# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

EFFECTIVE DATE: April 27, 2015

REVISION DATES: August 24, 2015, June 1, 2016

ISSUED TO:

Packaging Corporation of America - Filer City Mill

State Registration Number (SRN): B3692

LOCATED AT:

2246 Udell Street, Filer City, Manistee County, Michigan

## RENEWABLE OPERATING PERMIT

Permit Number:

MI-ROP-B3692-2015b

Expiration Date:

April 27, 2020

Administratively Complete ROP Renewal Application Due Between: October 27, 2018 and October 27, 2019

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-B3692-2015b

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 Environmental Quality

Janis Ransom, Cadillac District Supervisor

# **TABLE OF CONTENTS**

AUTHORITY AND ENFORCEABILITY	3
A. GENERAL CONDITIONS	4
Permit Enforceability	4
General Provisions	
Equipment & Design	5
Emission Limits	
Testing/Sampling	
Monitoring/Recordkeeping	
Certification & Reporting	
Permit Shield	
Revisions	
Reopenings	
Renewals	
Stratospheric Ozone Protection	
Risk Management Plan	
Emission Trading	
Permit To Install (PTI)	
B. SOURCE-WIDE CONDITIONS	
C. EMISSION UNIT CONDITIONS	
EMISSION UNIT SUMMARY TABLE	
EUCOALHANDLING	
EUBOILER1	
EUBOILER2	22
EUBOILER4A	28
EUWOODCHIPTRAN	
EUCOPELAND+DISTANK	34
EUWASHERS	39
EUSODA-ASH	
EUFLYASH	44
EUPELLET	47
D. FLEXIBLE GROUP CONDITIONS	40
FLEXIBLE GROUP SUMMARY TABLE	
FGMACT SUBPART S	
FGBIOGASSYSTEM	<b>Γ</b> Λ
FG-RULE 290	
FGRICE1	
FGPAPERMACH	
E. NON-APPLICABLE REQUIREMENTS	66
APPENDICES	67
Appendix 1: Abbreviations and Acronyms	
Appendix 2. Schedule of Compliance	
Appendix 3. Monitoring Requirements	
Appendix 4. Recordkeeping	
Appendix 5. Testing Procedures	
Appendix 6. Permits to Install	
Appendix 7. Emission Calculations	
Appendix 8. Reporting	

## 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 Environmental Quality (MDEQ) 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 will be identified for each ROP term or condition. All terms and conditions that are included in a PTI, are streamlined or subsumed, 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).<sup>2</sup> (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:" <sup>2</sup> (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 percent 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. (R 336.1901(a))
  - b. Unreasonable interference with the comfortable enjoyment of life and property. (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).<sup>2</sup> (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. (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.<sup>2</sup> (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(8))

#### **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 Part 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):
  - a. June 21, 1999,
  - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
  - c. 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.<sup>2</sup> (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.<sup>2</sup> (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, MDEQ.<sup>2</sup> (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, MDEQ, 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.<sup>2</sup> (R 336.1201(4))

#### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup>This 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. <u>EMISSION LIMIT(S)</u>

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

## II. MATERIAL LIMIT(S)

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

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall implement and maintain a Source-wide Malfunction Abatement Plan (MAP) approved by the District Supervisor. If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall revise the MAP within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment and add-on air pollution control device during similar malfunction events, and a program for corrective action for such events. (R 336.1910, R 336.1911)
- 2. The permittee shall maintain a program of fugitive dust control for all material storage piles, all material handling equipment, all plant roadways, and the plant yard as approved by the AQD. Changes to the program may be made upon approval by the AQD. (MCL 324.5524)

## 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

#### VI. MONITORING/RECORDKEEPING

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

NA

## 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:

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

<sup>&</sup>lt;sup>2</sup>This 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
EUCOALHANDLING	Coal handling system with fabric filters on two transfer points.	01/01/50 08/11/88	NA
EUBOILER1	Boiler No. 1 has a maximum heat input rating of 240 MMBtu/hr. The boiler is permitted to burn coal, natural gas, biogas, and No. 6 fuel oil. The exhaust is controlled by a baghouse when burning coal and can bypass the baghouse when both EUBOILER1 and EUBOILER2 are not firing coal.	01/01/50 12/06/80 09/02/83	FGBIOGASSYSTEM
EUBOILER2	Boiler No. 2 has a maximum heat input rating of 186 MMBtu/hr and is equipped with low NO <sub>X</sub> burners. The boiler is permitted to burn coal, natural gas, biogas, and No. 6 fuel oil. The exhaust is controlled by a baghouse when burning coal and can bypass the baghouse when both EUBOILER1 and EUBOILER2 are not firing coal.	01/01/50 12/06/80 09/02/83 12/06/84	FGBIOGASSYSTEM
EUBOILER4A	Natural gas and biogas-fired Babcock and Wilcox Model No. FM120-97 boiler. The boiler's maximum heat capacity is 227 MMBtu/hr and is equipped with low NO <sub>x</sub> burners.	11/01/02	FGBIOGASSYSTEM
EUWOODCHIPTRAN	Wood chip transport equipment; wood chip storage bins; conveyors and bucket elevators; screw conveyors and pneumatic transfer equipment; and five cyclones.	01/01/74 01/01/78	NA
EUCOPELAND+DISTANK	Fluidized bed reactor which recovers sodium carbonate from the spent pulping liquor. The exhaust is controlled by a venturi scrubber, wet electrostatic precipitator and regenerative thermal oxidizer.	10/15/76 01/01/81	NA
EUWASHERS	Pulp washing system and low volume/high concentration (LVHC) collection system.	03/01/04	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUSODA-ASH	Soda ash silo and baghouse.	01/01/53	NA
EUFLYASH	Fly ash silo and baghouse.	01/01/80	NA
EUPELLET	Sodium carbonate pellet storage silo and baghouse.	01/01/76	NA
EUEVAPLTV	Long tube vertical (LTV) evaporator set, associated equipment, LVHC. Any volatiles collected by the LVHC are ducted to EUBOILER1 and/or EUBOILER2 for destruction.	01/01/57	FGMACT_SUBPART_S
EUEVAPFC	Forced circulation (FC) evaporator set, associated equipment, and LVHC. Any volatiles collected by the LVHC are ducted to EUBOILER1 and/or EUBOILER2 for destruction.	01/01/64	FGMACT_SUBPART_S
EUDIGESTERS	Continuous digesters No. 1 and No. 2; defibrators No. 1 and No. 2; blow tower; cyclone separator; condenser; and LVHC. Any volatiles collected by the LVHC are ducted to EUBOILER1 and/or EUBOILER2 for destruction.	01/01/53	FGMACT_SUBPART_S
EUBIOGASFLARE	Biogas flare used to combust biogas during upsets or malfunctions with the biogas generation system or boilers.	01/01/08	FGBIOGASSYSTEM
EUBIOGASSYSTEM	Biogas generation system consisting of a pre-acidification tank, recycle/rapid mix tank, bioreactors, biogas holder, sludge tank, feed tanks, biogas collection system with scrubber, and sludge system.	01/01/08	FGBIOGASSYSTEM
EUPULPTANKS	Pulp storage tanks.	01/01/57	FGRULE290
EURECYCLE200	200 ton per day recycle paper pulping system.	01/01/85	FGRULE290
EUBLTANKS	Black liquor storage tanks.	01/01/57	FGRULE290
EURECYCLE300	300 ton per day recycle paper pulping system.	01/01/94	FGRULE290
EUWHITEWATER	Three whitewater storage vessels that have a capacity of greater than 40,000 gallons.	<1956	FGRULE290
EUPROCESSCHEM	Five process chemical storage vessels that have a capacity of greater than 40,000 gallons each.	<1956	FGRULE290
EURICE12994	Lift Station (CAT) – Emergency, compression-ignition, 225 horsepower, stationary reciprocating internal combustion engine.	09/01/92	FGRICE1
EURICE12974	Fire Pump (Cummins) – Emergency, compression-ignition, 208 horsepower stationary reciprocating internal combustion engine	08/01/93	FGRICE1
EUPAPERMACH1	Paper machine No. 1.	<1967	FGPAPERMACH
EUPAPERMACH2	Paper machine No. 2	<1967	FGPAPERMACH
EUPAPERMACH3	Paper machine No. 3	<1967	FGPAPERMACH

# EUCOALHANDLING EMISSION UNIT CONDITIONS

### **DESCRIPTION**

All coal handling equipment consisting of conveyors and coal storage bin to bring coal to the boilers.

Flexible Group ID: NA

## **POLLUTION CONTROL EQUIPMENT**

Three fabric filters

## I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
_	. PM	0.10 pounds per 1,000 pounds of exhaust gases <sup>2</sup>		EUCOALHANDLING	SC V.1	R 336.1331(1)(a)

## II. MATERIAL LIMIT(S)

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

### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUCOALHANDLING unless the fabric filters are installed and operating properly. (R 336.1910)

### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. All coal handling and storage shall be totally enclosed or equipped with dust suppression or bag filter control equipment.<sup>2</sup> (R 336.1910, R 324.5524)

## V. TESTING/SAMPLING

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

1. The permittee shall perform and document a non-certified visible emission observation once per week from each fabric filter exhaust point while the equipment is handling coal. If any visible emissions are observed PCA will correct and document the problem causing visible emissions within two (2) hours, re-perform the non-certified visible emission observation and document that visible emissions are no longer present while the equipment is handling coal. If visible emissions are still present additional actions shall be implemented to identify and correct the problem causing the visible emissions and these actions shall be documented. This process shall be repeated until the cause of visible emissions has been eliminated. (R 336.1213(3)(a))

#### VI. MONITORING/RECORDKEEPING

1. Records of the non-certified visible emissions observations and the USEPA Method 9 observations that are performed, the reason for the visible emissions, and any corrective actions taken shall be kept on file in a format acceptable to the AQD. (R 336.1213(3)(a))

### 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:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# EUBOILER1 EMISSION UNIT CONDITIONS

## **DESCRIPTION**

240 MMBtu/hr boiler capable of firing coal, natural gas, biogas, and No. 6 fuel oil.

Flexible Group ID: FGBIOGASSYSTEM

## POLLUTION CONTROL EQUIPMENT

Baghouse (when firing coal)

## I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	РМ	0.10 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air <sup>2</sup>	Test Protocol* When firing coal or No. 6 fuel oil	EUBOILER1	SC V.1 SC VI.2 SC VI.5	R 336.1331(1)(c)
2.	SO <sub>2</sub>	1.67 pounds per million BTU heat input <sup>2</sup>	Per 24 hour period when firing coal	EUBOILER1	SC VI.1	R 336.1401(1)
3.	SO <sub>2</sub>	1.11 pounds per million BTU heat input <sup>2</sup>	Per 24 hour period, when firing No. 6 fuel oil	EUBOILER1	SC VI.1	R 336.1401(1)

<sup>\*</sup> Test protocol shall specify averaging time.

## II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/Operating Scenario	Fallinmont	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Coal	1.0% sulfur <sup>2</sup>	Calculated on a basis of 12,000 BTU per pound	EUBOILER1	SC V.2	R 336.1401(1)
2.	No. 6 fuel oil	1.0% sulfur <sup>2</sup>	Calculated on a basis of 18,000 BTU per pound	EUBOILER1	SC V.2	R 336.1401(1)

### III. PROCESS/OPERATIONAL RESTRICTION(S)

- Coal feed to EUBOILER1 shall cease immediately, consistent with safe operating procedures, upon initiation of the baghouse bypass. Coal feeding shall not restart until the baghouse is back on-line and functioning properly.<sup>2</sup> (R 336.1910)
- 2. The permittee shall not fire EUBOILER1 with coal or a mixture of coal with any other approved fuel unless the baghouse is installed and operating properly. (R 336.1910)
- 3. The permittee shall maintain the differential pressure across the baghouse within the normal operating range identified in Source-Wide MAP. The normal operating range shall be determined during the most recent stack test. (R 336.1910, R 336.1911)

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall install and maintain the baghouse with a differential pressure gauge. (R 336.1910)
- 2. The permittee shall install, calibrate and maintain a COM to monitor the visible emissions from EUBOILER1 on a continuous basis when firing coal or No. 6 fuel oil or mixtures of these fuels with any other fuels. (R 336.1213(3)(b))
- 3. The span value of the COMS shall be between 60% and 80%. (R 336.1213(3))
- 4. The procedures under 40 CFR 60.13 and Performance Specification 1 of Appendix B to Part 60 shall be followed for installation, evaluation, and operation of the COM. (R 336.1213(3)(b), R 336.2150(1)(a))

### V. TESTING/SAMPLING

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

- 1. The permittee shall conduct PM performance tests once every five years if either coal or oil is fired for more than 60 consecutive days during that five year period or if coal or oil is fired for less than 60 consecutive days on three separate occasions. Performance testing shall be conducted in a manner acceptable to the AQD. (R 336.1213(3)(a))
- 2. The permittee shall conduct an analysis of the coal and No. 6 fuel oil, in a manner acceptable to the AQD, to determine the sulfur content and higher heating value. The analysis shall be performed for each shipment received. The AQD may require more frequent analyses. As an alternative, the permittee may obtain fuel receipts from the fuel supplier that certify the sulfur content and higher heating value of the fuel.<sup>2</sup> (R 336.1213(3)(a), R 336.1401(2))
- 3. The permittee shall perform an annual audit of the COMS using the procedures set forth in USEPA Publication 450/4-92-10, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to the AQD. The annual COMS audit is not required if either coal or oil is fired during the year. The annual COMS audit is required to be conducted within 60 days of resuming either coal or oil firing if more than one year has passed since the last COMS audit. (R 336.2157, R 336.1213(3)(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 maintain records of the sulfur content, higher heating value of each shipment of coal, and No. 6 fuel oil; and use this data to calculate and record 24 hour period SO2 emissions when firing coal or No. 6 fuel oil. (R 336.1213(3)(b))
- 2. The permittee shall continuously monitor and record once per day the differential pressure across the baghouse when firing coal or No. 6 fuel oil or mixtures of these fuels with any other fuels and shall take appropriate actions as described in the Source Wide MAP if the differential pressure is outside the proper operating range specified in the MAP. (R 336.1213(3), R 336.1910)
- 3. The permittee shall properly maintain the monitoring systems, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))
- 4. The permittee shall use the COMS recorded opacity as an indicator of the proper functioning of the baghouse. The appropriate range of opacity defining proper function of the baghouse is 0 20% opacity. (40 CFR 64.6(c)(1)(i) and (ii))
- 5. The permittee shall continuously monitor and record opacity. Six-minute average values shall be based on 36 or more equally spaced instantaneous opacity measurements per six-minute period. The COMS shall be calibrated in accordance with 40 CFR Part 60, Subpart A. (40CFR 60.13(h), 40 CFR 64.6(c)(1)(iii), R 336.1213(3))

6. To assure compliance with the particulate matter emission limits listed in SC I.1, when firing coal or a mixture of coal with any other approved fuel, an excursion for particulate matter shall be two consecutive one hour block average opacity values greater than 8%. This condition does not affect compliance with R 336.1331. (40 CFR 64.6(c)(2))

- 7. 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 40 CFR Part 64 compliance, 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, in frequent, 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))
- 8. 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 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). In response to an excursion of more than 8% opacity, based on two consecutive 1-hour block averages, the permittee shall take action as prescribed in the Source Wide MAP. (40 CFR 64.7(d))
- 9. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, records of monitoring maintenance, or corrective actions. (40 CFR 64.9(b)(1))

#### 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 two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. All stack testing protocols must be approved by the AQD prior to testing. (R 336.2001(3))
- 5. The Permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. (R 336.2001(4))
- 6. The Permittee shall submit two complete test reports of the test results in a format acceptable to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked within 60 days following the last test date. (R 336.2001(5))

7. When firing coal or oil in EUBOILER1 the permittee shall submit, on a quarterly basis, excess emission reports for any excess visible emissions which occurred during the reporting period. The reports shall be postmarked no later than 30 days following the end of each calendar quarter. Excess visible emissions are defined as all six minute periods during which the average opacity exceeds the opacity standards under R 336.1301(1)(a). (R 336.1213(3))

- 8. Each semiannual report of Compliance Assurance Monitoring (CAM) 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))
- 9. 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))
- 10. The permittee shall report the results of the COMS annual audit to the AQD District Supervisor no later than 30 days following the audit. (R 336.1213(3), R 336.2156)

### 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. SV917	144 <sup>2</sup>	193 <sup>2</sup>	R 336.1331

### IX. OTHER REQUIREMENT(S)

- 1. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions; modifying the frequency of conducting monitoring and collecting data; or the monitoring of additional parameters. (40 CFR 64.7(e))
- 2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)
- 3. The permittee shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters by January 31, 2016. (40 CFR Part 63, Subparts A and DDDDD)

#### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# EUBOILER2 EMISSION UNIT CONDITIONS

## **DESCRIPTION**

186 MMBtu/hr boiler capable of firing coal, natural gas, biogas, and No. 6 fuel oil.

Flexible Group ID: FGBIOGASSYSTEM

## **POLLUTION CONTROL EQUIPMENT**

Baghouse (when firing coal)

## I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	РМ	0.051 pound per million BTU heat input <sup>a</sup>	Test protocol* Firing coal only or firing coal and other fuels where the annual capacity factor for the other fuels is 10% or less.	EUBOILER2	SC V.1 SC VI.9	40 CFR 60.43b(a)(1)
2.	РМ	0.10 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air <sup>2</sup>	Test protocol*	EUBOILER2	SC V.1 SC VI.9	R 336.1331(1)(c)
3.	Visible emissions	20% opacity, 6 minute average, except for one 6 minute period per hour of not more than 27% opacity <sup>2</sup>	When firing coal or No. 6 oil or mixtures of these fuels with any other fuel.	EUBOILER2	SC VI.5	R 336.1301(1)(a) 40 CFR 60.43b(f)
4.	SO <sub>2</sub>	1.67 pounds per million BTU heat input <sup>2</sup>	Per 24 hour period, when firing coal.	EUBOILER2	SC VI.1	R 336.1401(1)
5.	SO <sub>2</sub>	1.11 pounds per million BTU heat input <sup>2</sup>	Per 24 hour period, when firing No. 6 fuel oil.	EUBOILER2	SC VI.1	R 336.1401(1)
6.	NO <sub>x</sub>	0.20 pounds per million BTU heat input	Based upon a 30 day rolling average basis, when firing natural gas.	EUBOILER2	SC VI.10	40 CFR 60.44b(a) 40 CFR 60.44b(i)
7.	NO <sub>x</sub>		Based upon a 30 day	EUBOILER2	SC VI.10	40 CFR 60.44b(b) 40 CFR 60.44b(i)
8.	NO <sub>x</sub>	0.40 pounds per million BTU heat input	Based upon a 30 day rolling average basis, when firing No. 6 fuel oil	EUBOILER2	SC VI.10	40 CFR 60.44b(a) 40 CFR 60.44b(i)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
9. NO <sub>x</sub>	emission limit using the	Based upon a 30 day rolling average basis, when firing a mixture of approved fuels.	FUROU ER2	SC VI.10	40 CFR 60.44b(c) 40 CFR 60.44b(i)

<sup>\*</sup> Test protocol shall specify averaging time

#### II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Coal	1 ()% cultur	Calculated on a basis of 12,000 BTU per pound.	EUBOILER2	SC V.2	R 336.1401(1)
2.	No. 6 fuel oil	1 (1% cultur	Calculated on a basis of 18,000 BTU per pound.	EUBOILER2	SC V.2	R 336.1401(1)

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- Coal feed to EUBOILER2 shall cease immediately, consistent with safe operating procedures, upon initiation of the baghouse bypass. Coal feeding shall not restart until the baghouse is back on-line and functioning properly.<sup>2</sup> (R 336.1910)
- 2. The permittee shall not fire EUBOILER2 with coal unless the baghouse is installed and operating properly. (R 336.1910)
- 3. The permittee shall maintain the differential pressure across the baghouse, when firing coal, within the normal operating range identified in the Source-Wide MAP. The normal operating range shall be determined during the most recent stack test. (R 336.1910, R 336.1911)
  - a. The NO<sub>x</sub> and O<sub>2</sub> continuous emission monitor (CEM)/parametric emission monitor (PEM) and the COMS shall be operated and data recorded during all periods of operation of EUBOILER2 except for CEM//PEM/COMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments. A certified PEM can only be used while firing natural gas and/or biogas otherwise a certified CEM shall be used to monitor NOx emissions. (40 CFR 60.48b(c), R 336.1213(3)(b), 40 CFR 60.48b(g))

## IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The permittee shall install and maintain the baghouse with a differential pressure gauge. (R 336.1910)
- 2. The permittee shall install, calibrate, and maintain a COMS to monitor the visible emissions from EUBOILER2 on a continuous basis when firing coal or No. 6 fuel oil or mixtures of these fuels with any other fuels (R 336.1213(3)(b), 40 CFR 60.48b(a), and 60.49b(f))
- 3. The span value of the COM shall be between 60% and 80%. (40 CFR 60.48b(e)(1))
- 4. The procedures under 40 CFR 60.13 and Performance Specification 1 of Appendix B to 40 CFR Part 60 shall be followed for installation, evaluation, and operation of the COM. (R 336.1213(3)(b), R 336.2150(1)(a), 40 CFR 60.13, 40 CFR 60.48b(e))
- 5. The permittee shall install, calibrate, and maintain a CEM or PEM to monitor and record  $NO_x$  emissions from EUBOILER2 on a continuous basis. (R 336.1213(3)(b), 40 CFR 60.48b(b)(1), 40 CFR 60.48b(g))

<sup>&</sup>lt;sup>a</sup> This limit does not apply during periods of startup, shutdown, or malfunction. **(40 CFR 60.43b(g))** 

6. The permittee shall install, calibrate, and maintain a CEM or PEM to continuously monitor the O<sub>2</sub> percentage from EUBOILER2. (R 336.1213(3)(b), 40 CFR 60.48b(g))

- 7. The span value of the  $NO_x$  CEM shall be 500 ppm, or shall be determined according to section 2.1.2 in appendix A to 40 CFR Part 75. (40 CFR 60.48b(e)(2))
- 8. The procedures under 40 CFR 60.13 and Performance Specification 2 of Appendix B to 40 CFR Part 60 shall be followed for installation, evaluation, and operation of the NO<sub>x</sub> CEM. (R 336.1213(3)(b), R 336.1250(1)(b), 40 CFR 60.13, 40 CFR 60.48b(e))
- 9. The procedures under 40 CFR 60.13 and Performance Specification 3 of Appendix B to 40 CFR Part 60 shall be followed for installation, evaluation, and operation of the O<sub>2</sub> CEM. (R 336.1213(3)(b), R 336.1250(1)(d), 40 CFR 60.13, 40 CFR 60.48b(e))
- 10. The procedures under 40 CFR 60.13 and Performance Specification 16 of Appendix B to 40 CFR Part 60 shall be followed for installation, evaluation, and operation of the NOx and O<sub>2</sub> PEM. (R 336.1213(3)(b), 40 CFR 60.13)

#### V. TESTING/SAMPLING

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

- 1. The permittee shall conduct PM performance tests once every five years, if either coal or oil is fired for more than 60 consecutive days during that five year period, or if coal or oil is fired for less than 60 consecutive days on three separate occasions. Performance testing shall be conducted in a manner acceptable to the AQD, for verification of the PM emission rates to demonstrate compliance with the limit in SC I.1 and SC I.2. (R 336.1213(3)(a))
- 2. The permittee shall conduct an analysis of the coal and No. 6 fuel oil, in a manner acceptable to the AQD, to determine the sulfur content and higher heating value. The analysis shall be performed for each shipment received. The AQD may require more frequent analysis. As an alternative, the permittee may obtain and maintain fuel receipts from the fuel supplier that certify the sulfur content and higher heating value of the fuel. (R 336.1213(3)(a), R 336.1401(2))
- 3. The permittee shall perform the Quality Assurance Procedures of the NO<sub>x</sub> CEM as set forth in Appendix F to 40 CFR Part 60 each calendar quarter. (R 336.1213(3), 40 CFR 60.13(a))
- 4. The permittee shall perform an annual audit of the COMS using the procedures set forth in USEPA Publication 450/4-92-10, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to the AQD. The annual COMS audit is not required if either coal or oil is fired during the year. The annual COMS audit is required to be conducted within 60 days of resuming either coal or oil firing if more than one year has passed since the last COMS audit. (R 336.2157, R 336.1213(3)(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 maintain records of the sulfur content and higher heating value of each shipment of coal and No. 6 fuel oil; and use this data to calculate and record 24 hour period SO2 emissions when firing coal or No. 6 fuel oil. (R 336.1213(3)(b))
- 2. The Permittee shall monitor and record the NOx emissions from EUBOILER2 on a continuous basis in a manner and with instrumentation acceptable to the AQD. (R 336.1213(3))
- 3. The permittee shall properly maintain the monitoring systems, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))
- 4. When NO<sub>x</sub> emission data are not obtained because of CEM/PEM breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other AQD approved reference methods to provide emission data for a minimum of 75% of the

operating hours in each operating day, in at least 22 out of 30 successive operating days. (40 CFR 60.48b(f), R 336.1213(3)(b))

- 5. The permittee shall use the COMS recorded opacity as an indicator of the proper functioning of the baghouse. The appropriate range of opacity defining proper function of the baghouse is 0 20% opacity. (40 CFR 64.6(c)(1)(I and ii))
- 6. The permittee shall continuously monitor and record opacity. Six-minute average values shall be based on 36 or more equally spaced instantaneous opacity measurements per six-minute period. The COMS shall be calibrated in accordance with 40 CFR Part 60, Subpart A. (40 CFR 60.13(h), 40 CFR 64.6(c)(1)(iii), R 336.1213(3))
- 7. To assure compliance with the particulate matter emission limits listed in SC I.1, when firing coal or a mixture of coal with any other approved fuel, an excursion for particulate matter shall be two consecutive one hour block average opacity values greater than 8%. This condition does not affect compliance with R 336.1331. (40 CFR 64.6(c)(2))
- 8. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks, 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 40 CFR Part 64 compliance, 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, in frequent, 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))
- 9. 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 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). In response to an excursion of more than 8% opacity based on two consecutive 1-hour block averages the permittee shall take action as prescribed in the Source Wide MAP. (40 CFR 64.7(d))
- 10. The permittee shall continuously monitor and record, once per day, the differential pressure across the baghouse when firing coal or a mixture of coal with any other approved fuel; and shall take appropriate actions as described in the Source Wide MAP if the differential pressure is outside the proper operating range specified in the MAP. (R 336.1213(3)(b), R 336.1910))
- 11. The permittee shall calculate the 30 day rolling average  $NO_x$  emission rate by using the one hour average  $NO_x$  emission rates measured by the  $NO_x$  CEM/PEM, expressed in pounds per MMBTU heat input. (R 336.1213(3)(b), 40 CFR 60.48b(d))
- 12. The permittee shall record and maintain records of the amounts of each fuel combusted during each day, and calculate the annual capacity factor individually for coal, No. 6 fuel oil, and natural gas. The annual capacity factor is determined on a 12 month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. (R 336.1213(3)(b), 40 CFR 60.49b(d)(1))
- 13. The permittee shall maintain records of the following information for each day EUBOILER2 is operated: (R 336.1213(3)(b), 40 CFR 60.49b(g))
  - a. Calendar date;
  - b. The average hourly NO<sub>x</sub> emission rate measured or predicted;
  - c. The 30 day average NO<sub>x</sub> emission rate calculated at the end of each operating day, from the measured or predicted hourly NO<sub>x</sub> emission rates for the preceding 30 operating days;

d. Identification of the operating days when the calculated 30 day average NO<sub>x</sub> emission rate are in excess of the NO<sub>x</sub> emission limits under 40 CFR 60.44b and SC I.6, I.7, I.8, and I.9 with the reasons for such excess emissions as well a description of corrective actions taken;

- e. Identification of the operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of the corrective actions taken;
- f. Identification of the time when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
- g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
- h. Identification of the times when the pollutant concentration exceeded full span of the CEM/PEM;
- i. Description of any modifications to the CEM/PEM that could affect the ability of the CEM/PEM to comply with the applicable Performance Specification 2, 3, or 16;
- Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.
- 14. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, records of monitoring maintenance, or corrective actions. (40 CFR 64.9(b)(1))

#### 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, on a quarterly basis, excess emission reports for any NO<sub>x</sub> excess emission and, when firing coal or oil, excess visible emission which occurred during the reporting period. The reports shall be postmarked no later than 30 days following the end of each calendar quarter. NO<sub>x</sub> excess emissions are defined as any calculated 30 day rolling average NO<sub>x</sub> emission rate which exceeds the applicable emission limits in 40 CFR 60.44b and Conditions I.6, I.7, I.8, and I.9. Excess visible emissions are defined as all 6 minute periods during which the average opacity exceeds the opacity standards under 40 CFR 60.43b(f) and Condition I.3. (R 336.1213(3), 40 CFR 60.49b(h), 40 CFR 60.7(c))
- 4. The permittee shall submit, on a quarterly basis, reports containing the information in SC VI.12. The reports shall be postmarked no later than 30 days following the end of each calendar quarter. (40 CFR 60.49b(i), R 336.1213(3))
- 5. The Permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. All stack testing protocols must be approved by the AQD prior to testing. (R 336.2001(3))
- 6. The Permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. (R 336.2001(4))
- 7. The Permittee shall submit two complete test reports of the test results in a format acceptable to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked within 60 days following the last test date. (R 336.2001(5))

8. Each semiannual report of CAM monitoring 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))

- 10. 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))
- 11. The permittee shall submit the results of the COMS annual audit to the AQD District Supervisor. The results shall be postmarked no later than 30 days following the audit. (R 336.1213(3))
- 12. The permittee shall submit the results of the Quality Assurance Procedures of the NOx CEM/PEM to the AQD District Supervisor. The results shall be postmarked no later than 30 days following each calendar quarter. (R 336.1213(3))
- 13. No less than 30 days prior to installation of any new monitoring system, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required PEMS. (40 CFR 60.49b(c), R 336.1213(3))

## 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. SV917	144 <sup>2</sup>	193 <sup>2</sup>	R 336.1331

## IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all applicable requirements of the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units as specified in 40 CFR Part 60, Subparts A and Db. (40 CFR Part 60, Subparts A and Db)
- 2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))
- 3. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)
- 4. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers, and Process Heaters by January 31, 2016. **(40 CFR Part 63, Subparts A and DDDDD)**

#### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

ROP No: MI-ROP-B3692-2015b Expiration Date: April 27, 2020

PTI No: MI-PTI-B3692-2015b

## **EUBOILER4A EMISSION UNIT CONDITIONS**

## DESCRIPTION

Natural gas and/or biogas fired Babcock and Wilcox Model FM 120-97 boiler with a maximum rated heat capacity of 227 million BTU per hour.

Flexible Group ID: FGBIOGASSYSTEM

### POLLUTION CONTROL EQUIPMENT

Low NO<sub>x</sub> burners

## I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	NO <sub>x</sub>	0.17 pound per MMBtu heat input <sup>2,a</sup>	30 day rolling average.	EUBOILER4A	SC V.2 SC VI.5	R 336.1205(3)
2.	СО	22.7 pounds per hour <sup>2</sup>	Based upon a 24 hour average.	EUBOILER4A	SC V.1 SC VI.5	R 336.1205(3)

<sup>&</sup>lt;sup>a</sup> In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined nitrogen oxides emissions limit shall be considered compliance with the nitrogen oxides emissions limit established by R 336.1205(3) and also compliance with the nitrogen oxides emissions limit in 40 CFR 60.44b(a), an additional applicable requirement that has been subsumed within this condition.

#### II. MATERIAL LIMIT(S)

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

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall burn only natural gas and/or biogas in EUBOILER4A.2 (R 336.1205(3))
- 2. The NO<sub>x</sub> and O<sub>2</sub> CEM/PEM shall be operated, and data recorded during all periods of operation of EUBOILER4A except for CEM/PEM breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments. A certified PEM can only be used when firing natural gas and/or biogas otherwise a certified CEM shall be used to monitor NOx emissions. (40 CFR 60.48b(c), R 336.1213(3)(b), 40 CFR 60.48b(g))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall install, calibrate and maintain a CEM or PEM to monitor and record NO<sub>x</sub> emissions from EUBOILER4A on a continuous basis.<sup>2</sup> (40 CFR 60.48b(b)(1), R 336.1213(3)(b), 40 CFR 60.48b(q))
- 2. The permittee shall install, calibrate and maintain a CEM or PEM to continuously monitor the O<sub>2</sub> percentage from EUBOILER4A. (R 336.1213(3)(b), 40 CFR 60.48b(b)(1), 40 CFR 60.48b(q))

3. The span value of the NOx CEM shall be 500 ppm or shall be determined according to section 2.1.2 in appendix A to 40 CFR Part 75. (40 CFR 60.48b(e)(2), 40 CFR 60.13, R 336.2154))

- 4. The procedures under 40 CFR 60.13 and Performance Specification 2 of Appendix B to 40 CFR Part 60 shall be followed for installation, evaluation, and operation of the NO<sub>x</sub> CEM. (R 336.1213(3)(b), R 336.2150(1)(b), 40 CFR 60.13, 40 CFR 60.48b(e))
- 5. The procedures under 40 CFR 60.13 and Performance Specification 3 of Appendix B to 40 CFR Part 60 shall be followed for installation, evaluation, and operation of the O<sub>2</sub> CEM. (R 336.1213(3)(b), R 336.2150(1)(d), 40 CFR 60.13)
- 6. The procedures under 40 CFR 60.13 and Performance Specification 16 of Appendix B to 40 CFR Part 60 shall be followed for installation, evaluation, and operation of the NOx and O<sub>2</sub> PEM. (R 336.1213(3)(b), 40 CFR 60.13)

### V. TESTING/SAMPLING

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

- The permittee shall conduct performance tests while firing only natural gas, in a manner acceptable to the AQD, for verification of the CO emission rates. The performance tests shall be conducted every five years.<sup>2</sup> (R 336.1213(3)(a), R 336.2001)
- The permittee shall perform the Quality Assurance Procedures of the NO<sub>x</sub> CEM/PEM as set forth in Appendix F to 40 CFR Part 60 each calendar quarter. (R 336.1213(3), 40 CFR 60.13(a), 40 CFR 60.48b(e))

#### 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 monitor and record the NOx emissions from EUBOILER4A on a continuous basis in a manner and with instrumentation acceptable to the AQD. (R 336.1213(3))
- 2. The permittee shall calculate the 30 day rolling average  $NO_x$  emission rate by using one hour average  $NO_x$  emission rates measured by the  $NO_x$  CEM/PEM expressed in pounds per MMBTU heat input. (R 336.1213(3)(b), 40 CFR 60.48b(d))
- 3. When NO<sub>x</sub> emission data are not obtained because of CEM/PEM breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other AQD approved reference methods to provide emission data for a minimum of 75% of the operating hours in each operating day, in at least 22 out of 30 successive operating days. (40 CFR 60.48b(f), R 336.1213(3)(b))
- 4. The permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and biogas. The annual capacity factor is determined on a 12 month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. (40 CFR 60.49b(d)(1), R 336.1213(3)(b))
- 5. The permittee shall maintain records of the following information for each day EUBOILER4A is operated.<sup>2</sup> (R 336.1213(3)(b), 40 CFR 60.49b(g))
  - a. Calendar date;
  - b. The 24 hour average CO emission rate calculated at the end of each operating day:
  - c. The average hourly NO<sub>x</sub> emission rate measured or predicted;
  - d. The 30 day average NO<sub>x</sub> emission rate calculated at the end of each operating day from the measured or predicted hourly NO<sub>x</sub> emission rates for the preceding 30 operating days;
  - e. Identification of the operating days when the calculated 30 day average NO<sub>x</sub> emission rate are in excess of the NO<sub>x</sub> emission limits under 40 CFR 60.44b and SC I.1 with the reasons for such excess emissions as well a description of corrective actions taken;
  - f. Identification of the operating days for which NO<sub>x</sub> emission data have not been obtained, including reasons for not obtaining sufficient data and a description of the corrective actions taken;

g. Identification of the time when emission data have been excluded from the calculation of average NO<sub>x</sub> emission rates and the reasons for excluding data;

- h. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
- i. Identification of the times when the NO<sub>x</sub> emission concentration exceeded full span of the CEM/PEM;
- j. Description of any modifications to the CEM/PEM that could affect the ability of the CEM to comply with the applicable Performance Specification 2, 3, or 16;
- k. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.

## 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 two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. All stack testing protocols must be approved by the AQD prior to testing. (R 336.2001(3))
- 5. The Permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. (R 336.2001(4))
- 6. The Permittee shall submit two complete test reports of the test results in a format acceptable to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked within 60 days following the last test date. (R 336.2001(5))
- 7. The permittee shall submit, on a quarterly basis, excess emission reports for any  $NO_x$  excess emission which occurred during the reporting period. The reports shall be postmarked no later than 30 days following the end of each quarterly period.  $NO_x$  excess emissions are defined as any calculated 30 day rolling average  $NO_x$  emission rate which exceeds the applicable emission limits in 40 CFR 60.44b and SC I.1. (R 336.1213(3), 40 CFR 60.49b(h), 40 CFR 60.7(c))
- 8. The permittee shall submit, on a quarterly basis, reports containing the information in SC VI.5. The reports shall be postmarked no later than 30 days following the end of each calendar quarter. (40 CFR 60.49b(i), R 336.1213(3))
- The permittee shall submit the results of the Quality Assurance Procedures of the NO<sub>x</sub> CEM/PEM to the AQD Technical Programs Unit. The results must be postmarked no later than 30 days following each calendar quarter. (R 336.1213(3))
- 10. No less than 30 days prior to installation of any new monitoring system, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required PEMS. (40 CFR 60.49b(c), R 336.1213(3))

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. SVBOILER4A	69 <sup>2</sup>	116 <sup>2</sup>	R 336.1205

## IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all applicable provisions of the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units as specified in 40 CFR Part 60, Subparts A and Db.<sup>2</sup> (40 CFR Part 60, Subparts A and Db)
- 2. The permittee shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters by the compliance date(s) specified in the Standards. (40 CFR Part 63, Subparts DDDDD and A)

#### Footnotes:

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

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

## EUWOODCHIPTRAN EMISSION UNIT CONDITIONS

## **DESCRIPTION**

Wood chip transport equipment, wood chip storage bins, conveyors and bucket elevators, screw conveyors and pneumatic transfer equipment.

Flexible Group ID: NA

### **POLLUTION CONTROL EQUIPMENT**

Five cyclones

## I. <u>EMISSION LIMIT(S)</u>

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.10 pounds per 1,000 pounds of exhaust gases	NA	EUWOODCHIPTRAN	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
NA	NA	NA	NA	NA	NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUWOODCHIPTRAN unless the cyclones are installed and operating properly. (R 336.1910)

## 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 shall perform and document a non-certified visible emission observation once per week from each fabric filter exhaust point while the equipment is operating. If any visible emissions are observed PCA will correct and document the problem causing visible emissions within two (2) hours, re-perform the non-certified visible emission observation and document that visible emissions are no longer present while the equipment is operating. If visible emissions are still present additional actions shall be implemented to identify and correct the problem causing the visible emissions and these actions shall be documented. This process shall be repeated until the cause of visible emissions has been eliminated. (R 336.1213(3)(a))

#### VI. MONITORING/RECORDKEEPING

1. Records of the non-certified visible emissions observations and the USEPA Method 9 observations that are performed, the reason for the visible emissions, and any corrective actions taken shall be kept on file in a format acceptable to the AQD. (R 336.1213(3)(a))

### 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:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# EUCOPELAND+DISTANK EMISSION UNIT CONDITIONS

## **DESCRIPTION**

A fluidized bed reactor (Copeland Reactor) used to recover sodium carbonate from spent pulping liquor (black liquor).

Flexible Group ID: NA

### **POLLUTION CONTROL EQUIPMENT**

Two cyclones, venturi scrubber, mist eliminator, wet electrostatic precipitator (ESP), and regenerative thermal oxidizer (RTO)

### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	РМ	0.20 pounds per 1,000 pounds of exhaust gases, corrected to 50% excess air <sup>2</sup>		EUCOPELAND+DISTANK	SC V.1 SC VI.6	R 336.1331(1)(a)
2.	Gaseous organic HAPs as measured by total hydrocarbons reported as carbon	≤ 2.97 pounds per ton of black liquor solids fired OR 90% reduction (prior to discharge of the gases to the atmosphere)²	NA	EUCOPELAND+DISTANK	SC V.3 SC VI.1	40 CFR 63.862(c)(2)

## II. MATERIAL LIMIT(S)

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

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EUCOPELAND+DISTANK unless the cyclones, venturi scrubber, mist eliminator, and RTO are installed and operating properly. (R 336.1910)
- 2. The permittee shall not operate EUCOPELAND+DISTANK unless the differential pressure across the venturi scrubber is equal to or greater than 38 inches.<sup>2</sup> (R 336.1910)
- 3. The permittee shall not operate EUCOPELAND+DISTANK unless the RTO temperature, (as measured in SC VI.1) is greater than or equal to the temperature established during the most recent performance test. (R 336.1910)

## IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and maintain a device to measure the differential pressure across the throat of the venturi scrubber.<sup>2</sup> (R 336.1910, 40 CFR 64.6(c)(ii))

2. The permittee shall install and maintain a device to measure the RTO temperature using a temperature monitor accurate to within ±1% of the temperature being measured.<sup>2</sup> (R 336.1910, 40 CFR 63.864(e)(11))

#### V. TESTING/SAMPLING

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

- 1. The permittee shall conduct performance tests once every five years, in a manner acceptable to the AQD and without the wet electrostatic precipitator operating, for verification of the PM emission rates to demonstrate compliance with the limit in SC I.1.<sup>2</sup> (R 336.1331, R 336.2001, R 336.2003, R 336.2004)
- 2. The permittee shall conduct performance tests once every five years utilizing Method 25 and the Methods in 40 CFR 63.865(b)(5)(i-iv), in a manner acceptable to the AQD, for verification of the gaseous organic HAP emission rates or the percentage reduction in gaseous organic HAPs, to demonstrate compliance with the limits in SC I.2. The performance tests shall be conducted no later than 180 days after startup, where the duration of the prior EUCOPELAND+DISTANK shutdown exceeds six months. If EUCOPELAND+DISTANK is not shut down for six consecutive months during a five year period performance testing shall take place at least once every five years. (40 CFR 63.865(d), 40 CFR 63.7(a)(3))
- 3. HAP performance testing shall include establishing RTO temperature operating ranges. (40 CFR 63.864(j))

#### 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 monitor, and record the operating temperature of the RTO at least once every successive 15 minute period using the procedures in 40 CFR 63.8(c). The monitor must compute, and record the operating temperature at the point of incineration of effluent gases that are emitted. (40 CFR 63.864(e)(11))
- 2. The permittee shall implement corrective actions, if any one hour average RTO temperature falls below the temperature established during the most recent performance test. (40 CFR 63.864(k)(1)(iii))
- 3. The permittee is in violation of the limit contained in SC I.2, if any three hour average RTO temperature falls below the temperature established during the most recent performance test. (40 CFR 63.864(k)(2)(iv))
- 4. The permittee shall maintain records of any occurrence when corrective action is required under SC VI.2, and when a violation is noted under SC VI.3. (40 CFR 63.866(b))
- 5. In addition to the general records required by 40 CFR 63.10(b)(2), the permittee shall maintain records of the following information: (40 CFR 63.866(c))
  - a. Records of the black liquor solids firing rate, in tons per day
  - b. Records of parameter monitoring data required under 40 CFR 63.864 (operating temperature of the RTO) and SC VI.1, including any period when the operating parameter levels were inconsistent with the levels established during the most recent performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken
  - c. Records of supporting calculations for compliance determinations made under SC V.3
  - d. Records of monitoring parameter ranges established for EUCOPELAND+DISTANK.
- 6. At a minimum, the permittee shall monitor, and record the differential pressure across the venturi scrubber once every 15 minutes in a manner and with instrumentation acceptable to the AQD. (40 CFR 64.6(c)(1)(iii), R 336.1213(3))

7. The permittee shall use the differential pressure across the venturi scrubber as an indicator of proper functioning of the scrubber and to assure compliance with the PM limit in SC I.1. The appropriate range of differential pressure is 38 inches or greater, and an excursion for PM shall be a one hour average differential pressure across the venturi scrubber less than 38 inches. This condition does not affect compliance with R 336.1331. (40 CFR 64(c)(1)(i and ii), 40 CFR 64.6(c)(2))

- 8. In response to an excursion as defined in SC VI.7, 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 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))
- 9. The permittee shall properly maintain the monitoring systems, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))
- 10. 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 venturi scrubber differential pressure monitoring in continuous operation (or shall collect data at all required intervals) at all times that the EUCOPELAND+DISTANK is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for 40 CFR Part 64 compliance, 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, in frequent, 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))
- 11. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, records of monitoring maintenance, or corrective actions. (40 CFR 64.9(b)(1))

### 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 two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. All stack testing protocols must be approved by the AQD prior to testing. (40 CFR 63.7(b)(1), R 336.2001(3))
- 5. The Permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. (R 336.2001(4))

6. The Permittee shall submit two complete test reports of the test results in a format acceptable to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked within 60 days following the last test date. (40 CFR 63.7(g), R 336.2001(5))

- 7. The permittee shall submit quarterly reports of excess emissions if any RTO temperature meets any of the conditions specified in 40 CFR 63.864(k)(1) and (2). The report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in SC VI.2, and the number and duration of occurrences when the source met or exceeded the conditions in SC VI.3. Reporting excess emissions below the violation thresholds of SC VI.3 does not constitute a violation of the applicable standard. When no exceedances of parameters have occurred, the permittee shall submit a semiannual report stating that no excess emissions occurred during the reporting period. (40 CFR 63.867(c))
- 8. Within 15 days after startup where the duration of the prior EUCOPELAND+DISTANK shutdown exceeds six months the permittee shall notify the AQD District Supervisor, in writing, of the startup date. (R 336.1213(3))
- 9. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and the corrective actions taken. If there were no excursions, then this report shall include a statement that there were no excursions. (40 CFR 64.9(a)(2)(i))
- 10. 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))

#### 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.	SV102	87 <sup>2</sup>	140 <sup>2</sup>	R 336.1331

#### IX. OTHER REQUIREMENT(S)

- 1. The permittee shall develop a written Startup, Shutdown, and Malfunction Plan as described in 40 CFR 63.6(e)(3) that contains specific procedures for operating the source and maintaining the source during periods of startups, shutdowns, and malfunctions, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements listed below. (40 CFR 63.866(a))
  - a. Procedures for responding to any process parameter level that is inconsistent with the level(s) established under Section 63.864(j), including the following: (40 CFR 63.866(a)(1))
    - i. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and
    - ii. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.
  - b. The startup, shutdown, and malfunction plan also must include the following schedules: (40 CFR 63.866(a)(2))
    - i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and
    - ii. An inspection schedule for each continuous monitoring system required under Section 63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD; and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))

- 3. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)
- 4. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, 40 CFR Part 63, Subparts A and MM. (40 CFR Part 63, Subparts A and MM)

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

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# **EUWASHERS EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

Two vacuum drum rotary pulp washers operated in series.

Flexible Group ID: NA

# **POLLUTION CONTROL EQUIPMENT**

LVHC Collection System, EUBOILER1, EUBOILER2

#### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	VOC	0.37 pounds per hour <sup>2,a</sup>	NA	EUWASHERS	SC VI.1	R 336.1205(1), R 336.1227
2.	VOC	18.57 pounds per hour <sup>2,b</sup>	NA	EUWASHERS	SC VI.1	R 336.1205(1), R 336.1227
3.	VOC	2.42 tons <sup>2</sup>	12 month rolling time period	EUWASHERS	SC VI.1	R 336.1205(1), R 336.1227

This limit is applicable during normal operation of the washers. Normal operation is defined as those times when the emissions from EUWASHERS are collected by the LVHC Collection System and combusted in EUBOILER1 or EUBOILER2

#### II. MATERIAL LIMIT(S)

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

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

# IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

 The permittee shall install and maintain EUWASHERS with a LVHC Collection System which collects emissions from EUWASHERS and combusts the collected emissions in EUBOILER1 or EUBOILER 2.<sup>2</sup> (R 336.1205(1))

#### V. TESTING/SAMPLING

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

NA

<sup>&</sup>lt;sup>b</sup> This limit is applicable during abnormal operation of the washers. Abnormal operation is defined as those times when the emissions from EUWASHERS are not collected by the LVHC Collection System or when the LVHC is operating and the collected gases are not combusted in EUBOILER 1 or EUBOILER2.

#### 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 keep, in a manner satisfactory to the AQD, records of the following information:<sup>2</sup> (R 336.1205(1), R 336.1213(3)(b))
  - a. Amount of oven dried pulp processed by EUWASHERS on a monthly basis;
  - b. Operating hours of EUWASHERS on a monthly basis;
  - c. Total time that the LVHC Collection System was unavailable or was being bypassed during operation of EUWASHERS on a monthly basis;
  - d. Annual VOC emissions, based upon a 12 month rolling time period, as determined at the end of each calendar month using the calculations in Appendix 7;
  - e. Hourly VOC emissions with and without the LVHC collection system operating, calculated on a monthly basis, using the calculations in Appendix 7.

# See Appendix 7

#### VII. <u>REPORTING</u>

- 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

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# EUSODA-ASH EMISSION UNIT CONDITIONS

### **DESCRIPTION**

Soda Ash Silo.

Flexible Group ID: NA

# **POLLUTION CONTROL EQUIPMENT**

Baghouse

#### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
,	. PM	0.10 pound per 1,000 pounds of exhaust gases		EUSODA-ASH	SC III.1 SC VI.1	R 336.1331(1)(a)

### II. MATERIAL LIMIT(S)

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

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall maintain the differential pressure across the baghouse within the normal operating ranges identified in the Source-Wide MAP. (R 336.1910, R 336.1911)
- 2. The permittee shall not operate EUSODA-ASH unless the baghouse is installed and operating properly. (R 336.1910)

#### IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

1. The permittee shall install and maintain a device to measure the differential pressure across the baghouse. (R 336.1910)

#### V. TESTING/SAMPLING

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

NA

#### 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 utilize baghouse differential pressure as an indicator of the proper functioning of the baghouse. The appropriate range of differential pressure defining proper function of the baghouse shall be specified in the Source-Wide MAP. The differential pressure across the baghouse shall be continuously monitored and recorded once per day. (R 336.1213(3)(b), 40 CFR 64.6(c)(1)(i)(ii) and (iii))

- 2. The permittee shall properly maintain the differential pressure monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b), R 336.1911)
- 3. The permittee shall use the differential pressure across the baghouse to assure compliance with the PM limit in SC I.1. An excursion for PM shall be a differential pressure outside of the normal operating range specified in the Source-Wide MAP. (40 CFR 64.6(c)(2))
- 4. In response to an excursion as defined in SC VI.3, the permittee shall restore operation of EUSODA-ASH 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))
- 5. 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 baghouse differential pressure monitoring in continuous operation (or shall collect data at all required intervals) at all times that the EUSODA-ASH is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for 40 CFR Part 64 compliance, 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, in frequent, 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))
- 6. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, records of monitoring maintenance, or corrective actions. (40 CFR 64.9(b)(1))

#### 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 CAM monitoring 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))

#### 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. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD, and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))
- 2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# EUFLYASH EMISSION UNIT CONDITIONS

### **DESCRIPTION**

Fly Ash Silo.

Flexible Group ID: NA

# **POLLUTION CONTROL EQUIPMENT**

Baghouse

#### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1	. PM	0.10 pound per 1,000 pounds of exhaust gases	NA	EUFLYASH	SC III.1 SC VI.1	R 336.1331(1)(a)

#### II. MATERIAL LIMIT(S)

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

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall maintain the differential pressure across the baghouse within the normal operating ranges identified in the Source-Wide MAP. (R 336.1910, R 336.1911)
- 2. The permittee shall not operate EUFLYASH unless the baghouse is installed and operating properly. (R 336.1910)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and maintain a device to measure the differential pressure across the baghouse. (R 336.1910)

#### V. TESTING/SAMPLING

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

NA

#### 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 utilize baghouse differential pressure as an indicator of the proper functioning of the baghouse. The appropriate range of differential pressure defining proper function of the baghouse shall be specified in the Source-Wide MAP. The differential pressure across the baghouse shall be continuously monitored and recorded once per day. (R 336.1213(3)(b), 40 CFR 64.6(c)(1)(i-iii))

- 2. The permittee shall properly maintain the differential pressure monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b), R 336.1911)
- 3. The permittee shall use the differential pressure across the baghouse to assure compliance with the PM limit in Condition I.1. An excursion for PM shall be a differential pressure outside the normal operating range specified in the Source-Wide MAP. (40 CFR 64.6(c)(2))
- 4. In response to an excursion as defined in SC VI.3, the permittee shall restore operation of EUFLYASH 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))
- 5. 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 baghouse differential pressure monitoring in continuous operation (or shall collect data at all required intervals) at all times that the EUFLYASH is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for 40 CFR Part 64, compliance, 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, in frequent, 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))
- 6. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, records of monitoring maintenance, or corrective actions. (40 CFR 64.9(b)(1))

#### 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 CAM monitoring 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))

# 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. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))
- 2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# EUPELLET EMISSION UNIT CONDITIONS

#### **DESCRIPTION**

Sodium Carbonate Pellet Storage Silo.

Flexible Group ID: NA

#### **POLLUTION CONTROL EQUIPMENT**

Baghouse

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.10 pound per 1,000 pounds of exhaust gases	NA	EUPELLET	SC III.2 SC VI.1	R 336.1331(1)(a)

#### II. MATERIAL LIMIT(S)

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

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EUPELLET unless the baghouse is installed and operating properly. (R 336.1910)
- 2. The permittee shall maintain the differential pressure across the baghouse within the normal operating ranges identified in the Source-Wide MAP. (R 336.1910, R 336.1911)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

 The permittee shall equip and maintain a device to monitor the differential pressure across the baghouse. (R 336.1910)

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

 The differential pressure across the baghouse shall be continuously monitored and recorded once per day. (R 336.1213(3)(b))

#### 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

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This 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
FGMACT_SUBPART_S	For semi-chemical pulping processes using wood, the affected sources are the digester system and the evaporator system, as defined in 40 CFR Part 63, Subpart S.	EUEVAPFC EUEVAPLTV EUDIGESTORS
FGBIOGASSYSTEM	Biogas generation system which produces fuel for the three boilers. In the event of boiler upsets or malfunctions, the gas is directed to EUBIOGASFLARE for destruction.	EUBOILER1 EUBOILER2 EUBOILER4A EUBIOGASSYSTEM, EUBIOGASFLARE
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	EUPULPTANKS EURECYCLE200 EUBLTANKS EURECYCLE300 EUWHITEWATER EUPROCESSCHEM
FGRICE1	Existing emergency stationary compression ignition RICE with a horsepower rating of less than 500 hp.	EURICE12994 EURICE12974
FGPAPERMACH	Grandfathered paper machines 1 – 3 all installed prior to 1967, no permit to install or NSR requirements.	EUPAPERMACH1 EUPAPERMACH2 EUPAPERMACH3

# FGMACT SUBPART S FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

For semi-chemical pulping processes using wood, the affected source is the total of all HAP emission points in the pulping system. Pulping system means all process equipment, beginning with the digester system, and up to and including the last piece of pulp conditioning equipment.

Emission Units: EUDIGESTERS, EUEVAPLTV, EUEVAPFC

#### POLLUTION CONTROL EQUIPMENT

EUBOILER1, EUBOILER2, LVHC collection system

#### I. <u>EMISSION LIMIT(S)</u>

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

#### II. MATERIAL LIMIT(S)

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

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. All regulated HAP-emitting sources associated with EUEVAPFC, EUEVAPLTV, and EUDIGESTERS shall be enclosed and vented into a closed-vent system and routed to EUBOILER1 and/or EUBOILER2. (40 CFR 63.443(c), 40 CFR 63.443(d)(4))
- 2. Each component of the closed-vent system specified in S.C. III.1 that is operated at positive pressure and located prior to a control device shall be operated with no detectable leaks as indicated by an instrument reading of less than 500 ppmv above background, as measured by the procedures in S.C.V.1. (40 CFR 63.450(c))
- 3. Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the control device requirements in S.C. III.1 shall comply with the following requirement: (40 CFR 63.450(d))
  - a. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that is capable of taking periodic readings as frequently as specified in 40 CFR 63.454(e). The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or
  - b. For bypass line valves that are not computer controlled, the permittee shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that the valve or closure mechanism cannot be opened without breaking the seal.

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. For all regulated HAP-emitting sources associated with EUEVAPFC, EUEVAPLTV, and EUDIGESTORS, the total HAP emissions from each LVHC system shall be controlled by introducing the HAP emission stream into the flame zone of EUBOILER1 and/or EUBOILER2.(40 CFR 63.443(b)(1), 40 CFR 63.443(d)(4)(i))

#### V. TESTING/SAMPLING

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

- 1. For positive pressure closed-vent systems or portions of closed vent systems, demonstrate no detectable leaks as specified in S.C. III.2.measured annually by the procedures in 40 CFR 63.457(d) as stated below: (40 CFR 63.453(k)(3))
  - a. Method 21, of part 60, appendix A-7; and
  - b. The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:
    - i. Zero air (less than 10 parts per million by volume of hydrocarbon in air); and
    - ii. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

#### VI. MONITORING/RECORDKEEPING

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

- 1. Each enclosure and closed-vent system used to comply with 40 CFR 63.450(a) shall comply with the following requirements: (40 CFR 63.453(k), R 336.1213(3)(b))
  - a. For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed
  - b. Each closed-vent system required by 40 CFR 63.450(a) shall be visually inspected every 30 days and at other times requested by the AQD. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.
  - c. For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in 40 CFR 63.450(c) measured initially and annually by the procedures in 40 CFR 63.457(d).
  - d. The valve or closure mechanism specified in 40 CFR 63.450(d)(2) shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.
- 2. If an inspection required by SC VI.1(a-c) identifies visible defects in ductwork, piping, enclosures or connections to covers required by 40 CFR 63.450, or if an instrument reading of 500 ppm<sub>v</sub> or greater above background is measured by SC V.1, or if enclosure openings are not maintained at negative pressure as determined by SC V.2, then the following corrective actions shall be taken as soon as practicable. (40 CFR 63.453(k)(6), R 336.1213(3)(a))
  - a. A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.
  - b. The repair or corrective action shall be completed no later than 15 days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.
- 3. For each applicable enclosure opening, closed-vent system, and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment. (40 CFR 63.454(b), R 336.1213(3)(a))

- 4. For each inspection performed pursuant to Condition VI.1(a-c), the permittee shall record the following information: (40 CFR 63.454(b), R 336.1213(3)(a))
  - a. Date of inspection;
  - b. The equipment type and identification;
  - c. Results of negative pressure tests for enclosures;
  - d. Results of leak detection tests;
  - e. The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);
  - f. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
  - g. Repair methods applied in each attempt to repair the defect or leak;
  - h. The reason for the delay if the defect or leak was not repaired within 15 days after discovery;
  - i. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
  - i. The date of successful repair of the defect or leak;
  - k. The position and duration of opening of bypass line valves and the condition of any valve seals;
  - I. The duration of the use of bypass valves on computer controlled valves.
- 5. The permittee shall set the flow indicator on each bypass line specified in 40 CFR 63.450(d)(1) to provide a record of the presence of gas flow in the bypass line at least once every 15 minutes. (40 CFR 63.454(e), R 336.1213(3)(a))
- 6. The following records of malfunctions must be maintained:
  - a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment;
  - b. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.454(g))

#### 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. Semiannual reporting of malfunctions that occurred during the reporting period, 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. The report must include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken to minimize emissions, including actions taken to correct the malfunction. (40 CFR 63.455(g), 40 CFR 63.10(d)(5)(i))

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 all applicable portions of 40 CFR Part 63, Subpart S. (40 CFR Part 63, Subpart S)

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# FGBIOGASSYSTEM FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Biogas generation system which produces fuel for the three boilers. In the event of boiler upsets or malfunctions, the gas is directed to EUBIOGASFLARE for destruction.

Emission Unit: EUBOILER1, EUBOILER2, EUBOILER4A, EUBIOGASSYSTEM, EUBIOGASFLARE

#### **POLLUTION CONTROL EQUIPMENT**

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO <sub>2</sub>	8.45 lb/hr <sup>2a</sup>	Test Protocol <sup>b</sup>	FGBIOGASSYSTEM	SC V.2	R 336.1205(1)(a), R 336.1205(3)
2. H <sub>2</sub> S	0.0449 lb/hr <sup>2c</sup>	Test Protocol <sup>b</sup>	FGBIOGASSYSTEM	SC V.2	R 336.1224, R 336.1225

Calculated by assuming complete combustion of H<sub>2</sub>S to SO<sub>2</sub>

#### II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements		
1.	Biogas	50,400,000 cubic feet <sup>2</sup>	12 month rolling time period	EUBIOGASFLARE	SC VI.6	40 CFR 52.21(r)(6)(iii)		
2.	H <sub>2</sub> S	4.49 lb/hr before combustion in a boiler or flare <sup>2</sup>	Test Protocol*	EUBIOGASFLARE	SC V.2	R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225		
	* Test Protocol shall specify averaging time.							

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGBIOGASSYSTEM unless EUBIOGASFLARE is installed and operating properly.<sup>2</sup> (R 336.1910)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall vent emissions from the recycle/rapid mix tank to the biogas collection system.<sup>2</sup> (R 336.1910)
- 2. The permittee shall install and maintain a device for measuring and recording the amount of biogas combusted in EUBIOGASFLARE.<sup>2</sup> (40 CFR 52.21(r)(6)(iii))

b Test Protocol shall specify averaging time.

<sup>&</sup>lt;sup>c</sup> Calculated by assuming 99% destruction of H<sub>2</sub>S during combustion

#### V. TESTING/SAMPLING

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

1. The permittee shall conduct performance tests, in a manner acceptable to the AQD, for verification of the PM, CO, and VOC emission rates from EUBOILER4A when firing only biogas. The performance tests shall be conducted every five years when biogas has been fired alone for more than 60 consecutive days.<sup>2</sup> (40 CFR 52.21(r)(6)(iii), R 336.1213(3)(a))

2. The permittee shall annually verify the rate of H<sub>2</sub>S in pounds per hour supplied to the boilers and flare from FGBIOGASSYSTEM by testing at owner's expense, in accordance with Department requirements. This test shall also be used to determine emission rates of H<sub>2</sub>S and SO<sub>2</sub> in pounds per hour.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225, R 336.1299, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

#### 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 measure and record the heat content, in BTU per cubic foot of biogas, on an annual basis.<sup>2</sup> (40 CFR 52.21(r)(6)(iii), R 336.1213(3)(b))
- 2. The permittee shall calculate and keep monthly records of the SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, PM, PM-10, lead, hydrogen fluoride, and sulfuric acid mist emissions from EUBOILER4A in tons per calendar year basis. The permittee shall use mass balance and emission factors derived from CEMS data and the most recent EUBOILER4A stack test data to calculate SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, PM emissions. The permittee shall use AQD approved emission factors to calculate PM-10, lead, hydrogen fluoride, and sulfuric acid mist emissions. Calculations and recording shall begin in January, 2009 and shall continue for 10 years. In the event that it becomes necessary to modify an emission factor, the permittee shall obtain the written approval of the District Supervisor prior to implementing the change.<sup>2</sup> (40 CFR 52.21(r)(6)(iii), R 336.1213(3)(b))
- 3. The permittee shall maintain a record of the following for EUBOILER1, EUBOILER2, EUBOILER4A, and EUBIOGASFLARE:<sup>2</sup> (40 CFR 52.21(r)(6)(iii), R 336.1213(3)(b))
  - a. Emission unit identification;
  - b. The type(s) of fuel used in each emission unit;
  - c. The quantity of fuel used in each emission unit on a calendar month basis;
  - d. The emission factor used to calculate emissions;
  - e. The source of the emission factor:
  - f. The heat content of each fuel used.
- 4. The permittee shall measure and record, in cubic feet, the amount of biogas combusted in EUBIOGASFLARE on a monthly basis. The permittee shall use the monthly records to calculate the amount of gas combusted in EUBIOGASFLARE on a 12 month rolling time period.<sup>2</sup> (R 336.1213(3)(b), 40 CFR 52.21(r)(6)(iii))

#### 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))
- 4. 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))

5. The Permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. All stack testing protocols must be approved by the AQD prior to testing. (R 336.2001(3))

- 6. The Permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. (R 336.2001(4))
- 7. The Permittee shall submit two complete test reports of the test results in a format acceptable to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, which are postmarked within 60 days following the last test date. (R 336.2001(5))
- 8. Effective until January 2019, the permittee shall submit records of SO2, NOx, CO, VOC, PM, PM-10, lead, hydrogen fluoride, and sulfuric acid mist emissions from EUBOILER4A in tons per calendar year to both the AQD Permit Section Supervisor and the AQD District Supervisor within 60 days following the end of each calendar year, if both of the following apply:
  - a. The calendar year actual emissions of SO2, NOx, CO, VOC, PM, PM-10, lead, hydrogen fluoride, or sulfuric acid mist exceed the baseline actual emissions (BAE) by a significant amount, and
  - b. The calendar year actual emissions differ from the pre-construction projection. The pre-construction projection is the sum of the projected actual emissions from each existing emission unit included in the Actual-to-Projected-Actual Applicability Test used for EUBOILER4A. A summary of baseline actual emissions and pre-construction projection can be found in the following table:

	Baseline	Projected
Pollutant	emissions	emissions
	(tons per year)	(tons per year)
SO2	1,940.46	1,980.21
NOx	589.55	679.83
CO	32.52	33.13
VOC	3.78	6.27
PM	8.40	12.23
PM-10	10.05	13.90
Lead	0.0230	0.237
Hydrogen fluoride	8.22	8.37
Sulfuric acid mist	21.02	21.42

The report shall contain the name, address, and telephone number of the facility; the annual emissions as calculated pursuant to EUBOILER4A, SC VI.2; and any other information the owner or operator wishes to include (i.e., an explanation why emissions differ from the pre-construction projection).2 (R 336.2818, 40 CFR Part 52.21(r)(6)(iii))

#### 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.	SVBIOGASFLARE	144 <sup>2</sup>	50 <sup>2</sup>	40 CFR 52.21(r)(6)(iii)

# IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

# FG-RULE 290 FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

**Emission Unit:** EUPULPTANKS, EURECYCLE200, EUBLTANKS, EURECYCLE300, EUWHITEWATER, and EUPROCESSCHEM

#### **POLLUTION CONTROL EQUIPMENT**

NA

#### I. <u>EMISSION LIMIT(S)</u>

- 1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(i))
- 2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: (R 336.1290(a)(ii))
  - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(ii)(A))
  - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. (R 336.1290(a)(ii)(B))
  - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. (R 336.1290(a)(ii)(C))
  - d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. (R 336.1290(a)(ii)(D))
- 3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: (R 336.1290(a)(iii))
  - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. (R 336.1290(a)(iii)(A))
  - b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. (R 336.1290(a)(iii)(B))
  - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. (R 336.1290(a)(iii)(C))

#### II. MATERIAL LIMIT(S)

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

# III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. (R 336.1290)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### 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. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. (R 336.1213(3))
  - a. Records identifying each air contaminant that is emitted. (R 336.1213(3))
  - b. Records identifying if each air contaminant is controlled or uncontrolled. (R 336.1213(3))
  - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. (R 336.1213(3))
  - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). (R 336.1213(3))
  - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. (R 336.1213(3), R 336.1290(c))
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. (R 336.1213(3))
  - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. (R 336.1290(b), R 336.1213(3))
  - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. (R 336.1213(3))
- 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. (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)

NA

# IX. OTHER REQUIREMENT(S)

NA

# FGRICE1 FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

One emergency (Caterpillar) - compression-ignition, 225 horsepower stationary reciprocating internal combustion engine and one fire pump (Cummins) – Emergency, compression-ignition, 208 horsepower stationary reciprocating internal combustion engine.

Emission Units: EURICE 12994, EURICE 12974

### **POLLUTION CONTROL EQUIPMENT**

NA

#### I. EMISSION LIMIT(S)

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

# II. MATERIAL LIMIT(S)

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

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee may operate EURICE 12994 and/or EURICE 12974 as necessary during emergencies with no time limit. (40 CFR 6640(f)(1))
- 2. The permittee shall minimize the time spent at idle and minimize startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. (40 CFR 63.6602, 40 CFR 63.6625(h), and 40 CFR, Part 63, Subpart ZZZZ, Table 2c, Item 1)
- 3. The permittee must comply with the following operational requirements:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in Condition III.4;
  - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace if necessary;
  - c. Inspect all hoses and belts every 500 hours or operation or annually, whichever comes first, and replace if necessary.

If EURICE 12994 or EURICE 12974 is being operated during an emergency and it is not possible to shut down the engine to perform the work practice standards on the schedule required the work practice standard can be delayed until the emergency is over. The work practice should be performed as soon as practicable after the emergency has ended. The permittee must report any failure to perform the work practice on the schedule required. (40 CFR 63.6602, and 40 CFR Part 63, Subpart ZZZZ, Table 2c, Item 1)

- 4. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition III.3. The oil analysis program must be performed at the same frequency specified for changing the oil in Condition III.3. The oil analysis shall test for the following limits:
  - a. Total Base Number is less than 30% of the Total Base Number of the oil when new;
  - b. Viscosity of the oil has changed by 20% from the viscosity of the oil when new;
  - c. Percent water content (by volume) is greater than 0.5%.

If any of the limits are exceeded, the permittee must change the oil within two days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee must change the oil within two days or before commencing operation, whichever is later. The analysis program must be part of the maintenance plan for EURICE 12994 and EURICE 12974. (40 CFR 63.6625(i))

- 5. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR Part 63, Subpart ZZZZ that apply to EURICE 12994 and EURICE 12974 at all times. (40 CFR 63.6605(a))
- 6. The permittee at all times must operate and maintain EURICE 12994 and EURICE 12974 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 40 CFR Part 63, Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of EURICE 12994 and EURICE 12974. (40 CFR 63.6605(b))
- 7. The permittee must operate and maintain EURICE 12994 and EURICE 12974 according to the manufacturer's emission-related written operation and maintenance instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6, Item 9)
- 8. The permittee may operate EURICE 12994 and EURICE 12974 for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the engine manufacturer or vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing is limited to 100 hours per year. (40 CFR 63.6640(f)(2)(i))
- 9. The permittee may operate EURICE 12994 and EURICE 12974 for up to 50 hours per engine per year in non-emergency situations, which are counted as part of the 100 hours of operation allowed under SC III.8. (40 CFR 63.6640(f)(3))

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip EURICE 12994 and EURICE 12974 each with a non-resettable hour meter. **(40 CFR 63.6625(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. The permittee shall keep the following records: (40 CFR 63.6655)
  - a. A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any initial Notification or Notification of Compliance Status, according to the requirements of 40 CFR 63.10(b)(2)(xiv):
  - b. Records of the occurrence and duration of each malfunction of operation;

- Records of actions taken during period of malfunctions to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning equipment to is normal or usual manner of operation;
- d. Records of the maintenance conducted on EURICE 12994 and EURICE 12974 in order to demonstrate that EURICE 12994 and EURICE 12974 are operated and maintained according to the respective maintenance plans;
- e. Records of the hours of operation recorded through the non-resettable hour meters. The permittee shall document how many hours were spent during emergency operation (including what classified the operation as an emergency) and how many hours were spent during non-emergency operation per engine;
- f. Records to demonstrate continuous compliance with the operating limitations in SC III.7.
- 2. The permittee shall keep records of the parameters that are analyzed as part of the oil analysis program in SC III.4, the results of the analysis, and the oil changes for the engine. (40 CFR 63.6625(j))

#### 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), 40 CFR 63.6640(b), 40 CFR 63.6650(f))
- 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 all applicable requirements of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. (40 CFR Part 63, Subparts A and ZZZZ)

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# FGPAPERMACH FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Grandfathered paper machines numbers 1 thru 3 all installed prior to 1967.

Emission Units: EUPAPERMACH1, EUPAPERMACH2, EUPAPERMACH3

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

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

#### II. MATERIAL LIMIT(S)

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

NA

# VI. MONITORING/RECORDKEEPING

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

NA

# 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:

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

<sup>&</sup>lt;sup>2</sup>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 the requirements identified in the table below are not applicable to the specified emission unit(s) and/or flexible group(s). This determination is incorporated into the permit shield provisions set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii). If the permittee makes a change that affects the basis of the non-applicability determination, the permit shield established as a result of that non-applicability decision is no longer valid for that emission unit or flexible group.

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
EUBOILER1	40 CFR Part 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units)	EUBOILER1 was installed prior to the applicability date of the regulation (June 19, 1984) and has not been modified since the promulgation date. Future modifications to the boiler may make EUBOILER1 subject to the regulation.
Miscellaneous Storage Tanks Storing VOC- containing Liquids	40 CFR Part 60, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984)	The Mill does not maintain any storage tanks containing VOCs that meet both the size requirement and the installation date requirement that would subject them to 40 CFR Part 60, Subpart Kb.
EUCOALHANDLING	40 CFR Part 60, Subpart Y (Standards of Performance for Coal Preparation and Processing Plants)	EUCOALHANDLING has not experienced an NSPS modification since its construction in 1950. Future NSPS modifications may make EUCOALHANDLING subject to the regulation.

# **APPENDICES**

# **Appendix 1: Abbreviations and Acronyms**

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

acfm         Actual cubic feet per minute         MSDS         Material Safety Data Sheet           BACT         Best Available Control Technology         MW         Megawatts           BTU         British Thermal Unit         NA         Not Applicable           °C         Degrees Celsius         NAAOS         National Ambient Air Quality Standards           CAA         Federal Clean Air Act         NESHAP         National Emission Standard for Hazardous Air Pollutants           CAM         Compliance Assurance Monitoring         NMOC         Non-methane Organic Compounds           CEM         Continuous Emission Monitoring         NSP         New Source Performance Standards           CO         Carbon Monoxide         NSR         New Source Review           COM         Continuous Opacity Monitoring         PM         Particulate Matter           department         Michigan Department of Environmental Quality         PM10         Particulate Matter less than 10 microns in diameter           dscf         Dry standard cubic foot         pph         PM Pound per hour           dscm         Dry standard cubic foot         pph         Particulate Matter less than 10 microns in diameter           EV         Emission Unit         ppm         Parts per million           Grims         Dry standard cubic foot <th>AQD</th> <th>ng is an alphabetical listing of abbreviations/acro Air Quality Division</th> <th>MM</th> <th>Million</th>	AQD	ng is an alphabetical listing of abbreviations/acro Air Quality Division	MM	Million
BACT         Best Available Control Technology         MW         Megawatts           BTU         British Thermal Unit         NA         Not Applicable           °C         Degrees Celsius         NAAQS         National Ambient Air Quality Standards           CAA         Federal Clean Air Act         NESHAP National Emission Standard for Hazardous Air Pollutants           CAM         Compliance Assurance Monitoring         NMC         Non-methane Organic Compounds           CEM         Continuous Emission Monitoring         NOX         Oxides of Nitrogen           CFR         Code of Federal Regulations         NSPS         New Source Performance Standards           CO         Carbon Monoxide         NSR         New Source Performance Standards           COM         Continuous Opacity Monitoring         PM         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter less than 10 microns in diameter           desartment         Dry standard cubic feet         ppm         Particulate Matter         Psur printing the feet of the printi		•	MSDS	Material Safety Data Sheet
BTU         British Thermal Unit         NA         Not Applicable           °C         Degrees Celsius         NAAQS         National Ambient Air Quality Standards           CAA         Federal Clean Air Act         NESHAP         National Emission Standard for Hazardous Air Pollutants           CAM         Compliance Assurance Monitoring         NMOC         Oxides of Nitrogen           CEM         Continuous Emission Monitoring         NSPS         New Source Performance Standards           CO         Carbon Monoxide         NSR         New Source Review           COM         Continuous Opacity Monitoring         PM         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter less than 10 microns in diameter           dscf         Dry standard cubic foot         pph         Pound per hour           dscf         Dry standard cubic meter         ppm         Parts per million           EPA         United States Environmental Protection Agency         ppm         Parts per million by volume           EU         Emission Unit         ppm         Parts per million by volume           FE         Degrees Fahrenheit         pS         Performance Specification           °F         Degrees Fahrenheit         pS	BACT	·	MW	-
°C         Degrees Celsius         NAAQS         National Ambient Air Quality Standards           CAA         Federal Clean Air Act         NESHAP         National Emission Standard for Hazardous Air Pollutants           CAM         Compliance Assurance Monitoring         NMC         Non-methane Organic Compounds           CEM         Continuous Emission Monitoring         NSP         New Source Performance Standards           CPR         Code of Federal Regulations         NSPS         New Source Performance Standards           CO         Carbon Monoxide         NSR         New Source Review           COM         Continuous Opacity Monitoring         PM         Particulate Matter deathed Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter less than 10 microns in diameter           discr         Dry standard cubic foot         pph         Parts per million         Perturn per hour           dscm         Dry standard cubic meter         ppm         Parts per million         Perturn per hour           dscm         Dry standard cubic meter         ppm         Parts per million         Perturn per hour           dscm         Dry standard cubic foot         ppm         Parts per million by volume           EU         Emission Unit         ppm         <			NA	_
CAA         Federal Clean Air Act         NESHAP Pollutarits         National Emission Standard for Hazardous Air Pollutarits           CAM         Compliance Assurance Monitoring         NMOC         Non-methane Organic Compounds           CEM         Continuous Emission Monitoring         NOX         Oxides of Nitrogen           CFR         Code of Federal Regulations         NSP         New Source Review           CO         Carbon Monoxide         NSR         New Source Review           COM         Continuous Opacity Monitoring         PM         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter less than 10 microns in diameter           dscf         Dry standard cubic foot         pph         Particulate Matter           dscf         Dry standard cubic meter         ppm         Parts per million           dscf         Dry standard cubic meter         ppm         Parts per million           EPA         United States Environmental Protection Agency         ppm         Parts per million by volume           EU         Emission Unit         ppmw         Parts per million by volume           EU         Emission Unit         ppmw         Parts per million by volume           EU         Eliminate Companition <td< td=""><td>°C</td><td>Degrees Celsius</td><td>NAAQS</td><td>• •</td></td<>	°C	Degrees Celsius	NAAQS	• •
CAM         Compliance Assurance Monitoring         NMOC         Non-methane Organic Compounds           CEM         Continuous Emission Monitoring         NOx         Oxides of Nitrogen           CFR         Code of Federal Regulations         NSPS         New Source Performance Standards           CO         Carbon Monoxide         NSR         New Source Review           COM         Continuous Opacity Monitoring         PM         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter           dsc         Dry standard cubic foot         pph         Pound per hour           dsc         Dry standard cubic meter         ppm         Parts per million           EPA         United States Environmental Protection Agency         ppm         Parts per million by volume           EU         Emission Unit         ppm         Parts per million by volume           FB         United States Environmental Protection Agency         ppm         Parts per million by volume           FB         Degrees Fahrenheit         PS         Performance Specification           FB         Perfuencion of Significant Deterioration	CAA	-	NESHAP	National Emission Standard for Hazardous Air
CFR         Code of Federal Regulations         NSPS         New Source Performance Standards           CO         Carbon Monoxide         NSR         New Source Review           COM         Continuous Opacity Monitoring         PM         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter less than 10 microns in diameter           dscf         Dry standard cubic foot         pph         Parts per million           dscm         Dry standard cubic meter         ppm         Parts per million           EPA         United States Environmental Protection Agency         ppmv         Parts per million           EPA         United States Environmental Protection Agency         ppmv         Parts per million           FE         Durited States Environmental Protection Agency         ppmv         Parts per million           FE         Degrees Fahrenheit         PS         Performance Specification           FG         Flexible Group         PSD         Performance Specification           GC         Genlon of Applied Coating Solids         psia         Pounds per square inch absolute           GC         General Condition         psig         Pounds per square inch absolute           GC         General Condition         PST<	CAM	Compliance Assurance Monitoring	NMOC	
CO Carbon Monoxide NSR New Source Review  COM Continuous Opacity Monitoring PM Particulate Matter  department Michigan Department of Environmental Quality PM-10 Particulate Matter less than 10 microns in diameter  dscf Dry standard cubic foot pph Pound per hour  dscm Dry standard cubic meter ppm Parts per million  EPA United States Environmental Protection Agency ppmv Parts per million by volume  EU Emission Unit ppmw Parts per million by weight  "F Degrees Fahrenheit PS Performance Specification  FG Flexible Group PSD Prevention of Significant Deterioration  GACS Gallon of Applied Coating Solids psia Pounds per square inch absolute  GC General Condition psig Pounds per square inch absolute  GC General Condition Part Permanent Total Enclosure  HAP Hazardous Air Pollutant PTI Permit to Install  Hg Mercury RACT Reasonable Available Control Technology  hr Hour ROP Renewable Operating Permit  HP Horsepower SC Special Condition  HP Horsepower SC Special Condition  HP Horsepower SC Special Condition  INSE Initial Risk Screening Level SC2 Sulfur Dioxide  ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  M Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality Vf Vear	CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
COM         Continuous Opacity Monitoring         PM         Particulate Matter           department         Michigan Department of Environmental Quality         PM-10         Particulate Matter less than 10 microns in diameter           dscf         Dry standard cubic foot         pph         Pound per hour           dscm         Dry standard cubic meter         ppm         Parts per million           EPA         United States Environmental Protection Agency         ppmv         Parts per million by volume           EU         Emission Unit         ppmw         Parts per million by volume           °F         Degrees Fahrenheit         PS         Performance Specification           FG         Flexible Group         PSD         Prevention of Significant Deterioration           GACS         Gallon of Applied Coating Solids         psia         Pounds per square inch absolute           GC         General Condition         psig         Pounds per square inch absolute           GC         General Condition         psig         Pounds per square inch absolute           GC         General Condition         psig         Pounds per square inch absolute           HAP         Hazardous Air Pollutant         PTI         Permanent Total Enclosure           HAP         Heavency         RACT	CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
department Michigan Department of Environmental Quality diameter  Dry standard cubic foot pph Pound per hour  dscm Dry standard cubic meter ppm Parts per million by volume  EPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Protection Agency ppmv Parts per million by weight  FEPA United States Environmental Quality Ppm Parts per million pound parts per million by weight  FEPA United States Environmental Quality Ppm Parts per million pound parts per million by weight  FEPA United States Environmental Quality Ppm Parts per million Pound Parts per million ppmp Parts per million pound parts per million ppmp Parts per million pound parts per million ppmp Parts per million ppm	СО	Carbon Monoxide	NSR	New Source Review
diameter dscf Dry standard cubic foot pph Pound per hour dscm Dry standard cubic meter ppm Parts per million EPA United States Environmental Protection Agency ppmv Parts per million by volume EU Emission Unit ppmw Parts per million by weight *F Degrees Fahrenheit PS Performance Specification FG Flexible Group PSD Prevention of Significant Deterioration GACS Gallon of Applied Coating Solids psia Pounds per square inch absolute GC General Condition psig Pounds per square inch gauge gr Grains PeTE Permanent Total Enclosure HAP Hazardous Air Pollutant PTI Permit to Install Hg Mercury RACT Reasonable Available Control Technology hr Hour ROP Renewable Operating Permit HP Horsepower SC Special Condition H2S Hydrogen Sulfide scf Standard cubic feet HVLP High Volume Low Pressure * sec Seconds ID Identification (Number) SCR Selective Catalytic Reduction IRSL Initial Threshold Screening Level SN State Registration Number IRSL Initial Threshold Screening Level SRN State Registration Number ILAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons MACT Maximum Achievable Control Technology MAERS Michigan Air Emissions Reporting System MAP Malfunction Abatement Plan VE Visible Emissions MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds mg Milligram yr Year	СОМ	Continuous Opacity Monitoring	PM	Particulate Matter
dscm Dry standard cubic meter ppm Parts per million  EPA United States Environmental Protection Agency ppmv Parts per million by volume  EU Emission Unit ppmw Parts per million by weight  °F Degrees Fahrenheit PS Performance Specification  FG Flexible Group PSD Prevention of Significant Deterioration  GACS Gallon of Applied Coating Solids psia Pounds per square inch absolute  GC General Condition psig Pounds per square inch gauge  gr Grains PeTE Permanent Total Enclosure  HAP Hazardous Air Pollutant PTI Permit to Install  Hg Mercury RACT Reasonable Available Control Technology  hr Hour ROP Renewable Operating Permit  HP Horsepower SC Special Condition  Hy2S Hydrogen Sulfide scf Standard cubic feet  HVLP High Volume Low Pressure * sec Seconds  ID Identification (Number) SCR Selective Catalytic Reduction  IRSL Initial Risk Screening Level SO2 Sulfur Dioxide  ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System upg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram Visual Achievable Control Technology yr Year	department		PM-10	diameter
EPA United States Environmental Protection Agency ppmw Parts per million by volume  EU Emission Unit ppmw Parts per million by weight  FF Degrees Fahrenheit PS Performance Specification  FG Flexible Group PSD Prevention of Significant Deterioration  GACS Gallon of Applied Coating Solids psia Pounds per square inch absolute  GC General Condition psig Pounds per square inch gauge  gr Grains PeTE Permanent Total Enclosure  HAP Hazardous Air Pollutant PTI Permit to Install  Hg Mercury RACT Reasonable Available Control Technology  hr Hour ROP Renewable Operating Permit  HP Horsepower SC Special Condition  H <sub>2</sub> S Hydrogen Sulfide scf Standard cubic feet  HVLP High Volume Low Pressure * sec Seconds  ID Identification (Number) SCR Selective Catalytic Reduction  IRSL Initial Risk Screening Level SQ <sub>2</sub> Sulfur Dioxide  ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram	dscf	-	pph	-
EU Emission Unit ppmw Parts per million by weight  *F Degrees Fahrenheit PS Performance Specification  FG Flexible Group PSD Prevention of Significant Deterioration  GACS Gallon of Applied Coating Solids psia Pounds per square inch absolute  GC General Condition psig Pounds per square inch gauge  gr Grains PeTE Permanent Total Enclosure  HAP Hazardous Air Pollutant PTI Permit to Install  Hg Mercury RACT Reasonable Available Control Technology  hr Hour ROP Renewable Operating Permit  HP Horsepower SC Special Condition  H <sub>2</sub> S Hydrogen Sulfide scf Standard cubic feet  HVLP High Volume Low Pressure * sec Seconds  ID Identification (Number) SCR Selective Catalytic Reduction  IRSL Initial Risk Screening Level SO <sub>2</sub> Sulfur Dioxide  ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  MACT Maximum Achievable Control Technology tpy Tons per year  MACR Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram		-	ppm	•
°F         Degrees Fahrenheit         PS         Performance Specification           FG         Flexible Group         PSD         Prevention of Significant Deterioration           GACS         Gallon of Applied Coating Solids         psia         Pounds per square inch absolute           GC         General Condition         psig         Pounds per square inch absolute           gr         Grains         PeTE         Permanent Total Enclosure           HAP         Hazardous Air Pollutant         PTI         Permit to Install           Hg         Mercury         RACT         Reasonable Available Control Technology           hr         Hour         ROP         Renewable Operating Permit           HP         Horsepower         SC         Special Condition           H2S         Hydrogen Sulfide         scf         Standard cubic feet           HVLP         High Volume Low Pressure *         sec         Seconds           ID         Identification (Number)         SCR         Selective Catalytic Reduction           IRSL         Initial Risk Screening Level         SO2         Sulfur Dioxide           ITSL         Initial Threshold Screening Level         SRN         State Registration Number           LAER         Lowest Achievable Emission Rate	EPA	United States Environmental Protection Agency	ppmv	·
FG Flexible Group GACS Gallon of Applied Coating Solids GC General Condition gr Grains HAP Hazardous Air Pollutant Hg Mercury HOUR Horsepower HP Horsepower HVLP High Volume Low Pressure *  ID Identification (Number) ITSL Initial Threshold Screening Level ID LAER LOwest Achievable Emission Rate Ib Pound Meter  Meter MACT Maximum Achievable Control Technology TMACT Maximum Achievable Control Technology TMACT Maximum Achievable Environmental Quality MIDEQ Michigan Department of Environmental Quality Milligram Milligram Merus Persuare inch absolute Pounds per square inch absolute Pounds per grade inch absolute Pounds per grad		Emission Unit	ppmw	·
GACS Gallon of Applied Coating Solids psia Pounds per square inch absolute GC General Condition psig Pounds per square inch gauge gr Grains PeTE Permanent Total Enclosure HAP Hazardous Air Pollutant PTI Permit to Install Hg Mercury RACT Reasonable Available Control Technology hr Hour ROP Renewable Operating Permit HP Horsepower SC Special Condition H2S Hydrogen Sulfide scf Standard cubic feet HVLP High Volume Low Pressure * sec Seconds ID Identification (Number) SCR Selective Catalytic Reduction IRSL Initial Risk Screening Level SO2 Sulfur Dioxide ITSL Initial Threshold Screening Level SRN State Registration Number LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant Ib Pound Temp Temperature m Meter THC Total Hydrocarbons MACT Maximum Achievable Control Technology tpy Tons per year MAERS Michigan Air Emissions Reporting System µg Microgram MAP Malfunction Abatement Plan VE Visible Emissions MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds mg Milligram yr Year	°F	Degrees Fahrenheit	PS	Performance Specification
GC General Condition psig Pounds per square inch gauge gr Grains PeTE Permanent Total Enclosure HAP Hazardous Air Pollutant PTI Permit to Install Hg Mercury RACT Reasonable Available Control Technology hr Hour ROP Renewable Operating Permit HP Horsepower SC Special Condition H2S Hydrogen Sulfide scf Standard cubic feet HVLP High Volume Low Pressure * sec Seconds ID Identification (Number) SCR Selective Catalytic Reduction IRSL Initial Risk Screening Level SO2 Sulfur Dioxide ITSL Initial Threshold Screening Level SRN State Registration Number LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant Ib Pound Temp Temperature m Meter THC Total Hydrocarbons MACT Maximum Achievable Control Technology tpy Tons per year MAERS Michigan Air Emissions Reporting System µg Microgram MAP Malfunction Abatement Plan VE Visible Emissions MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds mg Milligram	FG	Flexible Group	PSD	Prevention of Significant Deterioration
gr Grains PeTE Permanent Total Enclosure HAP Hazardous Air Pollutant PTI Permit to Install Hg Mercury RACT Reasonable Available Control Technology hr Hour ROP Renewable Operating Permit HP Horsepower SC Special Condition H2S Hydrogen Sulfide scf Standard cubic feet HVLP High Volume Low Pressure * sec Seconds ID Identification (Number) SCR Selective Catalytic Reduction IRSL Initial Risk Screening Level SO2 Sulfur Dioxide ITSL Initial Threshold Screening Level SRN State Registration Number LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant Ib Pound Temp Temperature m Meter THC Total Hydrocarbons MACT Maximum Achievable Control Technology tpy Tons per year MAERS Michigan Air Emissions Reporting System µg Microgram MAP Malfunction Abatement Plan VE Visible Emissions MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds mg Milligram	GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
HAP Hazardous Air Pollutant PTI Permit to Install Hg Mercury RACT Reasonable Available Control Technology hr Hour ROP Renewable Operating Permit HP Horsepower SC Special Condition H <sub>2</sub> S Hydrogen Sulfide scf Standard cubic feet HVLP High Volume Low Pressure * sec Seconds ID Identification (Number) SCR Selective Catalytic Reduction IRSL Initial Risk Screening Level SQ <sub>2</sub> Sulfur Dioxide ITSL Initial Threshold Screening Level SRN State Registration Number LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant Ib Pound Temp Temperature m Meter THC Total Hydrocarbons MACT Maximum Achievable Control Technology tpy Tons per year MAERS Michigan Air Emissions Reporting System µg Microgram MAP Malfunction Abatement Plan VE Visible Emissions MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds mg Milligram	GC	General Condition	psig	Pounds per square inch gauge
HgMercuryRACTReasonable Available Control TechnologyhrHourROPRenewable Operating PermitHPHorsepowerSCSpecial ConditionH₂SHydrogen SulfidescfStandard cubic feetHVLPHigh Volume Low Pressure *secSecondsIDIdentification (Number)SCRSelective Catalytic ReductionIRSLInitial Risk Screening LevelSO₂Sulfur DioxideITSLInitial Threshold Screening LevelSRNState Registration NumberLAERLowest Achievable Emission RateTACToxic Air ContaminantIbPoundTempTemperaturemMeterTHCTotal HydrocarbonsMACTMaximum Achievable Control TechnologytpyTons per yearMAERSMichigan Air Emissions Reporting SystemμgMicrogramMAPMalfunction Abatement PlanVEVisible EmissionsMDEQMichigan Department of Environmental QualityVOCVolatile Organic CompoundsmgMilligramyrYear	gr	Grains	PeTE	Permanent Total Enclosure
hr Hour ROP Renewable Operating Permit HP Horsepower SC Special Condition H2S Hydrogen Sulfide scf Standard cubic feet HVLP High Volume Low Pressure * sec Seconds ID Identification (Number) SCR Selective Catalytic Reduction IRSL Initial Risk Screening Level SO <sub>2</sub> Sulfur Dioxide ITSL Initial Threshold Screening Level SRN State Registration Number LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant Ib Pound Temp Temperature m Meter THC Total Hydrocarbons MACT Maximum Achievable Control Technology tpy Tons per year MAERS Michigan Air Emissions Reporting System µg Microgram MAP Malfunction Abatement Plan VE Visible Emissions MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds mg Milligram	HAP	Hazardous Air Pollutant	PTI	Permit to Install
HP Horsepower SC Special Condition  H <sub>2</sub> S Hydrogen Sulfide scf Standard cubic feet  HVLP High Volume Low Pressure * sec Seconds  ID Identification (Number) SCR Selective Catalytic Reduction  IRSL Initial Risk Screening Level SO <sub>2</sub> Sulfur Dioxide  ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram	Hg	Mercury	RACT	Reasonable Available Control Technology
H <sub>2</sub> S Hydrogen Sulfide scf Standard cubic feet  HVLP High Volume Low Pressure * sec Seconds  ID Identification (Number) SCR Selective Catalytic Reduction  IRSL Initial Risk Screening Level SO <sub>2</sub> Sulfur Dioxide  ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram Yr Year	hr	Hour	ROP	Renewable Operating Permit
HVLP High Volume Low Pressure * sec Seconds  ID Identification (Number) SCR Selective Catalytic Reduction  IRSL Initial Risk Screening Level SO <sub>2</sub> Sulfur Dioxide  ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	HP	Horsepower	SC	Special Condition
ID Identification (Number) IRSL Initial Risk Screening Level SO₂ Sulfur Dioxide ITSL Initial Threshold Screening Level SRN State Registration Number LAER Lowest Achievable Emission Rate Ib Pound Temp Temperature m Meter THC Total Hydrocarbons MACT Maximum Achievable Control Technology MAERS Michigan Air Emissions Reporting System MAP Malfunction Abatement Plan MDEQ Michigan Department of Environmental Quality MILITARY MO2 Selective Catalytic Reduction SCR Selective Catalytic Reduction SO₂ Sulfur Dioxide SRN State Registration Number TAC Toxic Air Contaminant Temp Temperature THC Total Hydrocarbons The Total Hydrocarbons The Michigan Pepartment System Mpg Microgram Microgram VE Visible Emissions VI Volatile Organic Compounds Mpg Milligram Milligram VY Year	H₂S	Hydrogen Sulfide	scf	Standard cubic feet
IRSL Initial Risk Screening Level SO <sub>2</sub> Sulfur Dioxide  ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	HVLP	High Volume Low Pressure *	sec	Seconds
ITSL Initial Threshold Screening Level SRN State Registration Number  LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	ID	Identification (Number)	SCR	Selective Catalytic Reduction
LAER Lowest Achievable Emission Rate TAC Toxic Air Contaminant  Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	IRSL	Initial Risk Screening Level	$SO_2$	Sulfur Dioxide
Ib Pound Temp Temperature  m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	ITSL	Initial Threshold Screening Level	SRN	State Registration Number
m Meter THC Total Hydrocarbons  MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	LAER	Lowest Achievable Emission Rate	TAC	Toxic Air Contaminant
MACT Maximum Achievable Control Technology tpy Tons per year  MAERS Michigan Air Emissions Reporting System µg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	lb	Pound	Temp	Temperature
MAERS Michigan Air Emissions Reporting System μg Microgram  MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	m	Meter	THC	Total Hydrocarbons
MAP Malfunction Abatement Plan VE Visible Emissions  MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds  mg Milligram yr Year	MACT	Maximum Achievable Control Technology	tpy	Tons per year
MDEQ Michigan Department of Environmental Quality VOC Volatile Organic Compounds mg Milligram yr Year	MAERS	Michigan Air Emissions Reporting System	μg	Microgram
mg Milligram yr Year	MAP	Malfunction Abatement Plan		Visible Emissions
	MDEQ	Michigan Department of Environmental Quality	VOC	Volatile Organic Compounds
	mg	Milligram	yr	Year
				Percent

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (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 FGRULE290. Alternative formats must be approved by the AQD District Supervisor.

As an approved alternative to the SC VI.1 (e) requirements for FGRULE290, the permittee maintains and provides to AQD documentation of a worst-case Potential to Emit (PTE) rate based on a 31-day month for each emission unit included in Rule 290 Flexible Group. Should changes be made to an emissions unit included in Rule 290 Flexible Group, or if a new emissions unit is installed that is subject to Rule 290, then the Permittee shall maintain and provide a new set of information to the AQD District Supervisor updating the worst-case PTE rate.

# **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 table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B3692-2009. 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-B3692-2009 is being reissued as Source-Wide PTI No. MI-PTI-B3692-2015.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	NA	NA	NA

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-B3692-2015.

Permit to Install Number	ROP Revision Application Number/Issu ance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
93-15	201500090/ August 24, 2015	Incorporate Permit to Install (PTI) No. 93-15. PTI No. 93-15 is an adjustment of the PM testing frequency to once every five years concurrent with the ROP cycle. The PTI also removes the TRS limit.	EUCOPELAND+DISTANK

Permit to Install Number	ROP Revision Application Number/Issu ance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
210-15	201600048/ June 1, 2016	Incorporate Permit to Install (PTI) No. 210-15. PTI No. 210-15 removes the scrubber requirement for biogas sent to the boilers from FGBIOGASSYSTEM and updates the H2S and SO2 emission limits. Additionally, this modification incorporates language to allow for the option of a predictive emissions monitoring system (PEMS) for air pollution control monitoring in EUBOILER2 and EUBOILER4A when burning natural gas or biogas.	FGBIOGASSYSTEM EUBOILER2 EUBOILER4A

# **Appendix 7. Emission Calculations**

#### A. EUBOILER2

The permittee shall use the following equation to calculate the  $NO_x$  emission limit listed in Condition I.9 in conjunction with monitoring, testing, or recordkeeping data to determine compliance with the applicable requirements referenced in EUBOILER2.

$$\mathsf{E}_{\mathsf{n}} = \frac{\left(\mathsf{EL}_{\mathsf{go}} \times \mathsf{H}_{\mathsf{go}}\right) + \left(\mathsf{EL}_{\mathsf{ro}} \times \mathsf{H}_{\mathsf{ro}}\right) + \left(\mathsf{EL}_{\mathsf{c}} \times \mathsf{H}_{\mathsf{c}}\right)}{\left(\mathsf{H}_{\mathsf{go}} \times \mathsf{H}_{\mathsf{ro}} \times \mathsf{H}_{\mathsf{c}}\right)}$$

Where:  $E_n = NO_x$  emission limit (pound per million BTU)

 $EL_{ao} = 0.20$  pound per million BTU

 $H_{qq}$  = Heat input from combustion of natural gas

 $EL_{ro} = 0.40$  pound per million BTU

 $H_{ro}$  = Heat input from combustion of No. 6 fuel oil

 $EL_c = 0.70$  pound per million BTU

H<sub>c</sub> = Heat input from combustion of coal

#### **B. EUWASHERS**

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

Daily VOC emissions =  $(A \times EF \times (1 - CE)) + (B \times EF)$ 

Where: A = Amount of pulp processed under normal conditions (Tons of oven dried pulp on a daily basis)

B = Amount of pulp processed under abnormal conditions (Tons of oven dried pulp on a daily basis)

EF<sup>a</sup> = Emission factor

CE<sup>b</sup> = Control efficiency

<sup>&</sup>lt;sup>a</sup> In the absence of specific test data, a default EF of 0.518 pounds of VOC per ton of oven dried pulp shall be used.

<sup>&</sup>lt;sup>b</sup> CE shall equal 0.98 when emissions are collected by the LVHC Collection System and EUBOILER1 and EUBOILER2 are operating properly.

#### Appendix 8. Reporting

#### A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ, AQD, Report Certification form (EQP 5736) and MDEQ, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section 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.