

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

EFFECTIVE DATE: March 12, 2019
REVISION DATE: September 26, 2019

ISSUED TO

**Neenah Paper Michigan, Inc.
Neenah Paper Michigan, Inc. – Munising, Michigan**

State Registration Number (SRN): B1470

LOCATED AT

501 E. Munising Avenue, Munising, Alger County, Michigan 49862

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B1470-2019a

Expiration Date: March 12, 2024

Administratively Complete ROP Renewal Application Due Between
September 12, 2022 and September 12, 2023

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Michigan Air Pollution Control Rule 210(1), this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B1470-2019a

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

Ed Lancaster, Marquette District Supervisor

TABLE OF CONTENTS

- AUTHORITY AND ENFORCEABILITY 3**
- A. GENERAL CONDITIONS..... 4**
 - Permit Enforceability 4
 - General Provisions..... 4
 - Equipment & Design 5
 - Emission Limits 5
 - Testing/Sampling 5
 - Monitoring/Recordkeeping 6
 - Certification & Reporting 6
 - Permit Shield 7
 - Revisions 8
 - Reopenings..... 8
 - Renewals..... 9
 - Stratospheric Ozone Protection 9
 - Risk Management Plan 9
 - Emission Trading 9
 - Permit To Install (PTI)..... 10
- B. SOURCE-WIDE CONDITIONS 11**
- C. EMISSION UNIT CONDITIONS 14**
 - EMISSION UNIT SUMMARY TABLE..... 14
 - EU05..... 16
 - EU15..... 21
- D. FLEXIBLE GROUP CONDITIONS..... 23**
 - FLEXIBLE GROUP SUMMARY TABLE..... 23
 - FGPM1COATER..... 25
 - FGSATURATORS&COATERS 28
 - FGEMERGENCYENGINES..... 30
 - FGCOLDCLEANERS..... 32
 - FGJJJJJJ-EU05..... 35
 - FGJJJJJJ-EU15..... 44
- E. NON-APPLICABLE REQUIREMENTS 48**
- APPENDICES 49**
 - Appendix 1. Acronyms and Abbreviations..... 49
 - Appendix 2. Schedule of Compliance..... 50
 - Appendix 3. Monitoring Requirements 50
 - Appendix 4. Recordkeeping 50
 - Appendix 5. Testing Procedures 51
 - Appendix 6. Permits to Install..... 51
 - Appendix 7. Emission Calculations 52
 - Appendix 8. Reporting 53

AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/or is state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as “state-only” are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee’s own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities **(R 336.1213(1)(d))**:
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² **(R 336.1301(1))**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.

12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following **(R 336.1213(3)(c))**:
 - a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete". The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
 - a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

27. Nothing in this ROP shall alter or affect any of the following:
 - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 - a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
 29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(9))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. 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 by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

SOURCE-WIDE CONDITIONS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 9.5 tpy ²	12-month rolling time period as determined at the end of each calendar month	All process equipment source-wide including grandfathered and exempt equipment	SC V.2 SC VI.1 SC VI.2	R 336.1205(1)(a)&(b)
2. Aggregate HAPs	Less than 23.5 tpy ²	12-month rolling time period as determined at the end of each calendar month	All process equipment source-wide including grandfathered and exempt equipment	SC V.2 SC VI.1 SC VI.2	R 336.1205(1)(a)&(b)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- The permittee shall determine emission rates for Hydrogen Chloride, Arsenic, Phosphorous, Manganese, Barium, Chromium, and lead and determine the Hydrogen Chloride control efficiency from EU05 (using exhaust emissions and the chlorine in the coal) by testing at owner's expense, in accordance with Department requirements. The permittee must complete the test once every five years, thereafter. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 63, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205(1)(a) & (b), R 336.2001, R 336.2003, R 336.2004)**
- The permittee shall determine the HAP content of any coating as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using USEPA Test Method 311 or other appropriate test method.² **(R 336.1205(1)(a) & (b))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. Formulation data (which identifies HAP content down to the 0.1 percent) can be used in completing calculations.² **(R 336.1205(1)(a) & (b))**
2. The permittee shall keep the following information on a monthly basis:
 - a. The quantity of each HAP containing material used or emitted.
 - b. The HAP emission factor of each HAP containing material used or emitted. (Emission factors are to be based on testing at the facility, manufacturer's formulation data, or as approved by the AQD District Supervisor.)
 - c. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - d. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1)(a)&(b))**

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

C. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU05	BOILER #1, BAGHOUSE AND STACK: The boiler can burn coal and natural gas. The boiler capacity is 202 MMBTU/hr heat input. The baghouse is utilized to reduce emissions of particulate. The Spray Dry Absorber (SDA) is used to reduce HAP emissions. EU05 is a CAM subject emission unit subject to the requirements of 40 CFR Part 64.	01/01/1958 / 1997/ 05/01/2015	FGJJJJJJ-EU05
EU15	BOILER #2 AND STACK: This boiler is only capable of burning #2 fuel oil. Boiler produces 150,000 lbs. of steam per hr. Boiler capacity is 202 MMBTU/hour heat input.	1970	FGJJJJJJ-EU15
EUPM1COATER	Paper Machine coater #1 and associated equipment and natural gas fueled oven.	1989	FGPM1COATER
EUPAPERMACHINE1	Paper machine #1 uses steam heated dryers.	1903 & 1989	NA
EUPAPERMACHINE2	Paper machine #2 uses steam heated dryers.	1903	NA
EUPM1SATURATOR	Paper machine #1 saturator uses natural gas and steam heated dryers.	1989	FGSATURATORS&COATERS
EUPM2SATURATOR	Paper machine #2 saturator uses natural gas and steam heated dryers.	1903	FGSATURATORS&COATERS
EUSATURATOR15	Saturator #15 uses steam heated dryers and ovens.	1964	FGSATURATORS&COATERS
EUSATURATOR18	Saturator #18 uses steam heated dryers and ovens.	1968	FGSATURATORS&COATERS
EUCOATER16	Coater #16 uses steam heated ovens.	1966	FGSATURATORS&COATERS
EUCOATER17	Coater #17 uses steam heat and natural gas ovens.	1966	FGSATURATORS&COATERS
EUCOATER19	Coater #19 uses steam heat and natural gas ovens.	1976	FGSATURATORS&COATERS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCOLDCLEANER	Any existing cold cleaner (placed into operation prior to 7/1/79) or new cold cleaner (placed into operation after 7/1/79) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285 (r)(iv).	2000	FGCOLDCLEANERS
EUPOWERGENERATOR	Emergency diesel-fired power generator located (7.63 MMBTU/hr heat input) in the Power House that would be used to restart the mill operations in the event of a power failure.	1978	FGEMERGENCYENGINES
EUFIREPUMPGEN	Emergency fire pumps with diesel engine (6.02 MMBTU/hr heat input).	1972	FGEMERGENCYENGINES
EUWWTPGENERATOR	Emergency diesel-powered generator (3.40 MMBTU/hr heat input) that would allow the wastewater treatment system to continue operation in the event of a power failure.	1996	FGEMERGENCYENGINES
EUHEATERS	Five (5) natural gas-fired heating units (3 units – 7.975 MMBTU/hr, 1 unit – 5.5 MMBTU/hr, 1 unit – 1.925 MMBTU/hr)	Prior to 1978	NA

**EU05
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Boiler, baghouse, stack, coal, and ash handling: Boiler EU05 is capable of burning coal and natural gas. The boiler capacity is 202 MMBTU/Hr heat input. The baghouse is utilized to reduce emissions of particulate. Sorbent Dry Absorber (SDA) will be installed to reduce HAP emissions.

EU05 is a CAM subject emission unit subject to the requirements of 40 CFR Part 64. The CAM subject pollutant for the emission unit is PM-10.

Flexible Group ID: FGJJJJJJ-EU05

POLLUTION CONTROL EQUIPMENT

Fabric filter baghouse to control particulate matter emissions and a spray dry absorber (SDA) to control HAP emissions.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.30 lbs/1000 lbs of exhaust gases corrected to 50% excess air ²	Hourly	EU05	SC V.1	R 336.1331(1)(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Coal	Sulfur Content less than or equal to 1.5 percent by weight (calculated on the basis of 12,000 BTUs per pound of coal) ²	Continuous	EU05	SC VI. 2	R 336.1401(1)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. If less than three baghouse modules (out of five) are operating at the baghouse collector, the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence.² **(R 336.1910)**
2. The permittee shall operate and maintain EU05 according to the approved Preventative Maintenance and Malfunction Abatement Plan (PM/MAP). At a minimum the plan shall contain the following:² **(R 336.1910, R336.1911)**
 - a. Operation and maintenance criteria for EU05, add-on control device(s), and for the process and control device(s) monitoring equipment as well as a standardized checklist to document the operation and maintenance of the equipment;
 - b. The work practice standards for the add-on control device(s) and monitoring equipment;
 - c. Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and

- d. A systematic procedure for identifying process equipment, add-on control device(s) and monitoring equipment malfunctions and for implementing corrective actions to address such malfunctions.
3. If at any time the PM/MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the PM/MAP within 45 days after such an event occurs. The permittee shall also amend the PM/MAP within 45 days if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the PM/MAP and any amendments to the PM/MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the PM/MAP or amended PM/MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1911)**
4. Upon detecting an excursion of the opacity limit, the permittee shall restore operation of EU05 to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. An excursion is two or more consecutive 1-hour block average opacity values greater than 20%. **(40 CFR 64.6, 40 CFR 64.7)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the baghouse collector for EU05 with a pressure drop indicator.² **(R 336.1205(1)(a), R 336.1910)**
2. The permittee shall not operate EU05 unless the SDA is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining the control device in accordance with an approved PM/MAP.² **(R 336.1205(1)(a), R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years.² **(R 336.1213(3)(b)(ii))**

1. The permittee shall verify PM emission rates from EU05 by testing at the owner's expense, in accordance with the Department requirements once every three years from the date of the previous stack test. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. ² **(R 336.1331, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.² **(R 336.1213(3)(b)(ii))**

1. The permittee shall carry out an Inspection and Maintenance Program for EU05, Coal Handling and Storage Equipment, Ash Handling and Storage Equipment and Associated Air Cleaning Devices as detailed in Appendix 4 to assure that the air cleaning devices are installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control Rules and existing law.² **(R 336.1910)**
2. The permittee shall monitor and record the fuel sulfur content for EU05 as detailed in Appendix 4.² **(R 336.1401(1))**
3. The permittee shall continuously monitor and record the pressure drop as an indicator of proper operation of the fabric filter baghouse. The pressure drop gauges (magnehelic gauges) will be maintained per the manufacturer's operation and maintenance procedures. Out of range values will be alarmed and corrective actions documented. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1)(a), R 336.1910, 40 CFR 64.6(c)(1)(i and ii))**

4. When EU05 is operating, the permittee shall operate, calibrate, and maintain a COM system on the baghouse for EU05. The permittee shall keep a summary record of all six-minute averages of opacity greater than 20%, except for one six-minute average per hour of not more than 27% opacity, including cause if known, and corrective action taken. Also, the permittee shall keep a summary record of opacity monitor downtime. The permittee shall submit these summary records with the semiannual reports.² **(R 336.1301)**
5. The COM system shall comply with Performance Specification 1 of Appendix B and Procedure 3 of Appendix F, 40 CFR Part 60.² **(R 336.2150(1)(a), 40 CFR 64.6(c)(1)(iii))**
6. Data recorded during monitoring malfunctions, associated repairs, and required QA/QC activities shall not be used for 40 CFR Part 64 compliance. **(40 CFR 64.6, 40 CFR 64.7, 40 CFR 64.9)**
7. The permittee shall utilize COM-recorded opacity as an indicator of the proper operation of the fabric filter baghouse. The indicator range of opacity defining proper function of the fabric filter baghouse is less than 20%. Six-minute average values shall be based on 36 or more equally spaced instantaneous opacity measurements per six-minute period. The COM shall be calibrated in accordance with 40 CFR Part 60, Subpart A. **(40 CFR 64.6(c)(1)(i and ii))**
8. The opacity monitor shall continuously monitor opacity. The averaging period is six minutes. The monitor shall be calibrated daily. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 64.6(c)(1)(iii))**
9. An excursion is two or more consecutive 1-hour block average opacity values greater than 20%. **(40 CFR 64.6(c)(2))**
10. The permittee shall continuously monitor the specific gravity of the SDA reagent and the SDA flue gas exit temperature and record hourly as an indicator of proper operation of the scrubber for comparison to acceptable operating ranges identified in the PM/MAP. Acceptable operating ranges will be defined through stack testing or manufacturer's recommended operation and both testing information and operating ranges will be included in the PM/MAP. The PM/MAP will also identify periods of operation (i.e., startup, shutdown, SDA maintenance, etc.) where these operating ranges will not apply as well as define expected responses to operation outside of the acceptable operating ranges. **(40 CFR 64.6(c)(1)(i and ii))**
11. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
12. 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 owner or operator 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 minimum data availability requirement, if applicable. The owner or operator 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. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
13. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
14. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and

other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

See Appendices 4 and 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**
6. The permittee shall submit any performance test reports including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV05	86 ²	135 ²	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall maintain the continuous opacity monitor associated with EU05. This includes, but is not limited to, maintaining the necessary parts for routine repairs of the monitor, and maintaining the monitor according to manufacturer's specifications (e.g., equipment calibration, etc.). **(40 CFR 64.6, 40 CFR 64.7)**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

ROP No: MI-ROP-B1470-2019a

Expiration Date: March 12, 2024

PTI No: MI-PTI-B1470-2019a

3. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.² **(40 CFR Part 63, Subparts A and JJJJJJ)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU15
EMISSION UNIT CONDITIONS

DESCRIPTION

Boiler #2 and stack: Boiler #2 has a rated capacity of 202 MMBtu/hour heat input and burns #2 fuel oil. The boiler produces 150,000 lbs. of steam per hour. Boiler #2 is being used as a “limited-use” boiler as defined in 40 CFR, Part 63, Subpart JJJJJJ.

Flexible Group ID: FGJJJJJJ-EU15

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur Dioxide	1.7 pounds per million BTUs of heat input for fuel oil	According to Method	EU15	SC VI.1	R 336.1402(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. No. 2 fuel oil	Maximum sulfur content of 1.6% calculated on the basis of 18,000 BTUs per pound of fuel oil.	According to Method	EU15	SC VI.1 SC. VI.2	R 336.1213(2)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall obtain and keep records of the sulfur content of the fuel oil burned in EU15 as detailed in Appendix 4. (R 336.1213(3))

See Appendix 4

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers. (40 CFR Part 63, Subparts A and JJJJJJ)

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D. FLEXIBLE GROUP CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGPM1COATER	Paper Machine #1 coater, dryers and stack. Paper machine #1 converts pulp and water mixture into a sheet of uniform thickness. The dryers are used to remove moisture at a predetermined rate. Paper is coated on the machine.	EUPM1COATER
FGSATURATORS&COATERS	Paper Machine #1 saturator, Paper Machine #2 saturator, Saturators #15 and 18 and ovens, and Coaters #16, 17 and 19.	EUPM1SATURATOR EUPM2SATURATOR EUSATURATOR15 EUSATURATOR18 EU COATER16 EU COATER17 EU COATER19
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUCOLDCLEANER
FGEMERGENCYENGINES	Emergency engines exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(g). These engines are used to run the mill, the fire pump and the wastewater treatment system in the event of a power failure. Each is an existing emergency, combustion ignition (CI) reciprocating internal combustion engine (RICE) greater than 500 brake hp.	EUPOWERGENERATOR EUFIREPUMPGEN EUWWTPGENERATOR
FGJJJJJJ-EU05	Conditions for any existing large (≥ 10 MMBtu/hour heat input) coal-fired industrial, commercial or institutional boiler as defined in 40 CFR 63.11237 (excluding limited use boilers) that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.	EU05

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FJJJJJ-EU15	Conditions for existing oil-fired, industrial, commercial or institutional limited-use boiler as defined in 40 CFR 63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.	EU15

**FGPM1COATER
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Paper Machine #1 coater, dryers and stack. Paper machine #1 converts pulp and water mixture into a sheet of uniform thickness. The dryers are used to remove moisture at a predetermined rate. Paper is coated on the machine.

Emission Unit: EUPM1COATER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	7.8 tpy ²	12-month rolling time period as determined at the end of the calendar month	FGPM1COATER	SC VI.2, SC VI.3	R 336.1702
2. VOC	12 pph ²	Hourly	FGPM1COATER	SC V.1 SCVI.2 SC VI.3	R 336.1702
3. Acrylonitrile	0.19 mg/m ³ , corrected to 70°F and 29.92 inches Hg ¹	Hourly	FGPM1COATER	SC V.1 SCVI.2 SC VI.3	R 336.1225
4. Formaldehyde	6.3 mg/m ³ , corrected to 70°F and 29.92 inches Hg ¹	Hourly	FGPM1COATER	SC V.1 SCVI.2 SC VI.3	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not fire any fuel in the dryers of FGPM1COATER other than sweet natural gas.² **(R 336.1205(1)(a))**
2. The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary.² **(R 336.1205(1)(a) & (b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. Upon request of the AQD District Supervisor, the permittee shall verify VOC, acrylonitrile, and formaldehyde emission rates from FGPM1COATER by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1225, R 336.1702)
- 2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1225, R 336.1702, R 336.1702)
- 3. The permittee shall keep the following information on a monthly basis for FGPM1COATER:
 - a. Gallons (with water) of each coating used.
 - b. VOC content (with water) of each coating as applied.
 - c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1225, R 336.1702)

- 4. The permittee shall monitor and record the paper machine feed rate from the paper machine #1 on a continuous basis in a manner and with instrumentation acceptable to the AQD. All data shall be kept on file and made available to the Department upon request.² (R 336.1205(1)(a) & (b))

See Appendices 4 and 7

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
- 4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPM1COATER	44.8 x 30.3 ²	90 ²	R 336.1225

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGSATURATORS&COATERS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Paper Machine #1 saturator, Paper Machine #2 saturator, Saturator #15 and #18 and ovens, and Coaters #16, #17, and #19.

Emission Units: EUPM1SATURATOR, EUPM2SATURATOR, EUSATURATOR15, EUSATURATOR18, EUCOATER16, EUCOATER17, EUCOATER19

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOCs	2.9 lb/gal (minus water) ^a as applied	Daily volume-weighted average.	Each emission unit in FGSATURATORS& COATERS	SC VI.2 SC VI.3	R 336.1610(2)(f) R 336.1702(d)

^a The phrase “minus water” shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. **(R 336.1602(4))**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1205(3), R 336.1213(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**
3. The permittee shall keep the following information on a daily basis for FGSATURATORS&COATERS:
 - a. Gallons (with water) of each coating used.
 - b. VOC content (minus water and with water) of each coating as applied.
 - c. VOC emission calculations determining the volume-weighted average VOC content of the coatings as applied on a daily basis.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**

See Appendix 4 and 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGEMERGENCYENGINES
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Emergency engines exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(g). These engines are used to run the mill, the fire pump and the wastewater treatment system in the event of a power failure. Each is an existing emergency, combustion ignition (CI) reciprocating internal combustion engine (RICE) greater than 500 brake hp.

Emission Units: EUPOWERGENERATOR, EUFIREPUMPGEN, EUWWTPGENERATOR

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel fuel	Maximum sulfur content of 15 ppm (0.0015 percent by weight)	Continuous	FGEMERGENCYENGINES	SC VI. 2	40 CFR 63.6604(b), 40 CFR 80.510(b)
2. Diesel fuel	Minimum cetane index of 40 or maximum aromatic content of 35 volume percent	Continuous	FGEMERGENCYENGINES	SC VI. 3	40 CFR 63.6604(b), 40 CFR 80.510(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall install a non-resettable hour meter on each engine in FGEMERGENCYENGINE. (40 CFR 63.6640(f))

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. For each engine in FGEMERGENCYENGINE, the permittee shall keep in a satisfactory manner, records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation and how many hours were spent during non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6640(f), 40 CFR 63.6660)**
2. The permittee shall obtain and keep records of the sulfur content of the fuel oil burned as detailed in Appendix 4. **(R 336.1213(3))**
3. The permittee shall obtain and keep records of the cetane index or aromatic content of the fuel oil burned in FGEMERGENCYENGINES. **(40 63.6604(b), 40 CFR 80.510(b))**

See Appendix 4

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. **(40 CFR Part 63, Subparts and ZZZZ)**

**FGCOLDCLEANERS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Unit: EUCOLDCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Cleaning Solvents	Less than 5% by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof	Continuous	FGCOLDCLEANERS	SC VI. 2(g)	R 336.1213(2)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. (R 336.1611(2)(b), R 336.1707(3)(b))
- The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. (R 336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The cold cleaner must meet one of the following design requirements:

- a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
 3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
 4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
 5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120°F, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
 - c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
 - g. Chemical content of the cleaning solvent used in each cold cleaner
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20%, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

**FGJJJJJJ-EU05
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Conditions for any existing large (≥ 10 MMBtu/hour heat input) coal-fired industrial, commercial or institutional boiler as defined in 40 CFR 63.11237 (excluding limited use boilers) that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.

Emission Unit: EU05

POLLUTION CONTROL EQUIPMENT

Fabric filter baghouse to control particulate matter emissions and spray dry absorber (SDA) to control HAP emissions.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Mercury	2.2×10^{-05} lb/mmBtu heat input	Hourly except for periods of startup and shutdown	EU05	SC V.1-11	40 CFR 63.11201(a) and Table 1.6.a
2. CO	420 ppmvd @ 3% O ₂	Hourly except for periods of startup and shutdown	EU05	SC V.1-5	40 CFR 63.11201(a) and Table 1.6.b

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to 40 CFR Part 63, Subpart JJJJJJ that applies to EU05. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 of 40 CFR Part 63, Subpart JJJJJJ satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement. **(40 CFR 63.11201(b))**
- The permittee must comply with the operating limit specified in Table 3 of 40 CFR Part 63, Subpart JJJJJJ for boilers that operate dry control systems. The boiler must maintain opacity to less than or equal to 10% opacity (daily block average). **(40 CFR 63.11201(c))**
- The permittee must minimize startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, the permittee must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. The permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available. **(40 CFR 63.11214(d), 40 CFR 63.11223(g))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee must conduct all performance tests according to 40 CFR 63.7(c), (d), (f), and (h). The permittee must also develop a site-specific test plan according to the requirements in 40 CFR 63.7(c). **(40 CFR 63.11212(a))**
2. The permittee must conduct each stack test according to the requirements in Table 4 of 40 CFR Part 63, Subpart JJJJJJ. **(40 CFR 63.11212(b))**
3. The permittee must conduct performance stack tests at the representative operating load conditions while burning the type of fuel or mixture of fuels that have the highest emissions potential for each regulated pollutant, and the permittee must demonstrate initial compliance and establish the permittee's operating limits based on these performance stack tests. For subcategories with more than one emission limit, these requirements could result in the need to conduct more than one performance stack test. Following each performance stack test and until the next performance stack test, the permittee must comply with the operating limit for operating load conditions specified in Table 3 of 40 CFR Part 63, Subpart JJJJJJ. **(40 CFR 63.11212(c))**
4. The permittee must conduct a minimum of three separate test runs for each performance stack test required in 40 CFR 63.11212, as specified in Section 63.7(e)(3) and in accordance with the provisions in Table 4 of 40 CFR Part 63, Subpart JJJJJJ. **(40 CFR 63.11212(d))**
5. To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in Sections 12.2 and 12.3 of USEPA Method 19 of Appendix A-7 to 40 CFR Part 60 of this chapter to convert the measured mercury concentrations that result from the performance test to pounds per million Btu heat input emission rates. **(40 CFR 63.11212(e))**
6. If the permittee elects to demonstrate compliance with an applicable mercury emission limit through fuel analysis, the permittee must conduct fuel analyses according to 40 CFR 63.11213 and Table 5 of 40 CFR Part 63, Subpart JJJJJJ and follow the procedures in paragraphs (c)(1) through (3) of 40 CFR 63.11211, as listed below. **(40 CFR 63.11211(c))**
 - a. If the permittee burns more than one fuel type, the permittee must determine the fuel type, or mixture, the permittee could burn in the boiler that would result in the maximum emission rates of mercury. **(40 CFR 63.11211(c)(1))**
 - b. The permittee must determine the 90th percentile confidence level fuel mercury concentration of the composite samples analyzed for each fuel type using Equation 1 of 40 CFR 63.11211:

$$P_{90} = \text{mean} + (\text{SD} * t) \quad (\text{Eq. 1})$$

Where:

P_{90} = 90th percentile confidence level mercury concentration, in pounds per million Btu.

mean = Arithmetic average of the fuel mercury concentration in the fuel samples analyzed according to 40 CFR 63.11213, in units of pounds per million Btu.

SD = Standard deviation of the mercury concentration in the fuel samples analyzed according to 40 CFR 63.11213, in units of pounds per million Btu.

t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table. **(40 CFR 63.11211(c)(2))**

- c. To demonstrate compliance with the applicable mercury emission limit, the emission rate that the permittee calculates for the boiler using Equation 1 of this 40 CFR must be less than the applicable mercury emission limit. **(40 CFR 63.11211(c)(3))**

7. The permittee must conduct fuel analyses according to the procedures in paragraphs (b) and (c) of 40 CFR 63.11213, stated in SC V.8 and SC V.9, respectively, and Table 5 of 40 CFR Part 63, Subpart JJJJJJ, as applicable. The permittee is not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. The permittee is required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury in Table 1 of 40 CFR Part 63, Subpart JJJJJJ. **(40 CFR 63.11213(a))**
8. At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in Table 5 of 40 CFR Part 63, Subpart JJJJJJ. Each composite sample must consist of a minimum of three samples collected at approximately equal intervals during a test run period. **(40 CFR 63.11213(b))**
9. The permittee must determine the concentration of mercury in the fuel in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 5 of 40 CFR Part 63, Subpart JJJJJJ. **(40 CFR 63.11213(c))**
10. The permittee must conduct all applicable performance (stack) tests according to 40 CFR 63.11212 on a triennial basis, except as specified in paragraphs (c) and (d) of 40 CFR 63.11220, stated in SC V.11. Triennial performance tests must be completed no more than 37 months after the previous performance test. **(40 CFR 63.11220(a))**
11. If the permittee demonstrates compliance with the mercury emission limit based on fuel analysis, the permittee must conduct a fuel analysis according to 40 CFR 63.11213 for each type of fuel burned as specified in paragraphs (d)(1) and (3) of 40 CFR 63.11220, as listed below.
 - a. When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are measured to be equal to or less than half of the mercury emission limit, the permittee does not need to conduct further fuel analysis sampling but must continue to comply with all applicable operating limits and monitoring requirements. **(40 CFR 63.11220(d)(1))**
 - b. When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are greater than half of the mercury emission limit, the permittee must conduct quarterly sampling. **(40 CFR 63.11220(d)(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If the permittee demonstrates compliance with any applicable emission limit through performance stack testing and subsequent compliance with operating limits (including the use of CPMS), with a CEMS, or with a COMS, the permittee must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (3) of 40 CFR 63.11205, as listed below, for the use of any CEMS, COMS, or CPMS. This requirement also applies to the permittee if the permittee petitions the USEPA Administrator for alternative monitoring parameters under 40 CFR 63.8(f). **(40 CFR 63.11205(c))**
 - a. For each CMS required in 40 CFR 63.11205 (including CEMS, COMS, or CPMS), the permittee must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs (c)(1)(i) through (vi) of 40 CFR 63.11205, as listed below. The permittee must submit this site-specific monitoring plan, if requested, at least 60 days before the permittee's initial performance evaluation of the permittee's CMS. This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under Appendix B to 40 CFR Part 60 of this chapter and that meet the requirements of 40 CFR 63.11224. **(40 CFR 63.11205(c)(1))**
 - i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). **(40 CFR 63.11205(c)(1)(i))**
 - ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. **(40 CFR 63.11205(c)(1)(ii))**

- iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations). **(40 CFR 63.11205(c)(1)(iii))**
 - iv. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii). **(40 CFR 63.11205(c)(1)(iv))**
 - v. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d). **(40 CFR 63.11205(c)(1)(v))**
 - vi. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c) (as applicable in Table 8 of 40 CFR Part 63, Subpart JJJJJJ), (e)(1), and (e)(2)(i). **(40 CFR 63.11205(c)(1)(vi))**
- b. The permittee must conduct a performance evaluation of each CMS in accordance with the permittee's site-specific monitoring plan. **(40 CFR 63.11205(c)(2))**
 - c. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. **(40 CFR 63.11205(c)(3))**
2. The permittee must monitor and collect data according to 40 CFR 63.11221 and the site-specific monitoring plan required by 40 CFR 63.11205(c), stated in SC VI.1. **(40 CFR 63.11221(a))**
 3. The permittee must operate the monitoring system and collect data at all required intervals at all times the affected source is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods (see 40 CFR 63.8(c)(7) of 40 CFR 63), repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the permittee's site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee is required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. **(40 CFR 63.11221(b))**
 4. The permittee may not use data collected during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods or required monitoring system quality assurance or quality control activities in calculations used to report emissions or operating levels. Any such periods must be reported according to the requirements in 40 CFR 63.11225. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system. **(40 CFR 63.11221(c))**
 5. Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the permittee's site-specific monitoring plan), failure to collect required data is a deviation of the monitoring requirements. **(40 CFR 63.11221(d))**
 6. The permittee must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 3 of 40 CFR Part 63, Subpart JJJJJJ that applies to the permittee according to the methods specified in Table 7 of 40 CFR Part 63, Subpart JJJJJJ and to paragraphs (a)(1) through (4) of 40 CFR 63.11222, as listed below. **(40 CFR 63.11222(a))**
 - a. Following the date on which the initial compliance demonstration is completed or is required to be completed under 40 CFR 63.7 and 63.11196, the permittee must continuously monitor the operating parameters. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of 40 CFR 63.11222 constitutes a deviation from the operating limits established under 40 CFR Part 63, Subpart JJJJJJ, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. **(40 CFR 63.11222(a)(1))**

- b. If the permittee has an applicable mercury limit, the permittee must keep records of the type and amount of all fuels burned in each boiler during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in lower emissions of mercury than the applicable emission limit (if permittee demonstrates compliance through fuel analysis), or result in lower fuel input of mercury than the maximum values calculated during the last performance stack test (if permittee demonstrates compliance through performance stack testing). **(40 CFR 63.11222(a)(2))**
7. If the permittee's boiler is subject to a CO emission limit in Table 1 of 40 CFR Part 63, Subpart JJJJJJ, the permittee must install, calibrate, operate, and maintain an oxygen analyzer system, as defined in 40 CFR 63.11237, according to the manufacturer's recommendations and paragraphs (a)(7) and (d) of 40 CFR 63.11224, as applicable, by the compliance date specified in 40 CFR 63.11196. Oxygen monitors and oxygen trim systems must be installed to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location. **(40 CFR 63.11224(a))**
8. The permittee must operate the oxygen analyzer system at or above the minimum oxygen level that is established as the operating limit according to Table 6 to this subpart when firing the fuel or fuel mixture utilized during the most recent CO performance stack test. Operation of oxygen trim systems to meet these requirements shall not be done in a manner which compromises furnace safety. **(40 CFR 63.11224(a)(7))**
9. If the permittee is using a control device to comply with the emission limits specified in Table 1 of 40 CFR Part 63, Subpart JJJJJJ, the permittee must maintain each operating limit in Table 3 of 40 CFR Part 63, Subpart JJJJJJ that applies to the permittee's boiler as specified in Table 7 of 40 CFR Part 63, Subpart JJJJJJ. If the permittee uses a control device not covered in Table 3 of 40 CFR Part 63, Subpart JJJJJJ, or the permittee wishes to establish and monitor an alternative operating limit and alternative monitoring parameters, the permittee must apply to the USEPA Administrator for approval of alternative monitoring under 40 CFR 63.8(f). **(40 CFR 63.11224(b))**
10. If the permittee demonstrates compliance with any applicable emission limit through stack testing and subsequent compliance with operating limits, the permittee must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (4) of 40 CFR 63.11224, as listed below. This requirement also applies to the permittee if the permittee petitions the USEPA Administrator for alternative monitoring parameters under 40 CFR 63.8(f). **(40 CFR 63.11224(c))**
- a. For each CMS required in 40 CFR 63.11224, the permittee must develop, and submit to the USEPA Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs (c)(1)(i) through (iii) of 40 CFR 63.11224, as listed below. The permittee must submit this site-specific monitoring plan (if requested) at least 60 days before the permittee's initial performance evaluation of the permittee's CMS. **(40 CFR 63.11224(c)(1))**
- i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). **(40 CFR 63.11224(c)(1)(i))**
- ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. **(40 CFR 63.11224(c)(1)(ii))**
- iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations). **(40 CFR 63.11224(c)(1)(iii))**
- b. In the permittee's site-specific monitoring plan, the permittee must also address paragraphs (c)(2)(i) through (iii) of 40 CFR 63.11224, as listed below. **(40 CFR 63.11224(c)(2))**
- i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (3), and (4)(ii). **(40 CFR 63.11224(c)(2)(i))**
- ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d). **(40 CFR 63.11224(c)(2)(ii))**
- i. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). **(40 CFR 63.11224(c)(2)(iii))**
- c. The permittee must conduct a performance evaluation of each CMS in accordance with the permittee's site-specific monitoring plan. **(40 CFR 63.11224(c)(3))**

- d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. **(40 CFR 63.11224(c)(4))**
11. If the permittee has an applicable opacity operating limit under this rule, the permittee must install, operate, certify and maintain each COMS according to the procedures in paragraphs (e)(1) through (8) of 40 CFR 63.11224, as listed below. **(40 CFR 63.11224(e))**
- a. Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR Part 60, Appendix B. **(40 CFR 63.11224(e)(1))**
 - b. The permittee must conduct a performance evaluation of each COMS according to the requirements in 40 CFR 63.8 and according to PS 1 of 40 CFR Part 60, Appendix B. **(40 CFR 63.11224(e)(2))**
 - c. As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. **(40 CFR 63.11224(e)(3))**
 - d. The COMS data must be reduced as specified in 40 CFR 63.8(g)(2). **(40 CFR 63.11224(e)(4))**
 - e. The permittee must include in the permittee's site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in 40 CFR 63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS. **(40 CFR 63.11224(e)(5))**
 - f. The permittee must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of 40 CFR 63.8(e). The permittee must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit. **(40 CFR 63.11224(e)(6))**
 - g. The permittee must calculate and record 6-minute averages from the opacity monitoring data and determine and record the daily block average of recorded readings, except as provided in 40 CFR 63.11221(c), stated in SC VI.4. **(40 CFR 63.11224(e)(7))**
 - h. For purposes of collecting opacity data, the permittee must operate the COMS as specified in 40 CFR 63.11221(b), stated in SC VI.3. For purposes of calculating data averages, the permittee must use all the data collected during all periods in assessing compliance, except that the permittee must exclude certain data as specified in 40 CFR 63.11221(c), stated in SC VI.4. Periods when COMS data are unavailable may constitute monitoring deviations as specified in 40 CFR 63.11221(d), stated in SC VI.5. **(40 CFR 63.11224(e)(8))**
12. The permittee must maintain the records specified in paragraphs (c)(1) through (7) of 40 CFR 63.11225, as listed below. **(40 CFR 63.11225(c))**
- a. As required in 40 CFR 63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted. **(40 CFR 63.11225(c)(1))**
 - b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11214 and 63.11223 as specified in paragraphs (c)(2)(ii) and (iv) of 40 CFR 63.11225, as listed below. **(40 CFR 63.11225(c)(2))**
 - i. For each boiler required to conduct an energy assessment, the permittee must keep a copy of the energy assessment report. **(40 CFR 63.11225(c)(2)(iii))**
 - ii. For each boiler subject to an emission limit in Table 1 of 40 CFR Part 63, Subpart JJJJJJ, the permittee must also keep records of monthly fuel use by each boiler, including the type(s) of fuel and amount(s) used. **(40 CFR 63.11225(c)(2)(iv))**
 - c. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation that were done to demonstrate compliance with the mercury emission limits. Supporting documentation should include results of any fuel analyses. The permittee can use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type. **(40 CFR 63.11225(c)(3))**
 - d. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. **(40 CFR 63.11225(c)(4))**
 - e. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a) including corrective actions to restore the malfunctioning

boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.11225(c)(5))**

- f. The permittee must keep the records of all inspection and monitoring data required by 40 CFR 63.11221 and 63.11222, and the information identified in paragraphs (c)(6)(i) through (vi) of 40 CFR 63.11225, as listed below, for each required inspection or monitoring. **(40 CFR 63.11225(c)(6))**
 - i. The date, place, and time of the monitoring event. **(40 CFR 63.11225(c)(6)(i))**
 - ii. Person conducting the monitoring. **(40 CFR 63.11225(c)(6)(ii))**
 - iii. Technique or method used. **(40 CFR 63.11225(c)(6)(iii))**
 - iv. Operating conditions during the activity. **(40 CFR 63.11225(c)(6)(iv))**
 - v. Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation. **(40 CFR 63.11225(c)(6)(v))**
 - vi. Maintenance or corrective action taken (if applicable). **(40 CFR 63.11225(c)(6)(vi))**
13. The permittee's records must be in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years. **(40 CFR 63.11225(d))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to 40 CFR Part 63, Subpart JJJJJJ and is an accurate depiction of the permittee's facility. **(40 CFR 63.11214(c))**
5. The permittee must report each instance in which the permittee did not meet each emission limit and operating limit in Tables 1 and 3 of 40 CFR Part 63, Subpart JJJJJJ that apply to the permittee. These instances are deviations from the emission limits in 40 CFR Part 63, Subpart JJJJJJ. These deviations must be reported according to the requirements in 40 CFR 63.11225. **(40 CFR 63.11222(b))**
6. The permittee must submit the notifications specified in paragraphs (a)(1) through (5) of 40 CFR 63.11225, as listed below, to the administrator. **(40 CFR 63.11225(a))**
 - a. The permittee must submit all of the notifications in 40 CFR 63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to the permittee by the dates specified in those Sections except as specified in paragraphs (a)(2) and (4) of 40 CFR 63.11225. **(40 CFR 63.11225(a)(1))**
 - b. An Initial Notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. **(40 CFR 63.11225(a)(2))**
 - c. If the permittee is required to conduct a performance stack test the permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance stack test is scheduled to begin. **(40 CFR 63.11225(a)(3))**
 - d. The permittee must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in 40 CFR 63.11196, stated in SC IX.4 or SC IX.5, unless the permittee must conduct a performance stack test. If the permittee must conduct a performance stack test, the permittee must submit the Notification of Compliance Status within 60 days of completing the performance stack test. The permittee must submit the Notification of Compliance Status in accordance with paragraphs (a)(4)(i) and

- (vi) of 40 CFR 63.11225, as listed below. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v) of 40 CFR 63.11225, as applicable, and signed by a responsible official. **(40 CFR 63.11225(a)(4))**
- i. The permittee must submit the information required in 40 CFR 63.9(h)(2), except the information listed in 40 CFR 63.9(h)(2)(i)(B), (D), (E), and (F). If the permittee conducts any performance tests or CMS performance evaluations, the permittee must submit that data as specified in paragraph (e) of 40 CFR 63.11225, stated in SC VII.7 and SC VII.8. If the permittee conducts any opacity or visible emission observations, or other monitoring procedures or methods, the permittee must submit that data to the Administrator at the appropriate address listed in 40 CFR 63.13. **(40 CFR 63.11225(a)(4)(i))**
 - ii. "This facility has had an energy assessment performed according to 40 CFR 63.11214(c)." **(40 CFR 63.11225(a)(4)(iii))**
 - iii. For units that install bag leak detection systems: "This facility complies with the requirements in 40 CFR 63.11224(f)." **(40 CFR 63.11225(a)(4)(iv))**
 - iv. For units that do not qualify for a statutory exemption as provided in 40 CFR 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.11225(a)(4)(v))**
 - v. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through USEPA's Central Data Exchange (CDX) <https://cdx.epa.gov/>. However, if the reporting form specific to 40 CFR Part 63, Subpart JJJJJJ is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13. **(40 CFR 63.11225(a)(4)(vi))**
- e. If the permittee is using data from a previously conducted emission test to serve as documentation of conformance with the emission standards and operating limits of 40 CFR Part 63, Subpart JJJJJJ, the permittee must include in the Notification of Compliance Status the date of the test and a summary of the results, not a complete test report, relative to 40 CFR Part 63, Subpart JJJJJJ. **(40 CFR 63.11225(a)(5))**
7. The permittee must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of 40 CFR 63.11225, as listed below. The permittee must submit the report by March 15 if the permittee had any instance described by paragraph (b)(3) of 40 CFR 63.11225. **(40 CFR 63.11225(b))**
- a. Company name and address. **(40 CFR 63.11225(b)(1))**
 - b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The permittee's notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.11225(b)(2))**
 - i. For units that do not qualify for a statutory exemption as provided in 40 CFR 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.11225(b)(2)(ii))**
 - ii. "This facility complies with the requirement in 40 CFR 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available." **(40 CFR 63.11225(b)(2)(iii))**
 - c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken. **(40 CFR 63.11225(b)(3))**
 - d. The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the permittee or USEPA through a petition process to be a non-waste under 40 CFR 241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and the total fuel usage amount with units of measure. **(40 CFR 63.11225(b)(4))**

8. Within 60 days after the date of completing each performance test (defined in 40 CFR 63.2) as required by 40 CFR Part 63, Subpart JJJJJJ the permittee must submit the results of the performance tests, including any associated fuel analyses, required by 40 CFR Part 63, Subpart JJJJJJ to USEPA's WebFIRE database by using CEDRI that is accessed through USEPA's CDX <https://cdx.epa.gov/>. Performance test data must be submitted in the file format generated through use of USEPA's Electronic Reporting Tool (ERT) (see <https://www3.epa.gov/ttn/chief/ert/index.html>). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to USEPA. The electronic media must be clearly marked as CBI and mailed to USEPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to USEPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the permittee must also submit these reports, including CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator at the appropriate address listed in 40 CFR 63.13. **(40 CFR 63.11225(e)(1))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

- At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.11205(a))**
- Table 8 of 40 CFR Part 63, Subpart JJJJJJ shows which parts of the General Provisions in Sections 63.1 through 63.15 apply to the permittee. **(40 CFR 63.11235)**
- The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and JJJJJJ)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGJJJJJJ-EU15
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Conditions for existing oil-fired industrial, commercial or institutional limited-use boiler as defined in 40 CFR 63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.

Emission Unit: EU15

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 of 40 CFR Part 63, Subpart JJJJJJ that applies to the permittee’s boiler. **(40 CFR 63.11201(b))**
2. The permittee must conduct a performance tune-up according to 40 CFR 63.11223(b), stated in SC III.4, and the permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted a tune-up of the boiler. **(40 CFR 63.11214(b))**
3. For affected sources subject to the work practice standard or the management practices of a tune-up, the permittee must conduct a performance tune-up according to paragraph (b) of 40 CFR 63.11223, stated in SC III.4, and keep records as required in 40 CFR 63.11225(c), stated in SC VI.1, to demonstrate continuous compliance. The permittee must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. **(40 CFR 63.11223(a))**
4. Except as specified in paragraph (f) of 40 CFR 63.11223, stated in SC III.5, the permittee must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of 40 CFR 63.11223, as listed below. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. **(40 CFR 63.11223(b))**
 - a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.11223(b)(1))**

- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.11223(b)(2))**
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.11223(b)(3))**
 - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. **(40 CFR 63.11223(b)(4))**
 - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.11223(b)(5))**
 - f. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of 40 CFR 63.11223, as listed below. **(40 CFR 63.11223(b)(6))**
 - i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. **(40 CFR 63.11223(b)(6)(i))**
 - ii. A description of any corrective actions taken as a part of the tune-up of the boiler. **(40 CFR 63.11223(b)(6)(ii))**
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. **(40 CFR 63.11223(b)(6)(iii))**
 - g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **(40 CFR 63.11223(b)(7))**
5. Limited-use boilers must conduct a tune-up every 5 years as specified in paragraphs (b)(1) through (7) of 40 CFR 63.11223, stated in SC III.4. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The permittee may delay the burner inspection specified in paragraph (b)(1) of 40 CFR 63.11223 and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of 40 CFR 63.11223 until the next scheduled unit shutdown, but the permittee must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Limited-use boilers are not subject to the emission limits in Table 1 of 40 CFR Part 63, Subpart JJJJJJ the energy assessment requirements in Table 2 of 40 CFR Part 63, Subpart JJJJJJ, or the operating limits in Table 3 of 40 CFR Part 63, Subpart JJJJJJ. **(40 CFR 63.11223(f))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The boiler shall comply with the definition of limited-use boiler: the boiler that burns any amount of solid or liquid fuels and has a federally enforceable average annual capacity factor of no more than 10 percent. **(40 CFR 63.11200(g))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee must maintain the records specified in paragraphs (c)(1) through (7) of 40 CFR 63.11225, as listed below. **(40 CFR 63.11225(c))**
 - a. As required in 40 CFR 63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted. **(40 CFR 63.11225(c)(1))**
 - b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11214 and 63.11223 as specified in paragraphs (c)(2)(i) through (vi) of 40 CFR 63.11225, as listed below. **(40 CFR 63.11225(c)(2))**
 - i. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. **(40 CFR 63.11225(c)(2)(i))**
 - ii. The permittee must keep records of monthly fuel use, including the type(s) of fuel and amounts(s) used. **(40 CFR 63.11225(c)(2)(iv))**
 - iii. For each boiler that meets the definition of limited-use boiler, the permittee must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and records of fuel use for the days the boiler is operating. **(40 CFR 63.11225(c)(2)(vi))**
 - c. Records of the occurrence and duration of each malfunction of the boiler. **(40 CFR 63.11225(c)(4))**
 - d. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), stated in SC IX.4, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. **(40 CFR 63.11225(c)(5))**
2. The permittee's records must be in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years. **(40 CFR 63.11225(d))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit the notifications specified in paragraphs (a)(1) through (5) of 40 CFR 63.11225, as listed below, to the administrator. **(40 CFR 63.11225(a))**
 - a. The permittee must submit all of the notifications in 40 CFR 63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to the permittee by the dates specified in those 40 CFR except as specified in paragraphs (a)(2) and (4) of 40 CFR 63.11225. **(40 CFR 63.11225(a)(1))**
 - b. An Initial Notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. **(40 CFR 63.11225(a)(2))**
 - c. The permittee must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in 40 CFR 63.11196, stated in SC IX.3. The permittee must submit the Notification of Compliance Status in accordance with paragraphs (a)(4)(i) and (vi) of 40 CFR 63.11225, as listed below. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v) of 40 CFR 63.11225, as applicable, and signed by a responsible official. **(40 CFR 63.11225(a)(4))**
 - i. The permittee must submit the information required in 40 CFR 63.9(h)(2), except the information listed in 40 CFR 63.9(h)(2)(i)(B), (D), (E), and (F). **(40 CFR 63.11225(a)(4)(i))**

- ii. “This facility complies with the requirements in 40 CFR 63.11214 to conduct an initial tune-up of the boiler.” **(40 CFR 63.11225(a)(4)(ii))**
- iii. For units that do not qualify for a statutory exemption as provided in 40 CFR 129(g)(1) of the Clean Air Act: “No secondary materials that are solid waste were combusted in any affected unit.” **(40 CFR 63.11225(a)(4)(v))**
- iv. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through USEPA’s Central Data Exchange (CDX) <https://cdx.epa.gov/>. However, if the reporting form specific to 40 CFR Part 63, Subpart JJJJJJ is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13. **(40 CFR 63.11225(a)(4)(vi))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

- 1. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.11205(a))**
- 2. Table 8 of 40 CFR Part 63, Subpart JJJJJJ shows which parts of the General Provisions in 40 CFRs 63.1 through 63.15 apply to the permittee. **(40 CFR 63.11235)**
- 3. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and JJJJJJ)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig

Appendix 2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in EU05, and EU15. Alternative formats must be approved by the AQD District Supervisor.

1. EU05 - Coal Shipments Received:

- a. For each coal shipment received, the permittee shall record the date received, source of coal and shipper, tons received, and a laboratory analysis of ash content, sulfur content, and moisture content to demonstrate compliance with the 1.5% sulfur content limitation. The determination of sulfur content (percent by weight) of fuel shall be carried out in accordance with a procedure acceptable to the Air Quality Division. The records of ash content and sulfur content shall specify whether they were measured on a dry basis or "as received."
- b. At least once per calendar year, the permittee shall have a coal analysis performed of the ash content, sulfur content, and moisture content. This analysis shall be independent of the analysis received from the coal supplier with each coal delivery. The determination of sulfur content (percent by weight) of fuel shall be carried out in accordance with ASTM Method 3177-75 or Method 4239-85 or a procedure acceptable to the District Supervisor.

2. EU05 - Boiler Inspection and Maintenance Program:

The permittee shall carry out an Inspection and Maintenance Program for EU05, the associated Bag House dust collection system, Opacity Meter, Ash Handling and Coal Handling and Storage equipment. The program shall include keeping a Daily Log which details equipment problems found, repairs done and/or corrective action taken and a Preventative Maintenance Log of scheduled and completed maintenance on the equipment listed above.

3. EU15 - Fuel Oil Analysis:

For each fuel oil shipment received, the permittee shall obtain from the fuel oil supplier a laboratory analysis of the sulfur content. The determination of sulfur content (percent by weight) shall be carried out in accordance with any of the following procedures: ASTM Method D129-64 or ASTM Method 1552-83 or ASTM Method 2622-87 or ASTM Method 1266-87, or an alternative method approved by the AQD District Supervisor. For each fuel oil shipment received, the permittee shall also record the date received, source of fuel oil and supplier, and gallons received. These records shall be retained by the permittee for a minimum of five years and made available to the Air Quality Division upon request.

4. FGSATURATORS&COATERS & FGPM1COATER-Coating Records:

- a. FGSATURATORS&COATERS: The permittee shall keep monthly records for the latex used at all coaters and saturators on a facility wide basis. The records will represent the volume throughput on either a wet pound or total gallon basis. The VOC content of each coating or saturant (minus water) shall be less than 2.9 lbs. per gallon as applied for #1 Paper Machine Saturator, #2 Paper Machine Saturator, #15 Saturator, #18 Saturator, #6 Coater, #17 Coater and #19 Coater.

- b. FGPM1COATER: The permittee shall be able to demonstrate that the VOC content of as applied coatings on the #1 Paper Machine Coater are at levels equal to or less than 12.0 lbs per hour and at less than 7.8 tons per year.

Appendix 5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-B1470-2013. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B1470-2013a is being reissued as Source-Wide PTI No. MI-PTI-B1407-20XX.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
24-15	201600016 / April 6, 2016	Incorporate PTI 24-15 to install a spray dry absorbent (SDA) system to control hazardous air pollutants (HAPs) (hydrogen chloride emissions) and qualify as an area source of HAPs. The SDA was installed and began operating prior to January 31, 2016.	EU05 and FGFACILITY

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROPB1470-2019.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
108-16A	201900079 / September 26, 2019	The Administrative Amendment was to incorporate PTI 108-16A into the ROP. The PTI went through a Public Comment Period from February 27, 2019 until March 29, 2019. The PTI was to increase the emission limits for HAPs for the existing paper mill. Additionally, the PTI removed some permitted Conditions, and made the Flexible Group and Emission Unit names consistent throughout the ROP. The two emission limits that were removed were associated with the facility since 1989 and requesting to have them removed was not due to difficulties in meeting the limits but rather the burden of it due to the configuration of the equipment. The PTI did not go through New Source Review at this time, since the main change was to increase the HAP opt-out limits.	EU05 FGPM1COATER SOURCE-WIDE

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in the Source-Wide Conditions.

The permittee shall use the following calculations in conjunction with monitoring, testing or record keeping data to determine compliance with the applicable requirements referenced in the Source-Wide Conditions for EU05. The example is for hydrogen chloride (HCl) and the tested emission factor is in lb/MMBtu.

$$HCl\ Emissions = Coal\ Burned\ (Tons) * Heat\ Input\ \left(\frac{MMBtu}{ton}\right) * Emission\ Factor\ \left(\frac{lb}{MMBtu}\right)$$

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FGPM1COATER and FGSATURATORS&COATERS.

- 1. FGPM1COATER: VOC emissions in pounds/hour = Coating or saturant flow in gallons/hour X VOC content in pounds/gallon minus water.
- 2. FGPM1COATER: VOC emissions in tons/year = VOC emissions in pounds/hour X hours of operation divided by 2000 pounds per ton minus water.
- 3. FGSATURATORS&COATERS: VOC concentration in pounds/gallon = Coating or Saturant Manufacturer’s Formulation Data concentration in pounds of VOC/gallon minus water.
- 4. FGPM1COATER: ACRYLONITRILE emission in milligrams/meter³ = Coating Manufacturer’s Formulation Data for acrylonitrile concentration in mg/kilogram of coating times the kilograms of coating/hr divided by the meters³ of air/hr.
- 5. FGPM1COATER: FORMALDEHYDE emissions in milligrams/meter³ = Coating Manufacturer’s Formulation Data for formaldehyde concentration in mg/kilogram of coating times the kilograms of coating/hr divided by the meters³ of air/hr.
- 6. EU05: The permittee shall use the following calculation in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU05. Alternative calculations must be approved by the AQD District Supervisor.

Annual emissions from use of SDA (tons) =
(Annual coal use, tons) * (Heating value of coal, btu/ton) * (Emission factor, lb/mmbtu)

Annual emissions – uncontrolled (tons) =
(Annual coal use, tons) * (Heating value of coal, btu/ton) * (Uncontrolled emission factor, lb/mmbtu)

The permittee shall use emission factors derived from stack testing performed on EU05 or based on CI content of the coal. If other emission factors are used, the permittee shall obtain approval from the AQD District Supervisor before using the emission factors to calculate emissions. The permittee shall use emission factors contained in the most recent AP-42 (Compilation of Air Pollutant Emission Factors) or the most recent FIRE (Factor Information Retrieval) database associated with a coal-fired boiler if vendor or stack testing data is not available.

- 7. EU15: The permittee shall use the following calculation in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU15. Alternative calculations must be approved by the AQD District Supervisor.

Values for percent sulfur and for heat value of fuel oil, which are obtained from analytical data, can be used in the following equation to determine % sulfur on the basis of 18,000 Btu per pound of fuel oil:

$$S = \left(\frac{S_{oil}}{1} \right) * \left(\frac{18,000 \text{ Btu}}{H_{oil}} \right)$$

Where:

S = % sulfur on the basis of 18,000 Btu per pound of fuel oil

H_{oil} = actual Heat Value of the fuel oil in Btu per pound of fuel oil

S_{oil} = actual percent Sulfur in the fuel oil

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting 40 CFR of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.