting None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] xii. Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.2.2 dated 8/11/22]	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
Delaware. [Reference: 7 DE Admin. Code 1108, Section 2.3 dated 7/11/13]	ix. Quality Assurance/Quality Control None.	
1. For a distillate fuel, 15 ppm by weight;	x. Record Keeping A. The Company shall maintain a list of diesel	
2. For residual fuel, 0.5% by weight;	generators at the facility, including: 1. Location,	
3. For any other fuel, 1.0% by weight.	2. Manufacturer and model number,	
v. Operational Limitation None.	3. Rated heat input,	
	Manufacturer's data for particulate emission rates, and	
	5. Twelve (12) month rolling hours of operation.	
	B. The Company shall maintain a list of all insignificant natural gas-fired equipment at the facility, including: 1. Location,	
	2. Manufacturer and model number,	
	3. Rated heat input, and	
	4. Twelve (12) month rolling fuel usage (may be assumed to be the difference between facility gas usage and the sum of gas usage from EU 2-1 and EU 2-2).	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	C. Calculations demonstrating compliance with this standard shall be kept for the general classification of natural gas fired equipment subject to this standard. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]	
	 D. The Company shall maintain records of fuel supplier certifications for each fuel oil shipment received at the facility. Such certification shall indicate: 1. The name of the fuel supplier, 	
	2. Date delivered,	
	3. Amount delivered,	
	4. Oil sampling method, and	
	 The sulfur content of the fuel oil as determined by ASTM method D129-91, D1552-90, D2622-92, or D4294-90. 	
2. Clarke Detroit Diesel Fire Protection Pump, for B	ulk Storage Area Tank Farm (100 hp), EU 2-13; Sulfur Dioxide	e (SO ₂) and Nitrogen Oxides (NO _x)
i. Emission Standard None. ii. Emission Limitation	v. Compliance Method Compliance shall be demonstrated by the monitoring/testing and record keeping requirements of this condition. [Reference: 7 DE	x. Reporting In addition to Conditions 2(b)(9) and 3(c)(2) of this permit:
A. Nitrogen Oxides (NO _x) emissions shall not exceed 3.1 lb/hr and 0.16 tons per year, on a twelve (12) month rolling basis;	Admin. Code 1130, Section 6.1.3 dated 8/11/22] vi. Monitoring None.	The owner or operator shall, for each occurrence of excess emissions, within 30 calendar days of becoming aware of such

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards		Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification		
В.	Carbon Monoxide (CO) emissions shall not exceed 0.67 lb/hr and 0.03 tons per year, on a twelve (12) month rolling basis;	vii. Testing None.	occurrence, supply the Department with the following information: A. The name and location of the facility.		
C.	Sulfur Oxide (SO _x) emissions shall not exceed 0.21 lb/hr and 0.01 tons per year, on a twelve (12) month rolling basis;	viii. Quality Assurance/Quality Control None.	B. The subject source(s) that caused the excess emissions.		
D.	Particulate Matter (PM) emissions shall not exceed 0.22 lb/hr and 0.01 tons per year,	ix. Record Keeping A. Monthly and twelve (12) month rolling operating hours for the diesel pump.	C. The time and date of the first observation of the excess emissions.		
E.	on a twelve (12) month rolling basis; and Volatile Organic Compound (VOC)	B. Dates of each of the following types of operation, recorded by type:	D. The cause and expected duration of the excess emissions.		
	emissions shall not exceed 0.25 lb/hr and 0.01 tons per year, on a twelve (12) month rolling basis.	 Operator training and periodic startup testing. 	E. The estimated rate of emissions (expressed in the units of the applicable emissions limitation) and the operating data and		
	perational Standard The owner or operator must:	2. Annual maintenance and testing.C. Manufacturer's specifications for the diesel	calculations used in determining the magnitude of the excess emissions.		
7	Change oil and filter every 500 hours of operation or annually, whichever comes first, or perform an oil analysis	pump. D. Fuel supplier certifications in accordance	F. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.		
	to determine if the total base is less than 30%, whether viscosity has not changed more than 20% from new and the water content is less than 0.5%. If so, no oil change is necessary.	with Condition 3 – Table 1(I)(1)(x)(D), except that if fuel supplier, laboratory tests performed using the ASTM methods in that condition can be substituted for that certification. If this option is taken, a sample must be taken and tested immediately after each fuel delivery. Records of laboratory results indicating the oil sampling method, the sulfur content, and	xi. Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.2.2 dated 8/11/22]		

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification		
 Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [Reference: 40 CFR Part 60, Subpart ZZZZ, Table 2d.4 and Parts 63.6625(i) and 66.6590(a)(1)(iii) dated 1/30/13] 	the method used to determine sulfur content, as well as the name and address of the testing laboratory must be kept. In this situation, records of the name of the fuel supplier, the date delivered, and the amount delivered shall be kept in the form of delivery receipts from the fuel supplier. [Reference: Permit: APC-2002/0256 dated 2/12/02]			
iv. Operational Limitation A. For maintenance purposes and testing, the total hours of operation for the Diesel Fire Protection Pump shall not exceed one hundred (100) hours per year, on a calendar year basis. [Reference: 40 CFR Part 63.6640 dated 1/30/13]				
 B. The Diesel Fire Protection Pump shall only be operated during the following situations: 1. There is a fire emergency at the facility; 				
 Operator training and periodic startup testing which shall not occur on an Ozone Alert or Ozone Action Day (Codes Orange, Red, or Purple); 				
Scheduled annual maintenance and testing which shall not occur on an				

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
Ozone Alert or Ozone Action Day (Codes Orange, Red, or Purple). [Reference: Permit: APC-2002/0256 dated 2/12/02]		
j. Facility Wide		
 Visible Emissions Emission Standard Emissions of visible air contaminants and/or smoke shall not be greater than twenty percent (20%) opacity for an aggregate of more than three (3) minutes in any one (1) hour, or more than fifteen minutes in any twenty-four (24) hour period. [Reference: 7 DE	 v. Compliance Method Compliance shall demonstrated by the monitoring/testing and record keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] vi. Monitoring If visible emissions are observed, the Company shall either cease activities until corrective action can be taken to eliminate visible emissions or conduct visible observations at fifteen-second intervals for a period of not less than one hour except that the observations may be discontinued whenever a violation of the standard is recorded. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] vii. Testing The additional procedures, qualification and testing to be used for visually determining the opacity shall be those specified in Sections 2 and 3, except for Section 2.5 and the second sentence of Section 2.4 of Reference Method 9 set forth in Appendix A, 40 CFR 60, revised July 1, 1982. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] 	 X. Reporting None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] Xi. Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.2.2 dated 8/11/22]

ecord Keeping he Company shall maintain a record of each eference Method 9 test performed and a copy f the qualifications of the individual performing he test. [Reference: 7 DE Admin. Code 1130, Section 1.3 dated 8/11/22] ompliance Method	
ompliance Method	
compliance shall be demonstrated by the monitoring and record keeping requirements of his condition. [Reference: 7 DE Admin. Code 1130, section 6.1.3 dated 8/11/22] Identitoring includes by is not limited to scentometer tests, in quality monitoring, and affidavits from affected citizens and investigators. This testing hall be performed as deemed necessary by the company, as specified elsewhere in this permit, and when requested by the Department. Reference: 7 DE Admin. Code 1119, Section 2.1 dated (1/81) esting one.	 x. Reporting None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] xi. Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.2.2 dated 8/11/22]
ichine con	onitoring and record keeping requirements of is condition. [Reference: 7 DE Admin. Code 1130, ction 6.1.3 dated 8/11/22] onitoring cludes by is not limited to scentometer tests, a quality monitoring, and affidavits from fected citizens and investigators. This testing all be performed as deemed necessary by the impany, as specified elsewhere in this permit, d when requested by the Department. Seference: 7 DE Admin. Code 1119, Section 2.1 dated 1/81]

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification	
3. Facility Wide Operational Limitation i. Emission Standard None. ii. Emission Limitation None. iii. Operational Standard None.	 ix. Record Keeping Records of all monitoring/testing shall be kept on-site. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] v. Compliance Method Compliance shall be demonstrated by the monitoring and record keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130,	 x. Reporting None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] xi. Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.2.2 dated 8/11/22 	
iv. Operational Limitation At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. [Reference: 7 DE Admin. Code 1101, Section 3 dated 11/11/13 and 7 DE Admin. Code 1102 Operating Permits]	information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Reference: 7 DE Admin. Code 1101, Section 3 dated 2/1/81 and 7 DE Admin. Code 1102 Operating Permits] vii. Testing None. viii. Quality Assurance/Quality Control None. ix. Record Keeping Records shall be kept in accordance with Condition 3(b) of this permit and shall include		

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification	
Work Practice Standards Handling, Storage, and Emission Standard	applicable maintenance records and standard operating procedures. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 12/11/00] Disposal of VOCs (VOC RACT) v. Compliance Method	x. Reporting	
 ii. Emission Limitation None. iii. Operational Standard A. The Company shall not allow, cause, or permit the disposal of more than eleven (11) pounds of a volatile organic compound (VOC), or of any materials containing more than eleven (11) pounds of any VOCs, in any one (1) day, in a manner that would permit the evaporation of VOC into the ambient air. This includes but is not limited to the disposal of VOC from any VOC control devices. This provision does not apply to: Any VOC or material containing VOC emitted from a regulated entity that is subject to a VOC standard under 7 DE Admin. Code 1124. Coating sources that are exempt from the emission limitations of Section 10 through Section 23 of 7 DE Admin. Code 1124. 	Compliance shall be demonstrated by adherence with the VOC handling work practices by providing appropriate training and posting of instructions, and record keeping for storage, use and disposal of VOCs. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] vi. Monitoring Monitor work practice standards and employee training records on an annual basis, updating records as needed. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] vii. Testing None. viii. Quality Assurance/Quality Control None. ix. Record Keeping The Company shall keep a record of postings and employee training related to these work practice standards and storage, use and disposal of VOCs. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22]	None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] xi. Certification None in addition to Condition 3(c)(3) of this permit. [Reference: 7 DE Admin. Code 1130, Section 6.2.2 dated 8/11/22]	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	nal Limitations, and Operational (Monitoring, Testing, QA/QC Procedures, and	
 Waste paint (sludge) handling systems, water treatment systems, and other similar operations at coating facilities using complying coatings. 		
 Any VOC or material containing VOCs used during process maintenance turnarounds for cleaning purposes, provided that the provisions of paragraphs (B), (C), and (D) of this condition are followed. [Reference: 7 DE Admin. Code 1124, Section 8.4.1 dated 3/11/11] 		
B. No owner or operator of a facility subject to 7 DE Admin. Code 1124 shall use open containers for the storage or disposa of cloth or paper impregnated with VOCs that are used for surface preparation, clean-up or coating removal. Containers for the storage or disposal of cloth or paper impregnated with VOCs shall be kept closed, except when adding or removing material. [Reference: 7 DE Admin. Code 1124, Section 8.4.3 dated 3/11/11]		
C. No owner or operator of a facility subject to 7 DE Admin. Code 1124 shall store in open containers spent or fresh VOC to be used for surface preparation, clean-up or coating removal. Containers for the		

	on Limitations, Emission Standards, tional Limitations, and Operational ards Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)		Reporting and Compliance Certification		
	storage of spent or fresh VOCs shall be kept closed, except when adding or removing material. [Reference: 7 DE Admin. Code 1124, Section 8.4.4 dated 3/11/11]				
D.	No owner or operator shall use VOC for the clean-up of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere. [Reference: 7 DE Admin. Code 1124, Section 8.4.5 dated 3/11/11]				
E.	The facility shall convey VOC-containing cleaning materials from on location to another in closed containers or pipes. [Reference: 7 DE Admin. Code 1124, Section 8.4.6.1 dated 3/11/11]				
F.	The facility shall handle and transfer all fresh and spent cleaning solvent and other VOC-containing material to or from any container, tank, vat, vessel, mixing vessel, or piping system, etc. in such a manner that minimizes spills and other losses. [Reference: 7 DE Admin. Code 1124, Section 8.4.6.2 dated 3/11/11]				
G.	The facility shall clean up spills of fresh and spent cleaning solvent and other VOC-containing material immediately. [Reference: 7 DE Admin. Code 1124, Section 8.4.6.3 dated 3/11/11]				

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Ор	nission Limitations, Emission Standards, Perational Limitations, and Operational Pandards	(M	mpliance Determination Methodology onitoring, Testing, QA/QC Procedures, and cord Keeping)	Re	eporting and Compliance Certification
iv.	H. The facility shall minimize air circulation around cleaning operations and shall implement equipment practices that minimize emissions including keeping part cleaners covered when not in use, and maintaining cleaning equipment to repair solvent leaks. [Reference: 7 DE Admin. Code 1124, Section 8.4.7 dated 3/11/11] Operational Limitation None.				
k.	Emission Unit 2-14 500 HP Burnham Boiler				
1.	Criteria Pollutants				
i.	Emission Standard PM ₁₀ emissions shall not exceed 0.3 pound per million BTU heat input, maximum 2-hour average. [Reference: 7 DE Admin. Code 1104, Section 2.1 dated 1/11/17] Emission Limitation [Reference: Condition 2.1 of Permit: APC-2021/0099-O dated 8/29/23] A. Sulfur Dioxide (SO ₂) emissions shall not exceed 0.014 pounds per hour and 0.062 tons per twelve (12) month rolling period. B. Nitrogen Oxides (NO _x) emissions shall not exceed 1.25 pounds per hour and 5.49 tons per twelve (12) month rolling period.		Compliance Method Compliance shall be demonstrated by the monitoring and record keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] Monitoring A. The Company shall monitor the following: [Reference: Condition 4.2 or Permit: APC-2021/0099-O dated 8/29/23] 1. The daily natural gas usage. 2. The daily hours of operation of the boiler. 3. All periods of startup, shutdown, and malfunction of the boiler.	xi.	None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit.

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
C. Carbon Monoxide (CO) emissions shall not exceed 1.27 pounds per hour and 5.57 tons per twelve (12) month rolling period.	4. The tune-up shall be performed in accordance with the manufacturer's recommendations. The tune up is not considered complete until any	
D. Volatile Organic Compounds (VOC) emissions shall not exceed 0.13 pounds per hour and 0.57 tons per twelve (12) month rolling period.	necessary repairs and adjustments have been made to ensure efficient operation.	
E. Particulate Matter (PM ₁₀) emissions shall not exceed 0.18 pounds per hour and 0.79 tons per twelve (12) month rolling period.	vii. Testing None. viii. Quality Assurance/Quality Control None.	
iii. Operational Standard None.	ix. Record Keeping A. The following information shall be recorded,	
 iv. Operational Limitation [Reference: Condition 3.1 of Permit: APC-2021/0099-O dated 8/29/23] A. The Company shall combust only natural gas in the boiler. 	initialed and maintained in log form (except data collected electronically): 1. The quantity of natural gas combusted each day and month.	
B. Natural gas consumption shall not exceed 207 MMscf in any twelve (12) month rolling period.	 The Company shall calculate the twelve (12) month rolling natural gas usage within fifteen (15) days of the end of each month. 	
C. The heat input capacity of the boiler shall not exceed 24.8 MMBtu/hr.	The daily and monthly hours of operation of the boiler.	
	The Company shall calculate the twelve (12) month rolling hours of operation	

	ion Limitations, Emission Standards, tional Limitations, and Operational ards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
D.	The boiler shall be equipped with the low NO _x burner(s) and over-fire air or flue gas recirculation.	within fifteen (15) days of the end of each month.	
E.	The boiler shall be equipped with a fuel flow meter.	5. The maintenance performed on the boiler.	
F.	Operation of the boiler shall be optimized by having qualified personnel perform a tune-up within seven (7) days of boiler	 Any start-up, shutdown, or malfunction of the boiler including the date and time and any corrective actions required. 	
G.	startup.	7. A log of all tune-ups performed on the boiler to include the dates of the tune-up, adjustment to the equipment, and as-left conditions.	
		a. The qualification of personnel performing the annual tune-ups. Minimum qualifications shall include manufacturer, supplier, or technical training.	
		8. The visible emissions monitoring of Table 3 – Condition 1(k)(1)(vi)(A).	
		 B. A rolling monthly total emissions shall be calculated and recorded each month in a log for each of the following pollutants. 1. Sulfur Oxide (SO₂) emissions; 	
		2. Nitrogen Oxides (NO _x) emissions;	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
2. Visible Emissions	 Carbon Monoxide (CO) emissions; Volatile Organic Compound (VOC) emissions; and Particulate Matter (PM₁₀) emissions. 	
i. Emission Standard No person shall cause or allow the emission of visible air contaminants and/or smoke from a stationary or mobile source, the shade or appearance of which is greater than twenty (20%) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour or more than fifteen (15) minutes in any twenty-four (24) hour period. [Reference: Condition 2.1 of Permit: APC-2021/0031-O dated 4/9/21]	 v. Compliance Method Compliance shall be demonstrated by the monitoring and record keeping requirements of this condition. [Reference: 7 DE Admin. Code 1130, Section 6.1.3 dated 8/11/22] vi. Monitoring None. vii. Testing A. Once each week, the exhaust stack shall be 	x. Reporting None in addition to Conditions 2(b)(9) and 3(c)(2) of this permit. xi. Certification None in addition to Condition 3(c)(3) of this permit.
ii. Emission Limitation None.	observed for visible emissions for at least five (5) minutes while the boiler is operating. If no visible emissions are	
iii. Operational Standard None.	observed, no further action is necessary. If visible emissions are observed, the owner or operator shall either:	
iv. Operational Limitation None.	Cease activities until corrective actions can be taken to eliminate the visible emissions; or	
	Conduct visual observations at fifteen second intervals, in accordance with	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	Subsection 1.5.3 of 7 DE Admin. Code 1120, for a period of not less than one (1) hour except that the observations may be discontinued whenever a violation of Table 3 – Condition 1(k)(2)(i) is recorded.	
	viii. Quality Assurance/Quality Control None.	
	ix. Record Keeping None.	

	viii. Quality Assurance/Quality Control None.	
	ix. Record Keeping	
	None.	
I. Reserved		

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Condition 3 – Table 1: Specific Requirements (Continued)

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)

Reporting and Compliance Certification

m. EU 5-6 Cold Solvent Degreasers and Carbon Absorber

- 1. Volatile Organic Compounds (VOC)
- i. Emission Standard None
- ii. Emission Limitation
 - A. Air contaminant emission levels shall not exceed those specified in 7 DE Admin. Code 1100 and the following: 2.1.1 Volatile Organic Compounds (VOC) Emissions VOC emissions shall not exceed 0.036 pounds per hour and 0.026 tons per rolling twelve (12) month period. [Reference: APC-2022/0086-O (AMD 1) Cond. 2.1 dated xx/xx/xx]
 - B. No person shall cause or allow the emission of visible air contaminants and/or smoke from a stationary or mobile source, the shade or appearance of which is greater than twenty (20%) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour or more than fifteen (15) minutes in any twenty-four (24) hour period. [Reference: 7 DE Admin. Code 1114 Section 2.0 dated 11/11/13; APC-2022/0086-O (AMD 1) Cond. 2.2 dated xx/xx/xx]
- iii. Operational Standard

- v. Compliance Method:
 Compliance with this emission standard and these operation limitations will be demonstrated by adherence to the appropriate
 - monitoring, testing, QA/QC, and recordkeeping requirements. [Reference: 7 DE Admin. Code 1130 Section 6.3.1, dated 8/11/22]
- vi. Monitoring:
 - A. The cold solvent cleaners shall be inspected monthly to verify proper operation and maintenance. [Reference: APC-2022/0086-O (AMD 1) Cond. 4.4 dated xx/xx/xx]
 - B. The Company shall document the solvent vapor pressure of all cleaning solutions used in the cold solvent cleaner. [Reference: APC-2022/0086-O (AMD 1) Cond. 4.5 dated xx/xx/xx]
 - C. The owner or operator of a solvent cleaning machine using a carbon adsorber to comply with 7 DE Admin. Code 1124 Section 33.0 shall measure and record the concentration of VOC solvent in the carbon adsorber bed at least monthly. The concentration shall be determined through a sampling port which is located 2/3 of the way through the carbon adsorber bed.

- x. Reporting:
 - In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22]

for each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, supply the Department in writing with the following information [APC-2022/0086-O (AMD 1) Cond. 6.2 dated xx/xx/xx]:

- 1. The name and location of the facility;
- 2. The subject source(s) that caused the excess emissions;
- 3. The time and date of the first observation of the excess emissions;
- 4. The cause and expected duration of the excess emissions;
- 5. For sources subject to numerical limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 A. The following VOC requirements for cold cleaning machines shall apply: No person shall use, sell or offer for sale for use in a cold cleaning machine any solvent containing more than 25 grams of VOC per liter, except as noted in Conditions 3 Table 1 - (m)(1)(iii)(A)(2) A cold cleaning machine may use greater than the VOC content for cold cleaning machines as specified above (25 g/l or 150 g/l) by using any of the VOC capture and control devices that control VOC air emissions to no more than would be experienced if the cleaning solution were VOC compliant in absence of the capture and control device. [Reference: 7 DE 1124 33.3.7.1; 33.3.7.3 dated 08/11/21; APC-2022/0086-O (AMD 1) Cond. 3.1.1 dated xx/xx/xx] B. Immersion cold cleaning machines shall have a freeboard ratio of 0.75 or greater unless the machines are equipped with working mode covers that shall be closed except when parts are being placed into or being removed from the machine. Covers shall be free of cracks, holes, and other defects, and easily opened or closed. [Reference: 7 DE 1124 33.3.1 dated 8/11/21; APC-2022/0086-O (AMD 1) Cond. 3.1.2 dated xx/xx/xx] 	 [Reference 7 DE 1124 33 dated 8/11/21; APC-2022/0086-O (AMD 1) Cond. 3.1.5 dated xx/xx/xx] vii. Testing In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall: A. The owner or operator shall perform monthly monitoring tests of the carbon adsorber using an organic vapor monitoring system. [APC-2022/0086-O Cond. (Amd 1) 4.6 dated xx/xx/xx] B. The VOC content of materials subject to the provisions of 7 DE Admin. Code 1124, Section 33.0 shall be determined by the EPA Reference Method 24 (Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coatings, Code of Federal Regulations Title 40, Page 60, Appendix A-7), dated May 1, 2019 and hereby incorporated by reference; by SCAQMD Method 304 [Determination of Volatile Organic Compounds (VOCs) in Various Materials] contained in the SCAQMD "Laboratory Methods Analysis for Enforcement Samples" manual, dated 1996 and hereby incorporated by reference, or by SQACMD Method 313 (Determination of Volatile Organic Compounds by Gas 	6. The proposed corrective actions and schedule to correct the conditions causing the excess emissions. xi. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 8/11/22]

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
C. Immersion cold cleaning machines and remote reservoir cold cleaning machines shall: 1. Have a permanent, conspicuous label summarizing the operating requirements in Condition 3 Table 1 - (m)(1)(iii)(D).	Chromatography/Mass Spectrometry), dated 1991 and hereby incorporated by reference or any other alternative test methods approved by the Department and by the EPA. [Reference APC-2022/0086-0 (AMD 1) Cond. 4.2 dated xx/xx/xxx] C. The owner or operator shall perform monthly monitoring tests of the carbon	
2. Be equipped with a downtime mode cover that shall be closed at all times except during cleaning or drying of parts or the addition or removal of solvent. Cover shall be free of cracks, holes, and other defects, and readily opened or closed. [Reference: 7 DE 1124 33.3.2 dated 8/11/21; APC-2022/0086-O (AMD 1) Cond. 3.1.3 dated xx/xx/xx]	adsorber using an organic vapor monitoring system. [Reference APC-2022/0086-O (AMD 1) Cond. 4.6] D. The owner or operator shall perform the following visible emission testing: Once a quarter the cold solvent machines and associated carbon adsorber shall be observed for the presence or absence of visible emissions for at least five minutes while the equipment is operating. The	
D. Batch cold cleaning machines shall be operated in accordance with the following procedures [Reference: 7 DE 1124 33.3.3 dated 8/11/21; APC-2022/0086-O (AMD 1) Cond. 3.1.4 dated xx/xx/xx]	five-minute observation window must start as soon as the carbon adsorber is stabilized. Compliance with this condition shall be demonstrated by the maintenance of a bound log of visible emissions. If visible emissions are	
 Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers and labeled as waste solvent, pursuant to 7 DE Admin. Code 1302, Delaware's Regulations Governing 	observed during the five-minute observation period, the owner or operator shall take actions per the manufacturer's recommendations to correct the problem as soon as possible. After corrective	

	on Limitations, Emission Standards, ional Limitations, and Operational rds	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<u>2.</u>	Hazardous Waste, as applicable. The closed containers may contain a device that allows pressure relief, by does not allow liquid solvent to drain from the container. Cleaned parts shall be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or	actions are taken, the owner or operator shall observe visible emissions while the equipment is next operated or tested. If visible emissions still persist, these steps (observe, correct, document) shall be repeated until visible emissions are not observed.	
	rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that solvent drains directly back to the cleaning machines.	The procedure outlined above does not require that the opacity of the emissions be determined. Since the procedure requires only the determination of whether visible emissions occur and does	
3.	Work area fans shall be located and positions so that they do not blow across the opening of the cold cleaning machine.	not require the determination of opacity levels, observer certification according to the procedures of EPA Reference Method 9 (40 CFR 60, Appendix A) is not	
4.	Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned or dried in the cold cleaning machine.	required. However, it is necessary that the observer is educated on the general procedures for determining the presence	
<u>5.</u>	Any solvent bath agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.	of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting,	
<u>6.</u>	Spills during solvent transfer and use of the cold cleaning machine shall be	wind, and the presence of uncombined water (condensing water vapor).	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
cleaned up immediately, and the wipe rags or other absorbent material shall be immediately stored in covered containers for disposal or recycling. 7. The Company shall ensure that the solvent level does not exceed the fill line. 8. Cold cleaning machine container or containers shall be free of all liquid leaks. Auxiliary equipment such as pumps, water separators, steam traps, or distillation units, shall not have any liquid leaks, visible tear, or crack detected shall be repaired immediately, or isolated such that no further leak can occur, or the cleaning machine shall be drained of all solvent and shutdown until the equipment is replaced or repaired. 9. Draining or filling of solvent containers or the cold cleaning machine shall be performed beneath the solvent surface of the receiving container whenever possible to reduce splashing. E. The owner or operator shall comply with the following operational limitations of the carbon adsorber: 1. The breakthrough capacity of the carbon adsorber shall not exceed 40 pounds contaminant per 100 pounds adsorbent.	 [Reference APC-2022/0086-O (AMD 1) Cond. 4.7 dated xx/xx/xx] viii. Quality Assurance/Quality Control None ix. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 8/11/22] A. The owner or operator of a cold cleaning machine shall maintain for not less than five (5) years, and shall provide to the Department, on request, the information specified in 7 DE Admin. Code 1124 Section 33.3.5. An invoice, bill of sale, certificate that corresponds to a number of sales, Safety Data Sheet (SDS), or other appropriate documentation acceptable to the Department may be used to comply with Section 33.0. [Reference 7 DE Admin. Code 1124 Section 33.3.6 dated 8/11/21; APC-2022/0086-O (AMD 1) Cond. 5.3] B. The Company shall maintain copies of the manufacturer supplied Safety Data Sheet 	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
 2. The temperature range of the carbon adsorber shall operate between 20°F to 250°F. 3. The adsorbent shall be changed once breakthrough is detected using an OVM (organic vapor meter) at 2/3 bed depth. Breakthrough is defined as a vapor concentration of 0.5 ppm VOC above background. [Reference: APC-2022/0086-O (AMD 1) Cond. 3.1.6 dated xx/xx/xx] F. At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Reference: APC-2022/0086-O (AMD 1) Cond. 3.2 dated xx/xx/xx] 	showing the solvent content and the true vapor pressure of the solvent used as determined by the testing condition of the permit. [Reference APC-2022/0086-O (AMD 1) Cond. 5.7] C. The Company shall retain records demonstrating that the employees that operate cold solvent cleaners have been trained on the operational standards of Condition 3 – Table 1 (m)(1)(iii)(C) and (D) of this permit. [Reference APC-2022/0086-O (AMD 1) Cond. 5.6 dated xx/xx/xx] D. Beginning on August 11, 2022, obtain from any person from whom the Company purchase or obtain any solvent containing VOC for use in a cold cleaning machine, a document specifying the following accurate information specific to all purchased or obtained product: [Reference 7 DE Admin. Code 1124 Section 33.3.5 dated 8/11/21; APC-2022/0086-O (AMD 1) Cond. 5.4] 1. The name and address of the solvent supplier.	
	product or vendor identification number.	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
G. All structural and mechanical components of the equipment or process covered by this permit shall be maintained in proper operating condition. [Reference: APC-2022/0086-O (AMD 1) Cond. 3.3 dated xx/xx/xx]	3. The VOC content of the solvent as determined by a test method in Condition 3 Table 1 – (m)(1)(vii)(B)	
H. The Company shall train all employees who use the cold solvent cleaners on the operational standards of this permit. [Reference: APC-2022/0086-O (AMD 1) Cond. 4.3 dated xx/xx/xx]	E. The following information shall be recorded, initialed, and maintained in a log (except data collected electronically) [Reference: APC-2022/0086-O (AMD 1) Cond. 5.5 dated xx/xx/xx].	
iv. Operational Limitation A. Operating hours shall not exceed 4 hours	1. Operating times of the carbon adsorber;	
per day and 1,460 in any rolling twelve (12) month period. [Reference:; APC-2022/0086-O (AMD 1) Cond. 3.1.6.4 dated xx/xx/xx]	 The maintenance records for the carbon adsorber, such as monthly maintenance inspections according to Condition 3 Table 1 – (m)(1)(vi)(A); 	
	3. The results of all monitoring conducted in accordance with Condition 3 Table 1 – (m)(1)(vi)(B) and (D);	
	4. Vapor pressure of the cleaning solutions used in the cold solvent cleaner;	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	5. Results of the monthly OVM measurements of the breakthrough capacity measured at 2/3 of bed depth; including date, time, measured VOC concentration, and measured VOC background concentration;	
	6. Operating temperature shall be ambient;	
	7. Date adsorbent began use;	
	8. Date adsorbent was changed;	
	9. Initial pressure drop in inches of water;	
	10. Quarterly visible emissions observations;	
	11. Monthly operating hours;	
	12. Freeboard ratio of the cold cleaning machine; and	

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification	
	13. Exhaust emissions in pounds per hours, parts per million and tons per rolling 12 month period.		

Condition 4 – Operational Flexibility

- **a.** In addition to the operational flexibility specifically provided in the terms and conditions detailed in Condition 3 Table 1 of this permit, the Owner and/or Operator is authorized to make any changes within the facility which contravenes the terms and conditions of this permit without a permit revision if the change:
 - 1. Is not a modification or otherwise prohibited under any provision of Title I of the Act or the State Implementation Plan (SIP); and [Reference: 7 **DE Admin. Code** 1130 Section 6.8 dated 8/11/22]
 - 2. Does not involve a change in any compliance schedule date; and [Reference: 7 **DE Admin. Code** 1130 Section 6.8 dated 8/11/22]
 - 3. Does not result in a level of emissions exceeding the emissions allowable under this permit, whether expressed herein as a rate of emissions or in terms of total emissions. [Reference: 7 DE Admin. Code 1130 Section 6.8 dated 8/11/22]
- **b.** Before making a change under the provisions of Condition 4(a) of this permit, the Owner and/or Operator shall provide advance written notice to the Department and to the EPA in accordance with Condition 3(c)(2)(iii) of this permit. [Reference: 7 **DE Admin. Code** 1130 Section 6.8.1 dated 8/11/22]
- **c.** The Owner and/or Operator shall keep records of any changes made under Condition 4 of this permit in accordance with Condition 3(b)(2)(iv) of this permit. [Reference: 7 **DE Admin. Code** 1130 Section 6.8.1 dated 8/11/22]

<u>Condition 5 – Compliance Schedule</u>

This permit does not contain a compliance schedule. [Reference: 7 **DE Admin. Code** 1130, Section 6.3.3 dated 8/11/22]

<u>Condition 6 – Permit Shield</u>

This permit does not provide a permit shield and shall not be presumed to provide such a shield. [Reference: 7 **DE Admin. Code** 1130, Section 6.6.3 dated 8/11/22]

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pc: Dover Title V File

Draft/Proposed Permit: <u>AQM-003/00033 Renewal 4</u>
Rohm and Haas Electronic Materials CMP, LLC
7 DE Admin. Code 1130 Operating Permit

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Attachment "A" – Revision History

Date	Number	Revision Type	Description	Pages Revised
December 31, 2001	AQM-003/00033	Initial Permit	-	-
July 20, 2007	AQM-003/00033 Renewal 1	Permit Renewal	Renewal of permit	All
July 22, 2010	AQM-003/00033 Renewal 1 (Revision 1)	Administrative Amendment	Change AQM Dover mailing address to Blue Hen Corporation Center	1 & 5
March 30, 2011	AQM-003/00033 Renewal 2	Permit Renewal	Renewal of permit, updated to reflect operating conditions and limitations	1-65
April 19, 2012	AQM-003/00033 Renewal 2 (Revision 1)	Minor Amendment	Corrections and update to revised Title V Permit format. Change nature or business from "Textile Goods Not Elsewhere Classified" to "Coated Fabrics, Not-Rubberized". Change primary NAICS code from 313312 to 313320.	All
December 13, 2017	AQM-003/00033 Renewal 3	Permit Renewal	Renewal of permit; updated to reflect operating conditions and limitations.	All
October 22, 2018	AQM-003/00033 Renewal 3 (Revision 1)	Administrative Amendment	Change in Responsible Official from Laszlo S. Cselovszky to Leslie Croskey.	1
February 20, 2019	AQM-003/00033 Renewal 3 (Revision 2)	Administrative Amendment	Updated to reflect operating conditions and limitations.	All
October 30, 2020	AQM-003/00033 Renewal 3 (Revision 3)	Administrative Amendment	Name change from Inc. to LLC.	All
Date	AQM-003/00033 Renewal 4	Permit Renewal	Renewal of permit	All