

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

EFFECTIVE DATE: June 11, 2020
REVISION DATES: June 6, 2022; October 17, 2022

ISSUED TO

**Billerud Quinnesec, LLC, and
Specialty Minerals (Michigan) Inc.**

State Registration Number (SRN): B7192

LOCATED AT

W-6791 US Highway 2 and W-6705 US Highway 2, Quinnesec, Dickinson County, Michigan 49876

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B7192-2020b

Expiration Date: June 11, 2025

Administratively Complete ROP Renewal Application Due Between
December 11, 2023 and December 11, 2024

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 Rule 210(1) of the administrative rules promulgated under Act 451, 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-B7192-2020b

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

Michigan Department of Environment, Great Lakes, and Energy

Michael Conklin, Acting Marquette District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

Section 1 – Billerud Quinnesec, LLC

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SECTION 1 – BILLERUD QUINNESEC, LLC

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))**

Section 1 – Billerud Quinnesec, LLC

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

Monitoring/Recordkeeping

- 16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.

- 17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

- 18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**

- 19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**

- 20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**

- 21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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

Permit Shield

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

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

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

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- 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))**

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- d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
 - 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.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

DESCRIPTION

NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

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 8-1

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VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall not operate unless the fugitive dust control plan for all outside bulk storage piles, transport of bulk materials, landfill, outdoor conveyor systems, plant roadways and lots, and manufacturing activities specified in the Fugitive Dust Control Program has been implemented and is maintained. **(R 336.1371, R 336.1372, and Act 452.5524)**
2. Each responsible official shall certify annually the compliance status of the stationary source with all stationary Source-Wide conditions. This certification shall be included as part of the annual certification of compliance as required in General Conditions in Part A of the ROP and Rule 213(4)(c). **(R 336.1213(4)(c))**

Footnotes:

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

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

C. EMISSION UNIT SPECIAL 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
EU0101-1	Chip screening operations - Chips are screened to remove fines and overs (chips too large for pulping). Overs are conveyed to the chipper for reprocessing. Emissions are controlled by a baghouse.	11/01/1988 04/01/2008	NA
EU0102-1	Chip production operations – Roundwood is chipped in a rotary disc system and conveyed to screening operations or ship pile. Emissions are controlled by a baghouse.	06/01/1981	NA
EU0106-1	Air density separator – This process separates wood chips used in the process from reject material and conveys the chips to the storage pile or screening system.	11/01/1988	NA
EU0203-1	Chip bin – Chips that have been conveyed to the chip bin are metered, as needed, into the digester through a rotary feed system. Dilute vent gases from the chip bin are routed to the Waste Fuel Boiler or Recovery Furnace for incineration.	06/01/1981 08/02/1989 04/01/2008	FG2334-1 FGBBKRAFT-1
EU0204-1	Digester System – Chips and cooking additives are combined with steam in the digester to produce pulp. Concentrated vent gases from the digester system are routed to the Lime Kiln or Waste Fuel Boiler for incineration.	06/01/1981 04/01/2008 05/01/2012 10/31/2018	FG2334-1 FGBBKRAFT-1
EU0205-1	Digester Blow Tank – Pulp from the digester process is transferred to this tank prior to processing in the brown stock washing system. Dilute vent gases from the blow tank are routed to the Waste Fuel Boiler or Recovery Furnace for incineration.	06/01/1981	FG2334-1 FGBBKRAFT-1

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU0368-1	Brown Stock Washers – Pulp from the digester system is transferred to the brown stock washers where the pulp is screened and cleaned using a water solution. Dilute vent gases from the Brown Stock Washers are routed to the Waste Fuel Boiler or Recovery Furnace for incineration.	06/01/1981 05/01/1990 04/01/2008	FG2335-1 FGBBKRAFT-1
EU0407-1	White Liquor Oxidation System – A caustic solution is combined with air, steam and spent liquor solution which converts the sodium sulfide to sodium thiosulfate. A demister controls emission from the White Liquor Oxidation System.	05/01/1990	NA
EU0460-1	O ₂ Delignification System - Washed brown stock pulp is treated with oxygen and various chemicals to further cook the pulp. Dilute vent gases from the O ₂ delignification system are routed to the Waste Fuel Boiler or Recovery Furnace for incineration.	05/01/1990 05/01/1996 04/01/2008	FG2335-1
EU0508-1	Bleach Plant Process - Washed brown pulp is treated with various chemicals for brightening. Bleached and washed pulp from the EU0508-1 Bleaching Process is stored in hardwood pulp storage chests prior to being used on the paper machine or converted to dried pulp. Emissions are controlled by the D stage scrubbers.	06/01/1981 08/01/1994 04/01/2008	FGBLEACH-1
EU0513-1	Bleach Plant Process Extraction Tower - Washed pulp is treated with various chemicals for brightening. Emissions are controlled by a scrubber.	06/01/1981 08/01/1994 04/01/2008	FGBLEACH-1
EU0514-1	Bleach Plant Process Extraction Washer and Filtrate Storage - Washed pulp is treated with various chemicals for brightening. Emissions are controlled by a scrubber.	06/01/1981 08/01/1994 04/01/2008	FGBLEACH-1
EU0610-1	ClO ₂ Generating Plant – Process unit and associated equipment used to make chlorine dioxide (ClO ₂). Emissions are controlled by scrubbers.	06/01/1981 04/01/1994 04/01/2008	NA
EU0611-1	Methanol Storage Tank	04/01/1994	NA
EU0765-1	Evaporator System – Liquor from the digester and pulp washer systems is processed in the evaporator system to increase solids content of the liquor. Emissions are collected in the CVG system and routed to the Lime Kiln or Waste Fuel Boiler for incineration.	06/01/1981 04/01/2008	FG2334-1 FGBBKRAFT-1
EU0766-1	Hotwell – This unit is part of the evaporator system. Emissions are collected in the CVG system and routed to the Lime Kiln or Waste Fuel Boiler for incineration.	06/01/1981	FG2334-1 FGBBKRAFT-1

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU0767-1	Condensate Stripper – Condensate from the evaporator system is steam-stripped to remove organics. CVG Emissions are collected in the CVG system and routed to the Lime Kiln or Waste Fuel Boiler for incineration.	06/01/1981	FG2334-1 FGBBKRAFT-1
EU0815-1	Chemical Recovery Furnace capable of burning black liquor solids, salt cake and ESP hopper solids. Also capable of firing natural gas and incinerating vent gases (containing TRS compounds) from the pulping processes. Emissions are controlled by an ESP.	06/01/1981 05/30/1995 04/01/2008 05/01/2012 10/31/2018	NA
EU0816-1	Smelt Dissolving Tank – Inorganics from the Chemical Recovery Furnace and precipitator are mixed with weak wash to form green liquor. Emissions are controlled by a wet scrubber.	06/01/1981 04/01/2008 05/01/2012	NA
EU0917-1	Lime Kiln – Lime mud from the causticizing system is converted to lime in a rotary kiln. Emissions are controlled by a wet scrubber.	06/01/1981	NA
EU1019-1	Slaker – Green liquor from the recausticizing system and lime from the kiln or purchased lime are mixed in the slaker to produce white liquor. Emissions are controlled by a wet scrubber.	06/01/1981	NA
EU1121-1	Waste Fuel Boiler – Combination boiler capable of burning wood refuse, coal and natural gas to produce steam used in the mill. Emissions are controlled by a multicyclone collector, ESP and OFA system.	06/01/1981 10/22/2010	FGWFBMOD-1
EU1122-1	Package Boiler – Natural gas fired boiler that supplies steam to mill processes.	06/01/1988	NA
EU1125-1	Coal Crusher/Unloader & Handling – Emissions are controlled by a baghouse.	06/01/1981	FGSOLIDFUEL-1
EU1127-1	Fuel Hogging Operations – Bark and wood waste from the pulping operations are processed and transferred to the woodyard and wood refuse boiler. Emissions are controlled by a baghouse.	06/01/1981 06/01/1988	FGSOLIDFUEL-1
EU1128-1	Purchased Fuel Hogging Operations - Delivery system, for purchased hog fuel (wood refuse), which is screened and transferred to the hog fuel storage pile, then to the waste fuel boiler (EU1121-1). The new delivery system will have three (3) open air drop points that include the truck dumper, screen operation bypass, and transfer building bypass. Emissions are controlled by a baghouse.	10/20/2010	FGWFBMOD-1

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU000TWR-1	Cooling Tower - Mechanical induced draft cooling tower with high efficiency drift eliminators to be used for the existing steam turbine and the new 29 MW steam turbine at the Mill.	10/20/2010	FGWFBMOD-1
EU1137-1	Hogged Fuel / Coal Transfer – Emissions are controlled by a baghouse.	06/01/1981 06/01/1988	FGSOLIDFUEL-1
EU1227-1	Q41 Paper Machine – Pulp (from hardwood pulp, softwood pulp, coated broke, and uncoated broke storage) is combined with supplemental chemicals and additives to make various grades of paper.	06/01/1988	NA
EU1228-1	Finished Paper Trimming – Paper rolls on the calendars and rereelers are trimmed to meet customer specifications. Emissions are controlled by cyclones and baghouses.	06/01/1988	NA
EU1229-1	Q41 Starch Handling – Ethylated starch is unloaded, stored and transferred for use on the paper machine. Emissions are controlled by a baghouse.	06/01/1988	FGQ41STARCH-1
EU1239-1	Q41 Starch Handling – Ethylated starch is unloaded, stored and transferred for use on the paper machine. Emissions are controlled by a baghouse.	06/01/1988	FGQ41STARCH-1
EU1240-1	Q41 Starch Handling – Ethylated starch is unloaded, stored and transferred for use on the paper machine. Emissions are controlled by a baghouse.	06/01/1988	FGQ41STARCH-1
EU2336-1	Condensate Source Group – Emissions are controlled by a condensate stripper, the CVG and DVG systems, and recycled in the pulp washing system.	06/01/1981 05/01/1996	NA
EU22CI001-1	Fire Water Pump – Emergency CI RICE MACT unit for fire water distribution.	2001	FGCIRICEMACT-1
EU09SI001-1	Lime Mud Storage Tank Auxiliary Gas Engine – SI RICE MACT unit for Lime Mud Storage Tank mixing.	2002	FGSIRICEMACT-1
EU23SI001-1	Admin Computer Room Backup Generator – SI RICE MACT unit for Admin building backup computer power.	2004	FGSIRICEMACT-1
EU12SSI001-1	41 Computer Room Backup Generator – Emergency SI ICE used for 41 Area backup computer power.	2011	FGNSPSSSIICE-1
EU09SI002-1	Lime Kiln Auxiliary Gas Engine – SI RICE MACT unit used for turning the Lime Kiln during periods when the main drive is not used.	1996	FGSIRICEMACT-1

**EU0101-1 CHIP SCREENING OPERATIONS
EMISSION UNIT CONDITIONS**

DESCRIPTION

CHIP SCREENING OPERATIONS: Chips are screened to remove fines and overs (chips too large for pulping). Overs are conveyed to the chipper for re-processing.

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. Particulate matter (PM)	0.03 gr/dscf of exhaust gasses calculated on a dry gas basis ²	Hourly	EU0101-1	SC VI.1 - 3	40 CFR 52.21(j)(3)
2. PM	5.2 pph ²	Hourly	EU0101-1	SC VI.1 - 3	40 CFR 52.21(j)(3) R 336.1301(1)(c)
3. Visible emissions	0%	6-minute average	EU0101-1	SC VI.2	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU0101-1 unless the bag filter control equipment is operating properly.² (R 336.1301(1)(c), R 336.1331(c), R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU0101-1 process unless a gauge which measures the pressure drop across the fabric filter collector is operating properly. (40 CFR 64.4(e))

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 record and maintain on file monthly processing rates (throughput) and shall make the records available to the AQD upon request. (R 336.1910)

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2. The permittee shall record weekly non-certified visual opacity observation as an indicator of proper operation of the dust collector. The indicator is the presence of visible emissions. **(40 CFR 64.6(c)(1)(i and ii))**
3. The permittee shall continuously measure the pressure drop and record once per shift as an indicator of proper operation of the dust collector. The indicator range is 0.1 to 4.0 inches water column. The averaging period is daily. The monitor shall be calibrated annually. **(40 CFR 64.6(c)(1)(i, ii, and iii))**
4. An excursion is the presence of any visible emissions and/or a departure from the differential pressure gauge indicator range of 0.1 to 4.0 inches water column. **(40 CFR 64.6(c)(2))**
5. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. An excursion response triggers an inspection, corrective action, and a reporting requirement. 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))**
6. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
7. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
8. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

VII. REPORTING

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

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- 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 8-1

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV01-ST-042-001	32 ²	55 ²	R 336.2083 R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

- The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
- 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 ROP and 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))**

Footnotes:

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

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

**EU0102-1 CHIP PRODUCTION OPERATIONS
EMISSION UNIT CONDITIONS**

DESCRIPTION

CHIP PRODUCTION OPERATIONS – Roundwood is chipped in a rotary disc system and conveyed to screening operations or chip pile.

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	0.06 lb. / 1,000 lbs. of exhaust gases, calculated on a dry gas basis ²	Hourly	EU0102-1	SC VI.1 – 3	R 336.1331(1)(c)
2. Visible emissions	5 percent opacity ²	6-Minute Average	EU0102-1	SC VI.2	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU0102-1 unless the dust collectors are operating properly.² **(R 336.1301(1)(c), R 336.1331(1)(c), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU0102-1 unless a gauge which measures the pressure drop across the fabric filter collector is operating properly.² **(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 record and maintain on file monthly processing rates (throughput) and shall make the records available to the AQD upon request. **(R 336.1910)**
2. The permittee shall perform and record weekly non-certified visual opacity observation as an indicator of proper operation of the dust collector. The indicator is the presence of visible emissions. **(40 CFR 64.6(c)(1)(i and ii))**

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3. The permittee shall continuously measure the pressure drop and record once per day as an indicator of proper operation of the dust collector. The indicator range is 0.5 to 10.0 inches water column. The averaging period is daily. The monitor shall be calibrated annually. **(40 CFR 64.6(c)(1)(i, ii, and iii))**
4. An excursion is visible emissions greater than 5% opacity and/or a departure from the differential pressure gauge indicator range of 0.5 to 10.0 inches water column. **(40 CFR 64.6(c)(2))**
5. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. An excursion response triggers an inspection, corrective action, and a reporting requirement. 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))**
6. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
7. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
8. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

VII. REPORTING

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

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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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV01-ST-036-001	16 ²	14 ²	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
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 ROP and 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))**

Footnotes:

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

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

**EU0106-1 AIR DENSITY SEPARATOR
EMISSION UNIT CONDITIONS**

DESCRIPTION

AIR DENSITY SEPARATOR – This process separates wood chips used in the process from reject materials and conveys the chips to the storage pile or screening system.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Cyclone

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.03 gr/dscf of exhaust gases ²	Hourly	EU0106-1	SC VI.1	R 336.1331(1)(c)
2. PM	4 pph ²	Hourly	EU0106-1	SC VI.1	R 336.1331(1)(c)
3. Visible Emissions	0%	6-minute average	EU0106-1	SC VI.1	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EU0106-1 unless the cyclone is operating properly.² **(R 336.1301(1)(c), R 336.1331(1)(c), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

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))**

- The permittee shall perform and record weekly non-certified visible opacity observations as an indicator of proper operation of the cyclone. The permittee shall make the records available to the AQD upon request.² **(R 336.1301(1)(c))**

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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 8-1

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV01-ST-061-001	28 ²	98 ²	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU0407-1 WHITE LIQUOR OXIDATION SYSTEM
EMISSION UNIT CONDITIONS**

DESCRIPTION

WHITE LIQUOR OXIDATION SYSTEM - A caustic solution is combined with air, steam and spent liquor solution which converts the sodium sulfide to sodium thiosulfate. The oxidized white liquor is used to further treat wood pulp in the pulping process

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Demister

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.08 gr/dscf ²	Hourly	EU0407-1	SC VI.1	R 336.1331(1)(c)
2. PM	0.30 pph ²	Hourly	EU0407-1	SC VI.1	R 336.1331(1)(c)
3. Visible Emissions	5% opacity ²	6-Minute Average	EU0407-1	SC VI.1	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU0407-1 unless the demister is operating properly.² **(R 336.1301(1)(c), R 336.1331(1)(c), 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))**

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 perform and record weekly non-certified visible opacity observations as an indicator of proper operation of the demister. The permittee shall make the records available to the AQD upon request.² **(R 336.1301(1)(c))**

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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))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV04-ST-003-001	12 ²	100 ²	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU0610-1 ClO₂ GENERATING PLANT
EMISSION UNIT CONDITIONS**

DESCRIPTION

ClO₂ GENERATING PLANT – Process unit and associated equipment used to make chlorine dioxide (ClO₂). Three chlorine dioxide storage tanks, with chilled water scrubbers, chlorine dioxide adsorption tower, salt cake slurry tank, generator dump tank, barometric condenser, salt cake filter, seal tank, sample chamber sewer, hereinafter “chlorine dioxide generator”.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Scrubbers

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Chlorine	0.067 pph ¹	3-hour average	EU0610-1	SC VI.1	R 336.1224(1)
2. Chlorine	13.5 mg/m ³ , corrected to 70°F and 29.92 in Hg ¹	3-hour average	EU0610-1	SC VI.1	R 336.1224(1)
3. Chlorine Dioxide	0.035 pph ¹	3-hour average	EU0610-1	SC VI.1	R 336.1224(1)
4. Chlorine Dioxide	7.0 mg/m ³ , corrected to 70°F and 29.92 in Hg ¹	3-hour average	EU0610-1	SC VI.1	R 336.1224(1)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU0610-1 unless the white liquor scrubber is operating properly.² **(R 336.1224(1), R 336.1225, R 336.1910)**
2. The permittee shall not operate the three chlorine dioxide storage tanks unless the chilled water scrubbers and white liquor scrubber are operating properly.² **(R 336.1224(1), R 336.1225, 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))**

NA

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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 flow of the scrubber liquid to the white liquor scrubber on a continuous basis in a manner and with instrumentation acceptable to the AQD.² (R 336.1224(1), R 336.1225, R 336.1910)

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))

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV06-ST-009-001	10 ²	125 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

- 1. There shall be no visible emissions from the chlorine dioxide generator.² (R 336.1301(1)(c))

Footnotes:

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

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

**EU0611-1 METHANOL STORAGE TANK
EMISSION UNIT CONDITIONS**

DESCRIPTION

METHANOL STORAGE TANK

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Methanol	25.0 pph ¹	Hourly	EU0611-1	SC VI.1	R 336.1224(1) R 336.1225
2. Methanol	0.54 tpy ¹	12-month rolling time period	EU0611-1	SC VI.1	R 336.1224(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Methanol	600,000 gallons ²	12-month rolling time period	EU0611-1	SC VI.1	R 336.1201(3) R 336.1224(1)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not fill EU0611-1 at a rate faster than 200 gallons per minute.¹ (R 336.1224(1), R 336.1225)

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))

1. The permittee shall monitor and record the amount of methanol transferred into EU0611-1.¹ (R 336.1224(1), R 336.1225)

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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))**

VIII. STACK/VENT RESTRICTION(S)

Tank pressure may be released by a pressure/vacuum breaker safety valve, as needed. Pressure relief valve discharges through a goose-neck vent.

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV06-ST-007-002	4	22	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU0815-1 CHEMICAL RECOVERY FURNACE
EMISSION UNIT CONDITIONS**

DESCRIPTION

CHEMICAL RECOVERY FURNACE capable of burning black liquor solids, salt cake and ESP hopper solids. The Recovery Furnace is also capable of firing natural gas and vent gases (containing TRS compounds) from pulping process.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Electrostatic Precipitator (ESP)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Hydrogen Chloride (HCl)	3.4 mg/dscm, corrected to 8% oxygen ¹	3-hour average	EU0815-1	SC V.1	R 336.1224(1) R 336.1225
2. HCl	2.8 pph ¹	3-hour average	EU0815-1	SC V.1	R 336.1224(1) R 336.1225
3. Sulfuric Acid (H ₂ SO ₄)	2.5 mg/dscm, corrected to 8% oxygen ²	3-hour average	EU0815-1	SC V.1	R 336.1224(1) R 336.1225 40 CFR 52.21(j)(3)
4. H ₂ SO ₄	2.07 pph ²	3-hour average	EU0815-1	SC V.1	R 336.1224(1) 40 CFR 52.21(j)(3)
5. H ₂ SO ₄	9.06 tpy	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3)
6. Total Reduced Sulfur (TRS) based on H ₂ S	4.3 ppmv on a dry basis, at 8% oxygen ²	24-hour daily	EU0815-1	SC VI.2 SC VI.4	R 336.1224(1) R 336.1225 40 CFR 52.21(j)(3)
7. TRS based on H ₂ S	5.0 pph ²	24-hour daily	EU0815-1	SC V.1	R 336.1224(1) R 336.1225 40 CFR 52.21(j)(3)
8. TRS based on H ₂ S	10.0 ppmv on a dry basis, at 8% oxygen ²	2-hour	EU0815-1	SC VI.2 SC VI.4	R 336.1224(1) R 336.1225 40 CFR 52.21(j)(3)
9. TRS based on H ₂ S	11.6 pph ²	2-hour	EU0815-1	SC V.1	R 336.1224(1) R 336.1225 40 CFR 52.21(j)(3)
10. TRS based on H ₂ S	5.0 ppmv on a dry basis, at 8% oxygen ²	12-hour	EU0815-1	SC VI.2 SC VI.4	R 336.1224(1) R 336.1225 40 CFR 60.283(a)(2) 40 CFR 52.21(j)(3)

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Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
11. TRS based on H ₂ S	5.8 pph ²	12-hour	EU0815-1	SC V.1 SC VI.4.b	R 336.1224(1) R 336.1225 40 CFR 52.21(j)(3)
12. TRS based on H ₂ S	10.25 tpy	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3)
13. H ₂ S	10.25 tpy	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3)
14. TCDD Toxic Equivalent (2,3,7,8-tetra-chlorodibenzo-p-dioxin) ^(a)	1.0 nanogram per dscm of exhaust gases, at 8% oxygen ²	Hourly	EU0815-1	SC V.1	R 336.1224(1) R 336.1225 R 336.2003(1)(c)
15. PM-2.5	108.72 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
16. PM-10	0.027 gr/dscf of exhaust gases, on a dry basis, corrected to 8% oxygen ²	Hourly	EU0815-1	SC VI.1.a	40 CFR 52.21(j)(3)
17. PM-10	51.1 pph ²	Hourly	EU0815-1	SC VI.1.a	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d) 40 CFR 52.21(j)(3)
18. PM-10	122.24 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
19. PM	0.044 gr/dscf at 8% oxygen ²	Hourly	EU0815-1	SC VI.1.c SC VI.1.d SC VI.1.e SC V.2	40 CFR 63.862(a)(1)(i)
20. PM	129.43 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3)
21. Sulfur Dioxide (SO ₂)	50 ppmv on a dry basis, at 8% oxygen ²	24-hour daily	EU0815-1	SC VI.4	40 CFR 52.21(j)(3)
22. SO ₂	110 pph ²	24-hour daily	EU0815-1	SC V.1 SC VI.4.b	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d) 40 CFR 52.21(j)(3)

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Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
23. SO ₂	19.06 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
24. Nitrogen Oxides (NO _x)	120 ppmv on a dry basis, at 8% oxygen ²	24-hour daily	EU0815-1	SC VI.4	40 CFR 52.21(j)(3)
25. NO _x	188 pph ²	24-hour daily	EU0815-1	SC V.1 SC VI.4.b	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d) 40 CFR 52.21(j)(3)
26. NO _x	709.23 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
27. Carbon Monoxide (CO) ^b	400 ppmv on a dry basis at 8% oxygen ²	8-hour average	EU0815-1	SC VI.4	R 336.2804 40 CFR 52.21(d) 40 CFR 52.21(j)(3)
28. CO ^b	384 pph ²	8-hour average	EU0815-1	SC V.1	R 336.2804 40 CFR 52.21(d) 40 CFR 52.21(j)(3)
29. CO ^b	500 ppmv on a dry basis, at 8% oxygen ²	1-hour average	EU0815-1	SC VI.4	40 CFR 52.21(j)(3)
30. CO ^b	480 pph ²	1-hour average	EU0815-1	SC V.1 SC VI.4.b	R 336.2804 40 CFR 52.21(d) 40 CFR 52.21(j)(3)
31. CO	592.31 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3) R 336.2804 40 CFR 52.21(d)
32. VOC	43.96 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3)
33. Lead	0.54 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.5	R 336.1205(3) R 336.2804 40 CFR 52.21(d)
34. Total Gaseous Nonmethane Organics (TGNMO) measured as total methane	50 ppmv on a dry basis, at 8% oxygen ²	3-hour average	EU0815-1	SC V.1	R 336.1702(a) 40 CFR 52.21(j)(3)
35. TGNMO measured as total methane	27.4 pph ²	3-hour average	EU0815-1	SC V.1	R 336.1702(a) 40 CFR 52.21(j)(3)
<p>a. The total polychlorinated dibenzo-p-dioxins and dibenzofurans emissions as 2,3,7,8-TCDD toxic equivalents are to be calculated using the USEPA Toxic Equivalent Factors (TEFs) in TEFs/89.</p> <p>b. These limits do not apply during startup and shutdown.</p>					

II. MATERIAL LIMIT(S)

1. The permittee shall not fire any fuels in EU0815-1 except for natural gas, virgin black liquor solids, salt cake or ESP hopper materials. **(R 336.1224, R 336.1225, R 336.1702(a))**
2. The natural gas fuel usage for EU0815-1 shall not exceed 793.55 million cubic feet per year. **(R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))**
3. The permittee shall not fire virgin black liquor solids, salt cake or ESP hopper materials greater than 4.44 million pounds per operating day and 755,000 tons per year, based on a 12-month rolling time period.² **(R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. During startup or shut down of EU0815-1, the CO emissions shall not exceed 1000 ppmv on a dry basis, corrected to 8% O₂, based upon a 12-hour average. Compliance with the CO emission limit during the periods of startup and shutdown shall be determined using CEMS for CO. **(R 336.2804, 40 CFR 52.21(d), 40 CFR 52.21(j)(3))**
2. The steam load from EU0815-1 while incinerating DVGs shall not be less than 100,000 pounds of steam per hour, unless otherwise demonstrated by the permittee to the satisfaction of the AQD. **(R 336.1224, R 336.1225, R 336.1901)**
3. The permittee shall not operate EU0815-1 unless the smelt dissolving tank scrubber and mist eliminator are operating properly.² **(R 336.1224, R 336.1225, R 336.1301, R 336.1331(1)(c), R 336.1702(a), R 336.1901, 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 336.1201(3))**

1. The permittee shall conduct performance testing for SO₂, NO_x, CO, HCl, Sulfuric Acid, TRS, TCDD, and TGNMO for EU0815-1 by testing at owner's expense, in accordance with Department requirements, once every ROP renewal period. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
CO	40 CFR Part 60, Appendix A
NO _x	40 CFR Part 60, Appendix A
SO ₂	40 CFR Part 60, Appendix A
Hydrogen Chloride	40 CFR Part 60, Appendix A
Sulfuric Acid	40 CFR Part 60, Appendix A
Total Reduced Sulfurs (TRS)	40 CFR Part 60, Appendix A
TCDD	40 CFR Part 60, Appendix A
Total Gaseous Nonmethane Organics (TGNMO)	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60, 40 CFR 52.21, 40 CFR 64.4(e), 40 CFR 64.6(d))**

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2. The permittee shall conduct performance tests for particulate matter per the applicable performance test requirements and test methods specified in 40 CFR Part 63, Subpart A and MM. The first periodic performance test must be conducted by October 13, 2020. Subsequent periodic tests must be conducted within 5 years following the previous performance test. Notification of performance tests shall be submitted at least 60 days in advance to the Administrator along with a site-specific test plan if requested. Test results must be submitted within 60 days of test completion to the USEPA via CEDRI in a format generated through EPA's ERT (electronic reporting tool), or consistent with the XML schema listed on USEPA's ERT website. A notification of compliance status must be submitted within 60 days of performance test completion. **(40 CFR 63.7, 40 CFR 63.865, 40 CFR 63.867)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Continuous Opacity Monitoring
 - a. The permittee shall utilize COM-recorded opacity as an indicator of the proper operation of the ESP. The indicator range of opacity defining proper function of the ESP is 20%. Six-minute average values shall be based on 36 or more equally spaced instantaneous opacity measurements per six-minute period. An excursion is a departure from the indicator range of 20% opacity. Opacity shall be determined at the exit of the main stack using a combiner equation acceptable to the AQD. **(40 CFR 64.6(c)(1)(i and ii), 40 CFR 64.6(c)(2))**
 - b. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of EU0815-1 (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
 - c. The permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system to measure opacity in accordance with the procedures in 40 CFR 63.6(h) and 40 CFR 63.8. Opacity shall be determined at the exhaust of the recovery furnace to the main stack. **(40 CFR 63.6(h), 40 CFR 63.8)**
 - d. The permittee shall maintain opacity at or below 35% except for 2% of the time in any quarter and periods of SSM. **(40 CFR Part 63, Subpart MM)**
 - e. The permittee shall implement corrective action when the average of ten consecutive 6-minute averages result in a measurement greater than 20% opacity. **(40 CFR 63.864(k)(2)(i))**
 - f. The permittee shall conduct inspections, evaluations, and quality control for the COM. **(R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 52.21(j)(3))**
 - g. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
 - h. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
 - i. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

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2. Continuous Emission Monitoring (CEM) System and Recordkeeping.
 - a. The permittee shall calibrate, monitor and record gaseous emissions of TRS on a continuous basis, with certified instrumentation, and in a manner acceptable to 40 CFR Part 60, Appendix B, Performance Specification Nos. 1 & 5. **(40 CFR 60.13, 40 CFR 60 Appendix B, Performance Specifications Nos. 1 & 5, 40 CFR 60.284)**
 - b. The permittee shall perform and report Quality Assurance Procedures of the CEMS and submit it to the AQD in a format of the data assessment report (DAR) along with the quarterly excess emission reports (EER) and summary reports. **(40 CFR Part 60, Subparts A & BB, and Appendix F)**
3. Process Monitoring System and Recordkeeping.
 - a. The permittee shall comply with the monitoring system and recordkeeping as required by 40 CFR 60.284. **(40 CFR 60.284)**
4. Other Monitoring and/or Recordkeeping.
 - a. The permittee shall maintain records of Particulate Matter and TRS emissions. **(40 CFR Part 60, Subpart A; 40 CFR 60.284)**
 - b. Compliance with the concentration limits (ppmv) of SO₂, NO_x, CO, and TRS shall be determined using CEMS located downstream of the ESP and in accordance with the procedures described in 40 CFR Part 60, Subpart BB, Section 60.284 and 40 CFR Part 60, Appendix B and the applicable Performance Specifications (PS) 2 through 5. **(40 CFR 52.21, 40 CFR 60.284, 40 CFR 60.285)**
 - c. The permittee shall monitor and record, in a satisfactory manner, the amount of fuel combusted daily and monthly from EU0815-1 and calculate the annual capacity factor for natural gas as determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. **(R 336.1205(3), 40 CFR 60.49b(d)(o))**
 - d. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor and record black liquor solid (BLS) usage rate from EU0815-1, on a daily basis. **(R 336.1205(3))**
5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period H₂SO₄, TRS, H₂S, PM-2.5, PM-10, PM, SO₂, NO_x, CO, VOC and lead emission calculation records for EU0815-1, as required by SC I.5, I.12, I.13, I.15, I.18, I.20, I.23, I.26, I.31, I.32 and I.33. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**
6. The permittee shall maintain a record of all fuels including natural gas, virgin black liquor solids, salt cake and ESP hopper materials fired in EU0815-1 on a monthly and 12-month rolling time period basis. The record shall be maintained on-site and made available to the Department upon request. **(R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))**
7. The permittee shall keep records, as applicable, specified in 40 CFR 63.866(b)-(d) in addition to the applicable recordkeeping requirements of 40 CFR 63.10. **(40 CFR 63.866(b)-(d), 40 CFR 63.10)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or

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exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**

5. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**
6. The permittee shall submit any performance test reports, including RATA reports, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
7. The permittee shall submit the notifications and reports as specified in the applicable sections of 40 CFR Part 63, Subpart MM and A. Semiannual excess emissions reports must be submitted electronically via CEDRI if forms are available. If CEDRI forms are not available, electronic reports must be submitted within one year of availability. **(40 CRR 63.867, 40 CFR 63.9, 40 CFR 63.10)**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV08-ST-004-001	168 ¹	299 ¹	R 336.1225, R 336.2803 R 336.2804, 40 CFR 52.21(c)&(d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall not generate DVGs during startup unless the DVGs can be accepted to either EU0815-1 or EU1121-1, which has maintained a minimum steam load under stable conditions.² **(R 336.1224, R 336.1225, R 336.1301(1)(c), R 336.1331(1)(c), R 336.1702(a), R 336.1901)**
2. The permittee shall not operate EU0815-1 on virgin black liquor solids, salt cake, and/or ESP hopper materials, including during startup and shutdown, unless the ESP is operating properly.² **(R 336.1224, R 336.1225, R 336.1301(1)(c), R 336.1331(1)(c), R 336.1901, R 336.1910, 40 CFR 52.21)**
3. The permittee shall maintain records of the startup and shutdown periods for EU0815-1, including dates, starting time and ending time of such periods and CO emission rates during such periods on file for a period of at least two years and made available to the AQD upon request.² **(R 336.2804, 40 CFR 52.21(d), 40 CFR 52.21)**
4. The period of startup or shutdown is defined as the period when the permittee commences the process of continuously burning black liquor solids in EU0815-1 or begins the process of discontinuing the continuous burning of black liquor solids, respectively, and does not include any period when the permittee is combusting only natural gas in EU0815-1. The periods of startup or shutdown shall not exceed 12 hours per occurrence.² **(R 336.1224, R 336.1225, R 336.1301(1)(c), R 336.1331(1)(c), R 336.1901, 40 CFR 52.21)**
5. The permittee shall monitor and record the total hourly, daily and annual EU0815-1 feed rates of black liquor solids which includes the virgin black liquor solids, salt cake, and ESP hoppers materials; the hourly steam load and natural gas usage of EU0815-1; the voltage and amperage supplied to all the fields and chambers of EU0815-1's ESP; and the time periods of one chamber operation of the ESP on a continuous basis in a manner and with instrumentation acceptable to the AQD.² **(R 336.1224, R 336.1225, R 336.1301(1)(c), R 336.1331(1)(c), R 336.1901, 40 CFR 52.21)**
6. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

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7. 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 ROP and 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))**

Footnotes:

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

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

**EU0816-1 SMELT DISSOLVING TANK
EMISSION UNIT CONDITIONS**

DESCRIPTION

SMELT DISSOLVING TANK – Inorganics from the chemical recovery furnace and precipitator are mixed with weak wash to form green liquor.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Scrubber

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. H ₂ S	0.83 pph ²	3-hour average	EU0816-1	SC V.1	40 CFR 52.21(j)(3)
2. H ₂ S	3.63 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0816-1	SC VI.8	R 336.1205(3)
3. TRS **	0.015 lb/ton BLS on a dry weight as fired basis ²	Hourly	EU0816-1	SC V.1	40 CFR 52.21(j)(3) 40 CFR 60.283(a)(4)
4. TRS **	1.19 pph ²	Hourly	EU0816-1	SC V.1	40 CFR 52.21(j)(3)
5. TRS	0.033 lb /ton BLS as H ₂ S ²	3-hour average	EU0816-1	SC V.1	40 CFR 60.283(a)(4)
6. TRS	5.21 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0816-1	SC VI.8	R 336.1205(3)
7. PM **	0.107 lb/ton BLS on a dry weight as fired basis ²	Hourly	EU0816-1	SC V.1 SC VI.3	40 CFR 52.21(j)(3)
8. PM **	8.5 pph ²	Hourly	EU0816-1	SC V.1 SC VI.3	40 CFR 52.21(j)(3)
9. PM	0.2 lb/ton BLS (dry weight) ²	3-hour average	EU0816-1	SC V.2	40 CFR 63.862(a)(1)(i)(B) 40 CFR 60.282(a)(2)
10. PM	28.16 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0816-1	SC VI.8	R 336.1205(3)
11. PM-10 **	0.107 lb/ton BLS on a dry weight as fired basis ²	Hourly	EU0816-1	SC V.1 SC VI.3	40 CFR 52.21(j)(3)

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Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
12. PM-10 **	8.5 pph ²	Hourly	EU0816-1	SC V.1 SC VI.3	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) 40 CFR 52.21(j)(3)
13. PM-10	23.69 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0816-1	SC VI.8	R 336.1205(3) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
14. PM-2.5	22.5 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0816-1	SC VI.8	R 336.1205(3) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
15. SO ₂ **	0.016 lb/ton BLS on a dry weight as fired basis ²	Hourly	EU0816-1	SC V.1 SC VI.2	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
16. SO ₂ **	1.27 pph ²	Hourly	EU0816-1	SC V.1 SC VI.2	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
17. SO ₂	5.56 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0816-1	SC VI.8	R 336.1205(3) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
18. VOC	14.61 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0815-1	SC VI.8	R 336.1205(3)
19. CO	5.29 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0816-1	SC VI.8	R 336.1205(3) R 336.2804 40 CFR 52.21(d)
20. NO _x	11.29 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0816-1	SC VI.8	R 336.1205(3) R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
21. TGNMO measured as methane	200 ppmv of exhaust gases, on a dry basis ²	3-hour average	EU0816-1	SC V.1	R 336.1702(a) 40 CFR 52.21(j)(3)
22. TGNMO measured as methane	6.5 pph ²	3-hour average	EU0816-1	SC V.1	R 336.1702(a) 40 CFR 52.21(j)(3)

BLS = Black liquor solids

**Limit is based on a maximum of 4.44 MM lbs per day of virgin black liquor solids, salt cake and/or ESP hoppers materials.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Input feed to the EU0816-1 shall cease immediately, consistent with safe operating procedures, upon initiation of collector bypass. Input feed to the tank shall not restart until the collector is back online and functioning properly. The permittee shall monitor and record the time(s) when the collector bypass is opened and closed.¹ **(R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall verify H₂S, TRS, PM, PM-10, SO₂, and TGNMO emission rates from EU0816-1, by testing at owner's expense, in accordance with the Department requirements, once every ROP renewal period. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM-10	40 CFR Part 51, Appendix M
SO ₂	40 CFR Part 60, Appendix A
H ₂ S	40 CFR Part 60, Appendix A
Total Gaseous Nonmethane Organics (TGNMO)	40 CFR Part 60, Appendix A
Total Reduced Sulfurs (TRS)	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. The TRS emission testing shall be conducted when incinerating DVGs in the chemical recovery furnace. **(R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.7, 40 CFR 60.8 and Appendix A)**

2. The permittee shall conduct performance tests for particulate matter per the applicable performance test requirements and test methods specified in 40 CFR Part 63, Subpart A and MM. The first periodic performance test must be conducted by October 13, 2020. Subsequent periodic tests must be conducted within 5 years following the previous performance test. Notification of performance tests shall be submitted at least 60 days in advance to the Administrator along with a site-specific test plan if requested. Test results must be submitted within 60 days of test completion to the USEPA via CEDRI in a format generated through USEPA's ERT (electronic reporting tool), or consistent with the XML schema listed on USEPA's ERT website. A notification of compliance status must be submitted within 60 days of performance test completion. Beginning October 11, 2019, the notification of compliance status must be submitted to the USEPA via CEDRI.² **(40 CFR 63.7, 40 CFR 63.865, 40 CFR 63.867)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall install, calibrate, maintain and operate a continuous monitoring system to measure fan amperage and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8. **(40 CFR 63.864(e)(10), 40 CFR 60.13(A), 40 CFR 63.8(b)(1))**
2. The permittee shall establish scrubber operating ranges for fan amperage and scrubbing liquid flow rate as specified in 40 CFR 63.864(j) and 40 CFR 63.865. The minimum scrubbing liquid flow rate is the rate established during the most recent performance test for particulate matter. **(40 CFR 63.864(j))**
3. The permittee shall maintain operating parameters within the range established according to 40 CFR 63.864(j) except for up to five 3-hour average periods in a semi-annual period. No more than one exceedance will be attributed to any 24-hour period. **(40 CFR 63.864(k)(2)(iv) and 40 CFR 63.864(k)(3))**
4. An excursion is when any 3-hour average parameter value is outside the minimum scrubber liquid flow rate established during the most recent performance test for particulate matter as provided in 40 CFR 63.864(j). The permittee shall implement corrective action upon detection of an excursion. **(40 CFR 63.864(k)(1)(ii) (40 CFR 64.6(c)(2))**
5. The permittee shall conduct CMS inspections, evaluations and quality control. **(40 CFR 63.864(f) and 40 CFR 63.8(d)-(e))**
6. The permittee shall maintain the records, as applicable, specified in 40 CFR 63.866(b)-(d) in addition to the applicable record-keeping requirements of 40 CFR 63.10. **(40 CFR 63.866(b)-(d), 40 CFR 63.10)**
7. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period H₂S, TRS, PM, PM-10, PM-2.5, SO₂, VOC, CO and NO_x emission calculation records for EU0816-1, as required by SC I.2, I.6, I.10, I.13, I.14, I.17, I.18, I.19, and I.20. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**
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 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). See Appendix 3 for the corrective action plan. **(40 CFR 64.7(d))**
9. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
10. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
11. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and

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

VII. REPORTING

1. Quarterly EER, within 30 days following the end of each calendar quarter. **(40 CFR 60.7(c) & (d))**
2. The permittee shall submit the notifications and reports as specified in the applicable sections of 40 CFR 63 Subparts MM and A. Beginning October 11, 2019, semiannual excess emissions reports must be submitted electronically via CEDRI if forms are available. If CEDRI forms are not available, electronic reports must be submitted within one year of availability. **(40 CFR 63.867, 40 CFR 63.9, 40 CFR 63.10)**
3. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
4. 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))**
5. The permittee shall submit any performance test reports, including RATA reports, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV08-ST-005-001	48 ¹	186 ¹	R 336.1225 R 336.2803 R336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart MM: National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi chemical Pulp Mills. **(40 CFR Part 63, Subpart MM)**
3. 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 ROP and 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))**

Footnotes:

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

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

**EU0917-1 LIME KILN
EMISSION UNIT CONDITIONS**

DESCRIPTION

LIME KILN – Lime mud from the causticizing system is converted to lime in a rotary kiln.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Wet scrubber

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Methanol	8.0 mg/dscm ¹	3-hour average	EU0917-1	SC V.1	R 336.1224 R 336.1225
2. Methanol	0.89 pph ¹	3-hour average	EU0917-1	SC V.1	R 336.1224 R 336.1225
3. Total Reduced Sulfur (TRS) based on H ₂ S	7.5 ppmv on a dry basis, at 10% oxygen ²	24-hour daily	EU0917-1	SC VI.1	R 336.1224 R 336.1225 R 336.1901 40 CFR 52.21(j)(3)
4. TRS based on H ₂ S	1.16 pph ²	24-hour daily	EU0917-1	SC V.1, VI.1	R 336.1224 R 336.1225 R 336.1901 40 CFR 52.21(j)(3)
5. TRS based on H ₂ S	10.0 ppmv on a dry basis, at 10% oxygen ²	1-hour	EU0917-1	SC VI.1	R 336.1224 R 336.1225 R 336.1901 40 CFR 52.21(j)(3)
6. TRS based on H ₂ S	1.56 pph ²	1-hour	EU0917-1	SC V.1, VI.1	R 336.1224 R 336.1225 R 336.1901 40 CFR 52.21(j)(3)
7. TRS based on H ₂ S	8.0 ppmv on a dry basis, at 10% oxygen ²	12-hour	EU0917-1	SC VI.1	40 CFR 60.283(a)(5)
8. TRS based on H ₂ S	1.26 pph ²	12-hour	EU0917-1	SC V.1, VI.1	R 336.1224 R 336.1225 R 336.1901 40 CFR 52.21(j)(3)
9. Carbon Monoxide (CO)	0.36 lb/MM BTU heat input when firing natural gas and/or No. 6 fuel oil ²	8-hour average	EU0917-1	SC V.1	R 336.2804 40 CFR 52.21(d)

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Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
10. Nitrogen Oxides (NOx)	0.30 lb/MM BTU heat input when firing natural gas and/or No. 6 fuel oil ²	24-hour daily	EU0917-1	SC V.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
11. NOx	29 pph ²	24-hour daily	EU0917-1	SC V.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
12. PM	0.064 gr/dscf at 10% oxygen ²	Hourly	EU0917-1	SC V.3, VI.2	40 CFR 60.282(a)(3)(i) 40 CFR 63.862(a)(1)(i)
13. PM	16.9 pph ²	Hourly	EU0917-1	SC V.1, VI.2	40 CFR 52.21(j)(3)
14. Sulfur Dioxide (SO ₂)	120 pph ²	Hourly	EU0917-1	SC V.1, V.2	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d) 40 CFR 52.21(j)(3)
15. SO ₂	1.7 lbs/MM BTUs of heat input ²	24-hour daily	EU0917-1	SC V.1, V.2	R 336.1402 R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
16. Total Gaseous Nonmethane Organics (TGNMO) measured as total methane	68 ppmv on a dry basis, at 10% oxygen ²	24-hour daily	EU0917-1	SC V.1	R 336.1702(a)
17. TGNMO measured as total methane	5.0 pph ²	Hourly	EU0917-1	SC V.1	R 336.1702(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The minimum temperature and residence time of EU0917-1 shall not be less than 1200 degrees F for at least 0.5 second. A temperature of EU0917-1 below 1400 degrees F shall be considered an alert condition and the permittee shall initiate steps to prepare to transfer the CVGs from EU0917-1 to the EU1121-1 should it become necessary.² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910, 40 CFR 52.21(j)(3), 40 CFR 60.284)**
2. The permittee shall not operate EU0917-1 unless the scrubber is operating properly.² **(R 336.1224, R 336.1225, R 336.1301, R 336.1331(1)(c), R 336.1901, R 336.1910, 40 CFR 52.21(j)(3))**
3. The permittee shall maintain operating parameters within the range established according to 40 CFR 63.864(j) except for up to five 3-hour average periods in a semiannual period, with the exception of pressure drop during periods of startup and shutdown. The permittee shall implement a corrective action when any 3-hour average parameter value is outside the range of values established as provided in 40 CFR 63.864(j).² No more than one exceedance will be attributed to any 24-hour period.² **(40 CFR 63.864(k)(1)(ii), 40 CFR 63.864(k)(2), 40 CFR 63.864(k)(3))**

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 verify Methanol, TRS, CO, NO_x, PM, SO₂ and TGNMO emissions from EU0917-1, by testing at owner's expense, in accordance with Department requirements, at a minimum, every five years from the date of the last test. Testing shall be performed using an approved USEPA Method. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
2. The permittee shall maintain a complete record of fuel oil specifications and/or fuel analysis for each delivery, or storage tank, of fuel oil.² **(R 336.1402)**
3. The permittee shall conduct performance tests for particulate matter per the applicable performance test requirements and test methods specified in 40 CFR Part 63, Subpart A and MM. The first periodic performance test must be conducted by October 13, 2020. Subsequent periodic tests must be conducted within 5 years following the previous performance test. Test results must be submitted within 60 days of test completion to the USEPA via CEDRI in a format generated through USEPA's ERT (electronic reporting tool), or consistent with the XML schema listed on USEPA's ERT website. A notification of compliance status must be submitted within 60 days of performance test completion. Beginning October 11, 2019, the notification of compliance status must be submitted to the USEPA via CEDRI.² **(40 CFR 63.7, 40 CFR 63.865, 40 CFR 63.867)**

VI. MONITORING/RECORDKEEPING

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

1. The TRS concentration limit shall be determined using a CEMS located downstream of the scrubber and in accordance with the procedures specified in 40 CFR 60.284, 40 CFR Part 60, Appendix F and Performance Specifications 5 & 3.² **(40 CFR 60.284, 40 CFR 60 Appendix F and Appendix B PS 5 & 3)**
2. The permittee shall install, calibrate, maintain, monitor and operate a continuous monitoring system to measure and record pressure drop across the scrubber and scrubber liquid flow rate at least once every successive 15 minute period using the procedure in (40 CFR 63.864 (e)(10), 40 CFR 60.13(a)).² **(40 CFR 63.8, 40 CFR 63.864 (e)(10))**
3. The permittee shall maintain operating parameters within the range established according to 40 CFR 63.864(j) except for up to five 3-hour average periods in a semi-annual period. No more than one exceedance will be attributed to any 24-hour period. **(40 CFR 63.864(k)(2)(iv), 40 CFR 63.864(k)(3))**
4. The permittee shall maintain and implement CMS data quality assurance procedures consistent with the requirements in 40 CFR 63.8(d)(1) and (2).² **(40 CFR 63.864(f), 40 CFR 63.8(d)(1)-(2))**
5. The permittee shall maintain records, as applicable, specified in 40CFR 63.866(b) - (d) in addition to the applicable record keeping requirements of 40 CFR 63.10.² **(40 CFR 63.866(b)-(d), 40 CFR 63.10)**
6. The permittee shall maintain purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing or any other records adequate to demonstrate compliance with the emission limit of 1.7 pounds SO₂ per million BTU's. **(R 336.1213(3))**

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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 NESHAP semiannual excess emissions reports as specified in 40 CFR Part 63, Subparts MM and A. Beginning October 11, 2019 semiannual reports must be submitted electronically via CEDRI if forms are available. If CEDRI forms are not available, electronic reports must be submitted within one year of availability.² **(40 CFR 63.867(c), 40 CFR 63.10(e)(3)(v))**
5. The permittee shall submit quarterly EER within 30 days following the end of each calendar quarter.² **(40 CFR 60.7(c) & (d))**
6. The permittee shall submit the applicable notifications and reports specified in 40 CFR 63.9 and 40 CFR 63.10.² **(40 CFR 63.867(a), 40 CFR 63.10(d))**
7. The permittee shall submit any performance test reports {including RATA reports} to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV09-ST-005-001	60 ²	185 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand –Alone Semi-chemical Pulp Mills. **(40 CFR Part 63, Subpart MM)**

Footnotes:

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

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

**EU1019-1 SLAKER
EMISSION UNIT CONDITIONS**

DESCRIPTION

SLAKER – Green liquor from the re-causticizing system and lime from the Lime Kiln or purchased lime are mixed in the Slaker to produce white liquor.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Wet Scrubber

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.03 gr/dscf of exhaust gases ²	Hourly	EU1019-1	SC VI.1	R 336.1331(1)(c) 40 CFR 52.21(j)(3)

*Test protocol shall specify averaging time.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall immediately cease input feed to EU1019-1, consistent with safe operating procedures, upon initiation of collector bypass. Input feed to EU1019-1 shall not restart until the scrubber is back on line and functioning properly. The permittee shall monitor and record the time(s) when the collector bypass is opened and closed.² (R 336.1301, R 336.1331(1)(c), 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))

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 monitor and record the flow rate to the scrubber.² (R 336.1301, R 336.331(1)(c))

VII. REPORTING

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

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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))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV10-ST-007-001	28 ²	123 ²	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU1121-1 WASTE FUEL BOILER
EMISSION UNIT CONDITIONS**

DESCRIPTION

WASTE FUEL BOILER – Installed in 1981; nominal rated heat input capacity of 660 MMBtu/hr. It is a combination fuel boiler capable of burning wood refuse, coal and natural gas to produce steam which will be used to supply the existing and new steam turbines at the mill. The Waste Fuel Boiler is also an incineration device for DVGs and/or CVGs. Boiler MACT: Existing source; designed to burn solid fuel; stokers/sloped grate/others designed to burn wet biomass fuel.

Flexible Group ID: FGWFBMOD-1

POLLUTION CONTROL EQUIPMENT

Electrostatic precipitator, multicyclone collector, and over-fired air (OFA)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Carbon Monoxide (CO)	360 pph ²	Hourly	EU1121-1	SC V.2, VI.9	R 336.2804 40 CFR 52.21(d) 40 CFR 52.21(j)(3)
2. CO	1500 ppmv, dry, @ 3% O ₂	At all times except during startup and shutdown ^(c)	EU1121-1	SC V.4, V.5, V.6, V.7, V.8, V.9, V10, V.11	40 CFR 63.7500 Table 2.7.a
3. PM	0.06 lb/MMBTU heat input ²	Hourly	EU1121-1	SC V.2, VI.5	R 336.1331(1)(c) 40 CFR 52.21(j)(3)
4. PM	0.037 lb/MM BTU heat input ²	At all times except during startup and shutdown ^(c)	EU1121-1	SC V.4, V.5, V.6, V.7, V.8, V.9, V.10, V.11, V.12	40 CFR 63.7500 Table 2.7.b
5. Nitrogen Oxides (NO _x)	0.20 lb/MM BTUs heat input when firing natural gas	3-hour average ^{(a)(b)}	EU1121-1	SC VI.3	40 CFR 60.44
6. NO _x	0.30 lb/MM BTUs heat input when firing wood and natural gas	3-hour average ^(a)	EU1121-1	SC VI.3	40 CFR 60.44
7. NO _x	0.70 lb/MM BTUs heat input when firing coal or coal & wood	3-hour average ^{(a)(b)}	EU1121-1	SC VI.3	40 CFR 60.44
8. NO _x	436.8 pph ² when firing natural gas, wood, coal or any combination of these fuels including when incinerating CVGs and/or DVGs	Hourly	EU1121-1	SC VI.3	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d) 40 CFR 52.21(j)(3)

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Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
9. Sulfur Dioxide (SO ₂)	476 pph ²	Hourly	EU1121-1	SC VI.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d) 40 CFR 52.21(j)(3)
10. SO ₂	1,016 pph when incinerating CVGs ²	Hourly	EU1121-1	SC VI.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d) 40 CFR 52.21(j)(3)
11. SO ₂	1.2 lbs/MM BTUs of heat input, when firing coal ²	3-hour average ^(a)	EU1121-1	SC VI.1	40 CFR Part 60, Subpart D
12. Total Gaseous Nonmethane Organics (TGNMO) measured as total methane	149 ppmv on a dry basis, corrected to 4% oxygen ²	Hourly	EU1121-1	SC V.2	R 336.1702(a)
13. TGNMO measured as total methane	58.2 pph ²	Hourly	EU1121-1	SC V.2	R 336.1702(a)
14. Visible Emissions	20% opacity except for one 6-minute period per hour of not more than 27% opacity	6-minute average	EU1121-1	SC VI.5	R 336.1301 40 CFR 60.42(a)(2)
15. Mercury	5.7 x 10 ⁻⁶ lb/MMBtu heat input	At all times except during startup and shutdown ^(c)	EU1121-1	SC V.4, V.5, V.6, V.7, V.8, V.9, V.10, V.11, V.12, V.13, V.14	40 CFR 63.7500 Table 2.1.b
16. HCl	2.2 x 10 ⁻² lb/MMBtu heat input	At all times except during startup and shutdown ^(c)	EU1121-1	SC V.4, V.5, V.6, V.7, V.8, V.9, V.10, V.11, V.12, V.13, V.14	40 CFR 63.7500 Table 2.1a
<p>a) The allowed averaging time shall automatically become the allowed averaging time in the NSPS for Fossil-Fuel-Fired Steam Generators (Subpart D) if the federal promulgated averaging time for the permittee's generating unit becomes greater or less than the 3-hour average.²</p> <p>b) When different fossil fuels are burned simultaneously in any combination, the applicable emission standard shall be determined by prorating using the formula provided in 40 CFR 60.44(b).²</p> <p>c) These standards apply at all times of operation, except during periods of startup and shutdown, during which time the permittee must comply only with items 5 and 6 of Table 3 of 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7500(f))</p>					

II. MATERIAL LIMIT(S):

1. The maximum sulfur content of the coal fuel shall not exceed one percent (1%) sulfur by weight, calculated on 12,000 BTUs per pound and based on a 10-day rolling average.² **(R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subpart D)**
2. The permittee shall only burn fuels as allowed in the Unit designed to burn biomass/bio-based solid subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(i) & (p))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall monitor and record the hourly steam load of EU1121-1 and the flow from the DVGs booster fan on a continuous basis in a manner and with instrumentation acceptable to the AQD.² **(R 336.1224, R 336.1225, R 336.1901, 40 CFR 52.21)**
2. The minimum steam loads of EU1121-1 when incinerating DVGs and/or CVGs shall not be less than the stable load of 50,000 and 85,000 pounds of steam per hour, respectively, unless an alternate program is demonstrated by the applicant to the satisfaction of the AQD. Additionally, the minimum temperature of EU1121-1 shall not be less than 1200 degrees F with a retention time of at least 0.5 second when incinerating DVG and/or CVGs.² **(R 336.1901, 40 CFR 60.283(a)(1)(iii))**
3. The heat input capacity from wet wood refuse for EU1121-1 shall not exceed a maximum of 660 million Btu per hour.² **(R 336.1205(1)(a))**
4. The heat input capacity from coal usage for EU1121-1 shall not exceed a maximum of 363 million Btu per hour.² **(R 336.1205(1)(a))**
5. The maximum coal feeder conveyor system rate to EU1121-1 shall not exceed 95 percent of the maximum 1.0 hp conveyor system motor output, based on an hourly average.² **(R 336.1205(1)(a))**
6. The permittee must meet the requirements in paragraphs (a)(1) through (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) through (e) of 40 CFR 63.7500, stated in SC III.7. The permittee must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of 40 CFR 63.7500, stated in SC III.8. **(40 CFR 63.7500(a))**
 - a. The permittee must meet each emission limit and work practice standard in Tables 2 and 3 of 40 CFR Part 63, Subpart DDDDD that applies to EU1121-1, except as provided under 40 CFR 63.7522. The output-based emission limits, in units of pounds per million Btu of steam output, in Table 2 of 40 CFR Part 63, Subpart DDDDD are an alternative applicable only to boilers and process heaters that generate steam, cogenerate steam with electricity, or both. The output-based emission limits, in units of pounds per megawatt-hour, in Table 2 of 40 CFR Part 63, Subpart DDDDD, are an alternative applicable only to boilers that generate electricity. **(40 CFR 63.7500(a)(1))**
 - b. The permittee must meet each operating limit in Table 4 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater. If the permittee uses a control device or combination of control devices not covered in Table 4 of 40 CFR Part 63, Subpart DDDDD, or the permittee wishes to establish and monitor an alternative operating limit or an alternative monitoring parameter, the permittee must apply to the USEPA Administrator for approval of alternative monitoring under 40 CFR 63.8(f). **(40 CFR 63.7500(a)(2))**
 - c. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**
7. As provided in 40 CFR 63.6(g), USEPA may approve use of an alternative to the work practice standards in 40 CFR 63.7500. **(40 CFR 63.7500(b))**
8. These standards apply at all times of operation, except during periods of startup and shutdown, during which time the permittee must comply only with items 5 and 6 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(f), 40 CFR 63.7540(d))**
9. The permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in Appendix 11-1 or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in Appendix 11-1. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous

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tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. **(40 CFR 63.7515(d))**

See Appendix 11-1

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the coal feeder conveyor system rate to EU1121-1 on a continuous basis.² **(R 336.1205(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 analyze and record the sulfur content for the coal on an intermittent basis determined by the AQD District Supervisor. The method for coal analysis is specified pursuant to Appendix 4-1.² **(R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**
2. Upon request from the AQD District Supervisor, the permittee may be required to verify CO, PM, and TGNMO emissions from EU1121-1 in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60 Appendix A. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The permittee shall submit complete test results to the AQD within 60 days following the last date of the test. **(R 336.1201(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall analyze and record the heating value, in Btu per pound, of the wet wood refuse, on a calendar month basis, in accordance with Department requirements. **(R 336.2001, R 336.2003)**
4. The permittee must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), continuous parameter monitoring system (CPMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. The permittee may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl), mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to 40 CFR 63.7530(c), stated in Appendix 10-1, is less than the applicable emission limit. (For gaseous fuels, the permittee may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) Otherwise, the permittee must demonstrate compliance for HCl, mercury, or TSM using performance testing, if subject to an applicable emission limit listed in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.2, SC I.3, SC I.14, and SC I.15. **(40 CFR 63.7505(c))**
5. The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7520(b))**
6. The permittee must conduct all applicable performance tests according to 40 CFR 63.7520, stated in SC V.5 and SC V.9 through SC V.13, on an annual basis (no more than 13 months after the previous performance test), except as specified in paragraphs (b) through (e), (g), and (h) of 40 CFR 63.7515, stated in SC III.9, SC V.7, SC V.8, V.14 and SC IX.5. **(40 CFR 63.7515(a))**
7. If the performance tests for a given pollutant for at least 2 consecutive years show that the emissions are at or below 75 percent of the emission limit (or, in limited instances as specified in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.2, SC I.4, SC I.15, and SC I.16, at or below the emission limit) for the pollutant, and if there are no changes in the operation of the EU1121-1 or air pollution control equipment that could increase emissions, the permittee may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM. **(40 CFR 63.7515(b))**

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8. If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit (as specified in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.2, SC I.4, SC I.15, and SC I.16) for a pollutant, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit, as specified in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.2, SC I.4, SC I.15, and SC I.16). **(40 CFR 63.7515(c))**
9. The permittee must conduct all performance tests according to 40 CFR 63.7(c), (d), (f), and (h). The permittee must also develop a site-specific stack test plan according to the requirements in 40 CFR 63.7(c). The permittee shall conduct all performance tests under such conditions as the Administrator specifies to the permittee based on the representative performance of the boiler for the period being tested. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. **(40 CFR 63.7520(a))**
10. The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if the permittee is opting to comply with the TSM alternative standard and the permittee must demonstrate initial compliance and establish the operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, the permittee must comply with the operating limit for operating load conditions specified in Table 4 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7520(c))**
11. The permittee must conduct a minimum of three separate test runs for each performance test required in 40 CFR 63.7520, as specified in 40 CFR 63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Table 2 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7520(d))**
12. To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of USEPA Method 19 at 40 CFR Part 60, Appendix A-7 to convert the measured particulate matter (PM) concentrations, the measured HCl concentrations, the measured mercury concentrations, and the measured TSM concentrations that result from the performance test to pounds per million Btu heat input emission rates. **(40 CFR 63.7520(e))**
13. Except for a 30-day rolling average based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), the permittee must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level. **(40 CFR 63.7520(f))**
14. If you demonstrate compliance with the mercury and/or HCl emission limits, stated in SC I.14 and SC I.15, based on fuel analysis, you must conduct a monthly fuel analysis according to 40 CFR 63.7521 for each type of fuel burned that is subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart. You may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in 40 CFR 63.7540. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, you may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or you begin burning a new type of fuel, you must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75 percent of the compliance level. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply. **(40 CFR 63.7515(e))**

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15. The permittee of an affected source must notify the AQD in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval 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. **(40 CFR 63.7(b)(1), R 336.2001(3))**
16. 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))**
17. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**

See Appendices 4-1, 9-1, and 10-1

VI. MONITORING/RECORDKEEPING

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

1. Compliance with the SO₂ emission rates shall be determined using CEMS for SO₂ and O₂ located downstream of the ESP.² **(40 CFR 60.13)**
2. The permittee shall monitor and record the SO₂ emission rate and oxygen content of the exhaust gases for EU1121-1 in accordance with the NSPS as specified in 40 CFR Part 60, Subparts A and D.² **(40 CFR 60.13 and Subparts A & D)**
3. The permittee shall demonstrate compliance with the NO_x emission rate using CEMS for NO_x and O₂ located downstream of the ESP. The permittee shall monitor and record the pounds per hour on a continuous basis and calculate tons per month of NO_x from EU1121-1 in a manner and with instrumentation acceptable to the AQD.² **(40 CFR 60.13 & Appendix B)**
4. The permittee shall perform and report Quality Assurance Procedures of the CEMS and submit it to the AQD in a format of the data assessment report (DAR) along with the quarterly EER and summary reports.² **(40 CFR Part 60, Subparts A, D, and Appendix F)**
5. The permittee shall calibrate, monitor and record visible emissions on a continuous basis, with certified instrumentation, and in a manner acceptable to the AQD. Opacity shall be determined at the exit of the main stack using a combiner equation acceptable to the AQD.² **(40 CFR Part 60.13, 40 CFR Part 60, Appendix B, Performance Specification)**
6. The permittee shall monitor and record, in a satisfactory manner, the amount of wet wood refuse used in EU1121-1 on a calendar month basis.² **(R 336.1205(1)(a), R 336.1225)**
7. The permittee shall monitor and record, in a satisfactory manner, the coal feeder conveyor system rate for EU1121-1 on a daily basis, as required in SC III.6.² **(R 336.1205(1)(a), R 336.1225)**
8. If the permittee demonstrates compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits through the use of CPMS, or with a CEMS or COMS, the permittee must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of 40 CFR 63.7505 for the use of any CEMS, COMS, or CPMS. This requirement also applies to the permittee if the permittee petitions the USEPA Administrator for alternative monitoring parameters under 40 CFR 63.8(f). **(40 CFR 63.7505(d))**

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9. If EU1121-1 is subject to a CO emission limit in Table 2 of 40 CFR Part 63, Subpart DDDDD, the permittee must install, operate, and maintain an oxygen analyzer system, as defined in 40 CFR 63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in paragraphs (a)(1) through (6) of 40 CFR 63.7525. Alternately, the permittee may operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7525(a), 40 63.7525(a)(7))**
10. If the permittee has an applicable opacity operating limit in this rule, the permittee must install, operate, certify and maintain each COMS according to the procedures in paragraphs (c)(1) through (7) of 40 CFR 63.7525. **(40 CFR 63.7525(c))**
11. If the permittee has an operating limit that requires the use of a CMS other than a PM CPMS or COMS, the permittee must install, operate, and maintain each CMS according to the procedures in paragraphs (d)(1) through (5) of 40 CFR 63.7525. **(40 CFR 63.7525(d))**
12. The permittee must monitor and collect data according to 40 CFR 63.7535 and the site-specific monitoring plan required by 40 CFR 63.7505(d), stated in SC VI.8. **(40 CFR 63.7535(a))**
13. The permittee must operate the monitoring system and collect data at all required intervals at all times that the boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods (see 40 CFR 63.8(c)(7)), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee is required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. **(40 CFR 63.7535(b))**
14. The permittee may not use data recorded during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions, out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. The permittee must record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. The permittee must use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system. **(40 CFR 63.7535(c))**
15. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, do not use any data collected during periods when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. The permittee must calculate monitoring results using all other monitoring data collected while the process is operating. The permittee must report all periods when the monitoring system is out of control in the annual report. **(40 CFR 63.7535(d))**
16. The permittee must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**
 - a. A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**

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- b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7555(a)(2))**
17. For each CEMS, COMS, and continuous monitoring system the permittee must keep records according to paragraphs (b)(1) through (5) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(b))**
- a. Records described in 40 CFR 63.10(b)(2)(vii) through (xi). **(40 CFR 63.7555(b)(1))**
 - b. Monitoring data for continuous opacity monitoring system during a performance evaluation as required in 40 CFR 63.6(h)(7)(i) and (ii). **(40 CFR 63.7555(b)(2))**
 - c. Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3). **(40 CFR 63.7555(b)(3))**
 - d. Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i). **(40 CFR 63.7555(b)(4))**
 - e. Records of the date and time that each deviation started and stopped. **(40 CFR 63.7555(b)(5))**
18. The permittee must keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD including records of all monitoring data and calculated averages for applicable operating limits, such as opacity and operating load, to show continuous compliance with each emission limit and operating limit that applies to the permittee. **(40 CFR 63.7555(c))**
19. For EU1121-1 subject to an emission limit in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.2, I.4, I.15 and I.16, the permittee must also keep the applicable records in paragraphs (d)(1) through (11) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(d))**
- a. The permittee must keep records of monthly fuel use by EU1121-1, including the type(s) of fuel and amount(s) used. **(40 CFR 63.7555(d)(1))**
 - b. If the permittee combusts non-hazardous secondary materials in EU1121-1, the permittee must keep records according to 40 CFR 63.7555(d)(2). **(40 CFR 63.7555(d)(2))**
 - c. A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of 40 CFR 63.7530, stated in Appendix 9-1, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 16 of 40 CFR 63.7530, stated in Appendix 10-1, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. **(40 CFR 63.7555(d)(3))**
 - d. A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of 40 CFR 63.7530, stated in Appendix 9-1, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 17 of 40 CFR 63.7530, stated in Appendix 10-1, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. **(40 CFR 63.7555(d)(4))**
 - e. If, consistent with 40 CFR 63.7515(b), stated in SC V.8, the permittee chooses to stack test less frequently than annually, the permittee must keep a record that documents that the emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit (or, in specific instances noted in Table 2 of 40 CFR Part 63, Subpart DDDDD, less than the applicable emission limit), and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year. **(40 CFR 63.7555(d)(5))**
 - f. Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment. **(40 CFR 63.7555(d)(6))**
 - g. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.7500(a)(3), stated in SC III.6, including corrective actions to restore

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the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.7555(d)(7))**

- h. The permittee must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. **(40 CFR 63.7555(d)(9))**
 - i. The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown of EU1121-1. **(40 CFR 63.7555(d)(10))**
20. Records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
21. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
22. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(c))**

See Appendices 9-1 and 10-1

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. Quarterly EER, within 30 days following the end of each calendar quarter.² **(40 CFR 60.7(c) & (d))**
- 5. The permittee shall submit any performance test reports {including RATA reports} to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
- 6. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, and in Subpart A of 40 CFR 63. **(40 CFR 63.7495(d))**
- 7. The permittee must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to 40 CFR 63.7530 and Table 7 to 40 CFR Part 63, Subpart DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in 40 CFR 63.7550. **(40 CFR 63.7515(f))**
- 8. The permittee must report each instance in which the permittee did not meet each emission limit and operating limit in Tables 2 through 4 of 40 CFR Part 63, Subpart DDDDD that apply to the permittee. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR Part 63, Subpart DDDDD. These deviations must be reported according to the requirements in 40 CFR 63.7550, stated in SC VII.13 and SC VII.14. **(40 CFR 63.7540(b))**
- 9. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**

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10. If the permittee has switched fuels or made a physical change to EU1121-1 and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
 - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**
 - c. The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**
11. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies to the permittee. **(40 CFR 63.7550(a))**
12. Unless the USEPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550 by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR 63.7540 (a)(10), (11), or (12), respectively, and not subject to emission limits or Table 4 operating limits, the permittee may submit only an annual, biennial, or 5-year compliance report, as applicable as specified below, instead of a semi-annual compliance report. **(40 CFR 63.7550(b))**
 - a. The first semi-annual compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, January 31, 2016 or as otherwise specified in 40 CFR 63.6(i), and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for the source in 40 CFR 63.7495, January 31, 2016 or as otherwise specified in 40 CFR 63.6(i). If submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified in 40 CFR 63.7495. **(40 CFR 63.7550(b)(1))**
 - b. The first semi-annual compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, January 31, 2016, or as otherwise specified in 40 CFR 63.6(i). The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31. **(40 CFR 63.7550(b)(2))**
 - c. Each subsequent semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
 - d. Each subsequent compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4))**
13. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**
 - a. If the facility is subject to the requirements of a tune up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (xiv) and (xvii) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
 - b. If a facility is complying with the fuel analysis the facility must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (x), (xi), (xiii), (xv), (xvii), (xviii) of 40 CFR 63.7550 and paragraph (d) of 40 CFR 63.7550 **(40 CFR 63.7550(c)(2))**
 - c. If a facility is complying with the applicable emissions limit with performance testing, they must submit a compliance report with the information in (c)(5)(i) through (iii), (vi), (vii), (viii), (ix), (xi), (xiii), (xv), (xvii), (xviii) of 40 CFR 63.7550 and paragraph (d) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(3))**

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- d. If a facility is complying with an emissions limit using a CMS the compliance report must contain the information required in paragraphs (c)(5)(i) through (iii), (v), (vi), (xi) through xiii), (xv) through (xvii) of 40 CFR 63.7550 and paragraph (e) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(4))**
- e. 40 CFR 63.7550(c)(5) is as follows:
 - i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
 - iv. The total operating time during the reporting period. **(40 CFR 63.7550(c)(5)(iv))**
 - v. If the permittee uses a CMS, including CEMS, COMS, or CPMS, the permittee must include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit. **(40 CFR 63.7550(c)(5)(v))**
 - vi. The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the USEPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. **(40 CFR 63.7550(c)(5)(vi))**
 - vii. If the permittee is conducting performance tests once every 3 years consistent with 40 CFR 63.7515(b) or (c), stated in SC V.7 or SC V.8 the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions. **(40 CFR 63.7550(c)(5)(vii))**
 - viii. A statement indicating that the permittee burned no new types of fuel in an individual boiler or process heater subject to an emission limit. Or, if the permittee did burn a new type of fuel and is subject to a HCl emission limit, the permittee must submit the calculation of chlorine input, using Equation 7 of 40 CFR 63.7530, stated in Appendix 9-1, that demonstrates that the source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or the permittee must submit the calculation of HCl emission rate using Equation 16 of 40 CFR 63.7530, stated in Appendix 10-1, that demonstrates that the source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If the permittee burned a new type of fuel and is subject to a mercury emission limit, the permittee must submit the calculation of mercury input, using Equation 8 of 40 CFR 63.7530, stated in Appendix 9-1, that demonstrates that the source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or the permittee must submit the calculation of mercury emission rate using Equation 17 of 40 CFR 63.7530, stated in Appendix 10-1, that demonstrates that the source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).
 - ix. If the permittee wishes to burn a new type of fuel in an individual boiler or process heater subject to an emission limit and the permittee cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of 40 CFR 63.7530, stated in Appendix 9-1, or the maximum mercury input operating limit using Equation 8 of 40 CFR 63.7530, stated in Appendix 9-1, or the maximum TSM input operating limit using Equation 9 of 40 CFR 63.7530, stated in Appendix 9-1, the permittee must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel. **(40 CFR 63.7550(c)(5)(ix))**
 - x. A summary of any monthly fuel analyses conducted to demonstrate compliance according to 40 CFR 63.7521 and 40 CFR 63.7530, stated in Appendix 10, for individual boilers or process heaters subject to emission limits, and any fuel specification analyses conducted according to 40 CFR 63.7521(f). **(40 CFR 63.7550(c)(5)(x))**
 - xi. If there are no deviations from any emission limits or operating limits in this subpart that apply to the permittee, a statement that there were no deviations from the emission limits or operating limits during the reporting period. **(40 CFR 63.7550(c)(5)(xi))**
 - xii. If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in 40 CFR 63.8(c)(7), a statement

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that there were no deviations and no periods during which the CMS were out of control during the reporting period. **(40 CFR 63.7550(c)(5)(xii))**

- xiii. If a malfunction occurred during the reporting period, 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 by the permittee during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with 40 CFR 63.7500(a)(3), stated in SC III.6, including actions taken to correct the malfunction. **(40 CFR 63.7550(c)(5)(xiii))**
 - xiv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10) or 5-year tune-up according to 40 CFR 63.7540(a)(12). Include the date of the most recent burner inspection if it was not done annually or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
 - xv. If the permittee plans to demonstrate compliance by emission averaging, certify the emission level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in 40 CFR 63.7545(e)(5)(i). **(40 CFR 63.7550(c)(5)(xv))**
 - xvi. For each reporting period, the compliance reports must include all of the calculated 30 day rolling average values for CEMS (CO, HCl, SO₂ and mercury), 10 day rolling average values for CO CEMS when the limit is expressed as a 10 day instead of 30 day rolling average, and the PM CPMS data.
 - xvii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - xviii. For each instance of startup or shutdown include the information required to be monitored, collected, or recorded according to the requirements of 40 CFR 63.7555(d).
14. For each deviation from an emission limit or operating limit in 40 CFR Part 63, Subpart DDDDD that occurs at an individual boiler or process heater where the permittee is not using a CMS to comply with that emission limit or operating limit, or from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the information required in paragraphs (d)(1) through (3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(d))**
- a. A description of the deviation and which emission limit, operating limit, or work practice standard from which the permittee deviated. **(40 CFR 63.7550(d)(1))**
 - b. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken. **(40 CFR 63.7550(d)(2))**
 - c. If the deviation occurred during an annual performance test, provide the date the annual performance test was completed. **(40 CFR 63.7550(d)(3))**
15. For each deviation from an emission limit, operating limit, and monitoring requirement in 40 CFR Part 63, Subpart DDDDD occurring at an individual boiler or process heater where the permittee is using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (e)(1) through (9) of 40 CFR 63.7550, as listed below. This includes any deviations from the site-specific monitoring plan as required in 40 CFR 63.7505(d), stated in SC VI.8. **(40 CFR 63.7550(e))**
- a. The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what the permittee deviated from). **(40 CFR 63.7550(e)(1))**
 - b. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks. **(40 CFR 63.7550(e)(2))**
 - c. The date, time, and duration that each CMS was out of control, including the information in 40 CFR 63.8(c)(8). **(40 CFR 63.7550(e)(3))**
 - d. The date and time that each deviation started and stopped. **(40 CFR 63.7550(e)(4))**
 - e. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period. **(40 CFR 63.7550(e)(5))**

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- f. A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. **(40 CFR 63.7550(e)(6))**
 - g. A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period. **(40 CFR 63.7550(e)(7))**
 - h. A brief description of the source for which there was a deviation. **(40 CFR 63.7550(e)(8))**
 - i. A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation. **(40 CFR 63.7550(e)(9))**
16. The permittee must submit the reports according to the procedures specified in paragraphs (h)(1) through (3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
- a. Within 60 days after the date of completing each performance test (defined in 40 CFR 63.2) required by 40 CFR Part 63, Subpart DDDDD, the permittee must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either paragraph (h)(1)(i) or (h)(1)(ii) of 40 CFR 63.7550 as listed below.
 - i. For data collected using test methods supported by the USEPA's Electronic Reporting Tool (ERT) as listed on the USEPA's ERT Web site <https://www.epa.gov/ttn/chief/ert/index.html>, you must submit the results of the performance test to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the USEPA's Central Data Exchange (CDX) <https://cdx.epa.gov/>. Performance test data must be submitted in a file format generated through use of the USEPA's ERT or an electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the USEPA's ERT or an alternate electronic file consistent with the XML schema listed on the USEPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the USEPA. The electronic media must be clearly marked as CBI and mailed to USEPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Road, Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the USEPA via the USEPA's CDX as described earlier in this paragraph.
 - ii. For data collected using test methods that are not supported by the USEPA's ERT as listed on the USEPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.
 - b. You must submit all reports required by Table 9 of this subpart electronically to the USEPA via the CEDRI. (CEDRI can be accessed through the USEPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site <https://www.epa.gov/chief> once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

See Appendices 8-1, 9-1, and 10-1

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV08-ST-004-001	168 ²	299 ²	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall not generate DVGs during startup unless the DVGs can be accepted to either EU0815-1 (the chemical recovery furnace) or EU1121-1, which has maintained a minimum steam load under stable conditions.² **(R 336.1224, R 336.1225, 40 CFR 52.21)**
2. The permittee shall not operate EU1121-1 on coal/wood fuel, including during startup and shutdown, unless the multi-cyclone collector and ESP are operating properly.² **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
3. The permittee shall maintain EU1121-1’s ESP hoppers with level detection devices.² **(R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**
4. The permittee must demonstrate continuous compliance with the tune-up as specified in Appendix 11-1. **(40 CFR 63.7540(a))**
5. For affected sources (as defined in 40 CFR 63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete the subsequent compliance demonstration no later than 180 days after the re-start of the affected source and according to the applicable provisions in 40 CFR 63.7(a)(2) as cited in Table 10 of 40 CFR Part 63, Subpart DDDDD. The permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in Appendix 11-1, and the schedule described in 40 CFR 63.7540(a)(13), stated in Appendix 11-1, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**
6. The permittee must demonstrate continuous compliance with each emission limit in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.2, I.4, I.15 and I.16, the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD, and the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in Table 8 of 40 CFR Part 63, Subpart DDDDD and paragraphs (a)(1) through (19) of 40 CFR 63.7540, as specified in Appendix 11-1. **(40 CFR 63.7540(a))**
7. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 40 CFR 63.15 applies to the permittee. **(40 CFR 63.7565)**

See Appendix 11-1

Footnotes:

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

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

**EU1122-1 PACKAGE BOILER
EMISSION UNIT CONDITIONS**

DESCRIPTION

PACKAGE BOILER – A natural gas-fired boiler that supplies steam to mill processes.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Carbon Monoxide (CO)	0.12 lb/MM BTUs heat input ²	Hourly/ with steam loading > 80,000 lbs of steam per hour	EU1122-1	SC VI.1	40 CFR 52.21(j)(3)
2. CO ^(a)	50.3 pph ²	Hourly/ with steam loading > 80,000 lbs of steam per hour	EU1122-1	SC VI.1	40 CFR 52.21(j)(3)
3. CO	195 ppm ²	Hourly/ with steam loading ≤ 80,000 lbs of steam per hour	EU1122-1	SC VI.1	40 CFR 52.21(j)(3)
4. CO ^(a)	25.5 pph ²	Hourly/ with steam loading ≤ 80,000 lbs of steam per hour	EU1122-1	SC VI.1	40 CFR 52.21(j)(3)
5. CO	195 ppm on, a dry basis ²	1-hour average during transition times ^(c)	EU1122-1	SC VI.1	40 CFR 52.21(j)(3)
6. CO ^(a)	25.5 pph ²	Hourly/ during transition times ^(c)	EU1122-1	SC VI.1	40 CFR 52.21(j)(3)
7. Nitrogen Oxides (NOx) ^(b)	0.10 lb/MM BTUs heat input ²	30-day rolling average	EU1122-1	SC VI.1	40 CFR 52.21(j)(3) 40 CFR 60.44b(a)(1) 40 CFR 60.44b(h)-(i) 40 CFR 60.46b(a) 40 CFR 60.46b(c) 40 CFR 60.46b(e)(1)&(3)
8. NOx ^{(a)(b)}	41.9 pph ²	Hourly	EU1122-1	SC VI.1	40 CFR 52.21(j)(3)
9. Volatile Organic Compounds (VOC)	0.014 lb/MM BTUs heat input ²	Hourly	EU1122-1	SC VI.3	40 CFR 52.21(j)(3)

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Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
10. VOC	5.87 pph ²	Hourly	EU1122-1	SC VI.3	40 CFR 52.21(j)(3)
a) CO and NOx emissions in pph are calculated using continuous emission monitor data in ppm and the constant stack gas flow rate of 30,000 dscf/min. b) The NOx standard applies at all times, including periods of startup, shutdown, or malfunction. c) During the transition times not exceeding a one-hour period when EU1122-1 steam loading is entering or leaving the 80,000 lbs of steam per hour level.					

II. MATERIAL LIMIT(S)

1. The permittee shall not fire any fuel in EU1122-1 other than pipeline quality natural gas.² **(R 336.1201(3))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the tune-up and Energy Assessment work practice standards for EU1122-1 at the source. **(40 CFR 63.7500(a)(1), 40 CFR Part 63, Subpart DDDDD, Table 3, Nos. 1-4)**
2. The permittee must operate and maintain affected sources in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**
3. The permittee may obtain approval from the Administrator to use an alternative to the work practice standards noted in SC III.1 and/or SC III.2. **(40 CFR 63.7500(b))**
4. The permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in Appendix 11-1 or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in Appendix 11-1. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. **(40 CFR 63.7515(d))**

See Appendix 11-1

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))**

1. The permittee shall monitor the NOx, and CO emission rates, boiler steam load and oxygen content of the flue gases on a continuous basis in a manner and with instrumentation acceptable to the AQD. The 1-hour average NOx emission rates measured by the NOx CEMS shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission rates under 40CFR60.44b. The 1-hour NOx averages shall be calculated using the data points required under 40 CFR 60.13(b). At least 3 NOx data points must be used to calculate each 1-hour average.² **(40 CFR 60.48b(d), 40 CFR 60.49b)**

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2. The permittee shall calibrate, monitor and record visible emissions on a continuous basis, with certified instrumentation, and in a manner acceptable to the AQD. Opacity shall be determined at the exit of the main stack using a combiner equation acceptable to the AQD. **(R 336.1213(3), 40 CFR 60.13, 40 CFR Part 60, Appendix B, Performance Specification)**
3. The permittee shall keep, in a satisfactory manner, records of VOC emission rate calculations for EU1122-1. These calculations shall be based on product throughput rates, and appropriate emission factors. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1213(3))**
4. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**
5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(a), (b), and (c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Permittee shall submit quarterly EER, within 30 days following the end of each calendar quarter. **(40 CFR 60.7(c) & (d))**
5. The permittee must submit boiler tune-up compliance reports. Annual or 5 year compliance reports must cover the applicable 1 or 5 year periods from January 1 to December 31. Compliance reports must be postmarked or submitted no later than January 31. Compliance reports must be submitted using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the USEPA's Central Data Exchange (CDX) <https://cdx.epa.gov/>. The permittee must use the appropriate electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site <https://www.epa.gov/chief>, once the XML schema is available. If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90-days after the form becomes available in CEDRI. **(40 CFR 63.7550(b), 40 CFR 63.10(a)(5), 40 CFR 63.7550(h))**
6. The permittee must include the following information in the compliance report. **(40 CFR 63.7550(c), 40 CFR 63.7550(c)(1))**
 - a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - b. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**

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- d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
- e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**

See Appendix 8-1

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV10-ST-007-001	168 ²	299 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

- 1. When NOx emissions are not obtained because of continuous monitoring system 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 approved reference methods to provide NOx emissions data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. **(40 CFR 60.48b(f))**
- 2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subpart DDDDD)**

Footnotes:

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

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

**EU1128-1 PURCHASED FUEL HOGGING OPERATINGS
EMISSION UNIT CONDITIONS**

DESCRIPTION

PURCHASED FUEL HOGGING OPERATIONS – DELIVERY SYSTEMS, for purchased hog fuel (wood refuse), which is screened and transferred to the hog fuel storage pile, then to the waste fuel boiler (EU1121-1). The new delivery system will have three (3) open air drop points that include the truck dumper, screen operation bypass, and transfer building bypass.

Flexible Group ID: FGWFBMOD-1

POLLUTION CONTROL EQUIPMENT

Fabric filter dust collector

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	5 percent ²	6-minute average	Visible emissions from the fabric filter dust collector and drop points within EU1128-1	SC VI.1	R 336.1301 R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
2. PM	0.005 gr/dscf ²	Hourly	Emissions from the fabric filter dust collector within EU1128-1	SC VI.1 SC VI.2	R 336.1331(1)(b)
3. PM	0.90 tpy ²	12-month rolling, determined at the end of each calendar month	Emissions from the fabric filter dust collector within EU1128-1	SC VI.1 SC VI.2	R 336.1205(1)(a) R 336.1331(1)(c)
4. PM10	0.90 tpy ²	12-month rolling, determined at the end of each calendar month	Emissions from the fabric filter dust collector within EU1128-1	SC VI.1 SC VI.2	R 336.1205(1)(a) R 336.1331(1)(c)
5. PM2.5	0.90 tpy ²	12-month rolling, determined at the end of each calendar month	Emissions from the fabric filter dust collector within EU1128-1	SC VI.1 SC VI.2	R 336.1205(1)(a) R 336.1331(1)(c)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Purchased Wet Wood Refuse (hog fuel)	512,000 tons per year ²	12-month rolling, determined at the end of each calendar month	EU1128-1	SC VI.8	R 336.1205 R 336.1225

Section 1 – Billerud Quinnesec, LLC**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not operate any portion of EU1128-1 unless the fabric filter with broken bag leak detectors or an alternative monitoring method approved in writing by the AQD District Supervisor is installed and/or implemented, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a Malfunction Abatement Plan (MAP), approvable by the AQD District Supervisor.² **(R 336.1901, R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install a device to monitor pressure drop across the fabric filter baghouse. **(40 CFR 64.4(e))**

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 record weekly non-certified visual opacity observation as an indicator of proper operation of the dust collector. The indicator is the presence of visible emissions. **(40 CFR 64.6(c)(1)(i and ii))**
2. The permittee shall continuously measure the pressure drop and record a daily reading (or every 15 minutes for an hourly average for large pollutant-specific emission units) as an indicator of proper operation of the dust collector. The indicator range is 0 to 10 inches water column. **(40 CFR 64.6(c)(1)(i & ii))**
3. An excursion is the presence of visible emissions and/or a departure of pressure drop from the indicator range of 0 to 10 inches water column. **(40 CFR 64.6(c)(2))**
4. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). An excursion triggers an inspection, corrective action, and a reporting requirement. **(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 monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
6. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
7. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and

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

8. The permittee shall keep, in a satisfactory manner, calendar month and 12-month rolling records of the wet wood refuse processed through EU1128-1, as required by SC II.1.² **(R 336.1205(1)(a), R 336.1225)**

VII. REPORTING

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

See Appendix 8-1

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. EU1128-1	18.0 ²	67.0 ²	R 336.2803, R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
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 ROP and 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))**

Footnotes:

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

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

**EUCOOLTWR-1 COOLING TOWER
EMISSION UNIT CONDITIONS**

DESCRIPTION

Cooling Tower - Mechanical induced draft cooling tower equipped with high efficiency drift eliminators.

Flexible Group ID: FGWFBMOD-1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUCOOLTWR-1 unless a MAP as described in Rule 911(2), has been submitted within 180 days of initial start-up, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each cooling tower in EUCOOLTWR-1 with drift eliminators with a vendor-certified maximum drift rate of 0.0009 percent or less.² (R 336.1205, R 336.1331, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

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Expiration Date: June 11, 2025

PTI No: MI-PTI-B7192-2020b

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 maintain a record, for each cooling tower in EUCOOLTWR-1, for the life of the cooling tower, of the vendor’s certification required in SC IV.1.² (R 336.1205)
2. The permittee shall calculate the PM and PM10 emissions from each cooling tower in EUCOOLTWR-1 each calendar month, using a method acceptable to the AQD District Supervisor.² (R 336.1205)

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 8-1

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCOOLTWR1	360.0 ²	47.0 ²	R 336.2803, R 336.2804 40 CFR 52.21(c) & (d)
2. SVCOOLTWR2	360.0 ²	47.0 ²	R 336.2803, R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU1227-1 Q41 PAPER MACHINE
EMISSION UNIT CONDITIONS**

DESCRIPTION

Q41 PAPER MACHINE – Pulp (from hardwood pulp, softwood pulp, coated broke, and uncoated broke storage) is combined with supplemental chemicals and additives to make various grades of paper.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	2.9 pph ²	Hourly	EU1227-1	SC VI.1	R 336.1702(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

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 monitor and record the daily paper machine production rate and coating application rate.² (R 336.1201(3))

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))

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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))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV12-ST-085-001	60 ²	89 ²	R 336.1201(3)
2. SV12-ST-085-002	72 ²	89 ²	R 336.1201(3)
3. SV12-ST-085-003	30 ²	88 ²	R 336.1201(3)
4. SV12-ST-086-001	12 ²	90 ²	R 336.1201(3)
5. SV12-ST-092-001	78 ²	89 ²	R 336.1201(3)
6. SV12-ST-092-002	78 ²	90 ²	R 336.1201(3)
7. SV12-ST-094-001	24 ²	91 ²	R 336.1201(3)
8. SV12-ST-095-001	30 ²	92 ²	R 336.1201(3)
9. SV12-ST-096-001	30 ²	90 ²	R 336.1201(3)
10. SV12-ST-097-001	28 ²	94 ²	R 336.1201(3)
11. SV12-ST-098-001	25 ²	94 ²	R 336.1201(3)
12. SV12-ST-099-001	32 ²	90 ²	R 336.1201(3)
13. SV12-ST-100-001	32 ²	90 ²	R 336.1201(3)
14. SV12-ST-105-001	54 ²	89 ²	R 336.1201(3)
15. SV12-ST-106-001	54 ²	89 ²	R 336.1201(3)
16. SV12-ST-117-001	28 ²	95 ²	R 336.1201(3)
17. SV12-ST-118-001	28 ²	95 ²	R 336.1201(3)
18. SV12-ST-119-001	28 ²	95 ²	R 336.1201(3)
19. SV12-ST-120-001	28 ²	95 ²	R 336.1201(3)
20. SV12-ST-121-001	28 ²	95 ²	R 336.1201(3)
21. SV12-ST-122-001	28 ²	95 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU1228-1 FINISHED PAPER TRIMMING
EMISSION UNIT CONDITIONS**

DESCRIPTION

FINISHED PAPER TRIMMING – Paper rolls on the calendars and rereelers are trimmed to meet customer specifications.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Cyclones, Baghouses

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM-10	0.01 gr/dscf of exhaust gases ²	Hourly	EU1228-1	SC VI.1	R 336.1331(1)(c)
2. PM-10	3.36 pph ²	Hourly	EU1228-1	SC VI.1	R 336.1331(1)(c)
3. Visible Emissions	5% opacity ²	6-minute average	EU1228-1	SC VI.1	R 336.1213(3)(a)(ii)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU1228-1 unless the cyclones and baghouses are operating properly.² (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))

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 perform and record weekly non-certified visible opacity observations as an indicator of proper operations of the fabric filter collector. The permittee shall make the records available to the AQD upon request. (R 336.1213(3)(a)(ii))

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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 8-1

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV12-ST-133-001	46 ²	66 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU2336-1 CONDENSATE SOURCE GROUP
EMISSION UNIT CONDITIONS**

DESCRIPTION

CONDENSATE SOURCE GROUP – Collects condensates specified in 40 CFR 63.446(c)(1), (2) or (3). Collected condensates are treated by one or more method identified in 40 CFR 63.446(e).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Condensate Stripper, Pulp Washing System, CVG and DVG systems.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The condensate collection tank shall be equipped so that the fixed roof and all openings will be operated with no detectable leaks, as indicated by an instrument reading of less than 500 ppmv above background. Each opening will be maintained in a closed, sealed position at all times that the tank contains condensates, except when necessary to use the openings for sampling, removal, or for equipment inspection, maintenance, or repair. **(40 CFR 63.446(d)(2))**
2. The condensate collection tank shall be equipped with a water seal device at the top of the tank, and a vent at the top of the fixed roof that is connected, with a closed vent system meeting the requirements in 40 CFR 63.450 to the DVG or CVG collection system. **(40 CFR 63.962(b)(2)(I)(A), 40 CFR 63.446(d)(2)(i), 40 CFR 63.450)**
3. The permittee shall collect and control pulping condensates to comply with 40 CFR 63.446. **(40 CFR 63.6(i), 40 CFR 63.440)**
4. Condensates that are collected for compliance with 40 CFR 63.446 shall be routed through a closed collection system to the condensate collection tank. **(40 CFR 63.446(d)(1))**
5. The closed collection system shall meet the requirements in 40 CFR Part 63, Subpart RR, 40 CFR 63.960, 63.961 and 63.962, and the closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.443(d) and 63.450. **(40 CFR Part 63, Subpart RR, 40 CFR 63.960, 40 CFR 63.961, 40 CFR 63.962, 40 CFR 63.443(d), 40 CFR 63.446(d)(1), 40 CFR 63.450)**
6. Collected condensate streams shall contain at least 11.1 pounds total HAPs per oven dried ton of pulp on a 15-day rolling average basis. **(40 CFR 63.446(c)(3))**
7. Condensate streams shall be treated to remove at least 10.2 pounds total HAPs per oven dried ton of pulp on a 15-day rolling average; and/or condensates collected in the condensate collection tank shall be recycled in a closed collection system to equipment systems captured by the CVG or DVG systems.² **(R 336.1201(3), 40 CFR 63.446(e)(1), 40 CFR 63.446(e)(5))**

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8. The condensate collection and treatment system shall be operated in accordance with the applicable CMS parameter value ranges established in accordance with 40 CFR 63.453(n). **(40 CFR 63.453(o))**
9. Records shall be maintained for all periods of excess emissions. Periods of excess emissions from the control device are not violations of 40 CFR 63.446 provided that the time of excess emissions divided by the total process operating time in a semiannual reporting period does not exceed ten (10) percent. **(40 CFR 63.446(g))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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

NA

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

1. The permittee shall install, calibrate, operate, and maintain on site, according to manufacturer's specifications, a continuous monitoring system (CMS) in accordance with 40 CFR Part 63, as approved by the Department and the USEPA. The CMS shall include a continuous recorder. **(40 CFR 63.453(a), 40 CFR 63.453(i))**
2. The permittee shall comply with the CMS QA/QC and performance evaluation requirements in 40 CFR Part 63, Subpart A recordkeeping requirements, and the condensate collection and treatment CMS. **(40 CFR Part 63, Subpart A, 40 CFR 63.8, 40 CFR 63.10)**
3. The permittee shall prepare and maintain a site-specific inspection plan for the closed collection system, in accordance with 40 CFR 63.454(b). **(40 CFR 63.454(b))**
4. The condensate collection system shall be visually inspected monthly. The inspection and monitoring shall be in accordance with the requirements in 40 CFR Part 63. **(40 CFR 63.453(l), 40 CFR 63.964(a)(1)(A), 40 CFR 63.964(a)(1)(B)(v), 40 CFR 63.964(b)(1) & (2), 40 CFR 63.964(d))**
5. The unburied portion of the collection system piping shall be visually inspected to verify that there are no defects. **(40 CFR 63.964(a)(1)(B)(iii))**
6. The inspection shall include verification that appropriate liquid levels in the water seals in the Condensate Collection Tank (CCT) are being maintained and identification of any other defects that could reduce water seal control effectiveness. **(40 CFR 63.453(1)(2))**
7. The CCT shall be inspected for detectable leaks initially and annually by the procedures in 40 CFR 63.457(d). **(40 CFR 63.453(l))**

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))**

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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 comply with the applicable notification and reporting requirements as specified in 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart S. **(40 CFR 63.9, 40 CFR 63.10, 40 CFR 63.455)**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. **(40 CFR Part 63, Subpart S)**

Footnotes:

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

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

D. FLEXIBLE GROUP SPECIAL 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
FG2334-1	<p>Concentrated Vent Gas (CVG), low-volume, high-concentration (LVHC) System. Collects off-gases from associated emission units.</p> <p>Collected gases are combusted in the Lime Kiln, Waste Fuel boiler, or Recovery Furnace and/or treated in the CVG scrubber.</p> <p>(40 CFR Part 63, Subpart S – National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry)</p>	<p>EU0203-1 EU0204-1 EU0205-1 EU0765-1 EU0766-1 EU0767-1</p>
FG2335-1	<p>Dilute Vent Gas (DVG), high-volume, low-concentration (HVLC) System. Collects off-gases from associated emission units.</p> <p>The following unregulated sources are also included in the DVG collection system: weak black liquor tank, intermediate black liquor tank, black liquor filter reject tank, combined condensate tank, salt cake mix tank, and precipitator surge tank.</p> <p>Collected gases are incinerated in either the waste fuel boiler (primary) or chemical recovery furnace (secondary).</p> <p>(40 CFR Part 63, Subpart S – National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry)</p>	<p>EU0368-1 EU0460-1</p>
FGBBKRAFT-1	<p>KRAFT MILL SUBPART BB SYSTEMS flexible group regulated under CFR 40 Part 60, Subpart BB</p> <p>(40 CFR Part 60, Subpart BB – Standards of Performance for Kraft Pulp Mills)</p>	<p>EU0203-1 EU0204-1 EU0205-1 EU0368-1 EU0765-1 EU0766-1 EU0767-1</p>
FGBLEACH-1	<p>Bleaching and Extraction Stages for the treatment of washed pulp</p>	<p>EU0508-1 EU0513-1 EU0514-1</p>

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Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGSOLIDFUEL-1	Coal and hogged fuel processing and transfer	EU1125-1 EU1127-1 EU1137-1
FGCIRICEMACT-1	40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition (CI) RICE less than 500 brake HP.	EU22CI001-1
FGSIRICEMACT-SI	40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing spark ignition RICE less than or equal to 500 brake HP.	EU09SI001-1 EU09SI002-1 EU23SI001-1
FGNSPSSSIICE-1	40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Internal Combustion Engines (SI ICE), emergency SI ICE greater than 25 HP manufactured on or after 1/01/2009	EU12SSI001-1
FGWFBMOD-1	Modification to add OFA to the Waste Fuel Boiler (EU1121-1) to increase the heat input capacity; installation of new equipment for delivery and screening of purchased wood refuse fuel; installation of a new steam turbine that will utilize steam from EU1121-1 to produce power for the mill; and a cooling tower.	EU1121-1 EU1128-1 EUCOOLTWR-1

**FG2334-1 CVG (LVHC) SYSTEM
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

CVG (Concentrated Vent Gas) SYSTEM – Collects low volume high concentration (LVHC) off gases from the following associated emission units. The collected gases are combusted in the Lime Kiln, Waste Fuel boiler, or Recovery Furnace and/or treated in the CVG scrubber.

Emission Units:

- EU0203-1 (Chip Bin) – The Chip Bin serves as the feed point for the Digester System.
- EU0204-1 (Digester System) – Chips and cooking additives are combined with steam to produce pulp.
- EU0205-1 (Digester Blow Tank) – Pulp from the digester process is transferred to this tank prior to processing in the Brown Stock Washers.
- EU0765-1 (Evaporator System) – Liquor from the digester and pulp washer systems is processed in the evaporator system to increase the percent solids.
- EU0766-1 (Hotwell) – This unit is part of the evaporator.
- EU0767-1 (Condensate Stripper) – Condensate from the evaporator system is steam-stripped to remove organics.

POLLUTION CONTROL EQUIPMENT

Concentrated Vent Gas (CVG) System gases from the Digester System, Evaporator System, Hotwell, and Condensate Stripper are collected in a closed vent collection system and routed to the Lime Kiln (primary), Waste Fuel Boiler (primary backup), or CVG scrubber (secondary backup) for incineration and/or treatment. Concentrated Vent Gas (CVG) System gases from the Chip Bin and Digester Blow Tank are collected in a closed vent collection system and routed to the Waste Fuel Boiler (primary) or Chemical Recovery Furnace (secondary) for incineration.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the equipment associated with the CVG system unless the CVGs are incinerated in either the lime kiln or wood refuse boiler or if these sources are unavailable, scrubbed in the CVG scrubber, except as provided below for all planned and unplanned CVG switchovers.² **(40 CFR 52.21(j)(3), R 336.1901)**
2. The permittee shall switch over the CVG between the lime kiln and the wood refuse boiler as expeditiously as possible during all planned and unplanned switchovers. The permittee shall limit the time of uncontrolled venting of CVG into the atmosphere to a maximum of five minutes during such switchovers. The permittee shall properly operate the CVG scrubber within five minutes of an unplanned switchover. Proper operations means that the white liquor feed rate shall not be less than 10 gallons per minute and the concentration of sodium hydroxide shall not be less than 70 grams per liter for the CVG scrubber.¹ **(R 336.1901)**
3. The permittee shall control HAP emissions from each applicable CVG system to comply with 40 CFR 63.443(a)(1).² **(40 CFR 63.6(i), 40 CFR 63.440, 40 CFR 63.443(a)(1))**

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4. The CVG source group emissions shall be enclosed and vented into a closed-vent system and routed to the lime kiln or wood refuse boiler, or recovery furnace.² **(40 CFR 63.443(c))**
5. The closed-vent system shall meet the requirements in 40 CFR 63.450.² **(40 CFR 63.450(c) & (d))**
6. The emissions from the CVG source group shall be introduced into the lime kiln, wood refuse boiler, or recovery furnace in the flame zone or with the primary fuel.² **(40 CFR 63.443(d))**
7. Records shall be maintained for all periods of excess emissions. Periods of excess emissions from the CVG source group are not violations of 40 CFR 63.443(c) and (d) provided that the time of excess emissions divided by the total process operating time in a semiannual reporting period does not exceed one (1) percent for control devices used to reduce the total HAP emissions from the CVG system.² **(40 CFR 63.443(e)(1))**
8. The permittee shall maintain fresh steam and/or flash steam from the digester blow tank for the EU0203-1 eductor and presteaming, unless the permittee receives AQD District Supervisor's written approval for equally effective proposed alternative odor control.¹ **(R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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

NA

VI. MONITORING/RECORDKEEPINGRecords shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor and record the white liquor flow rate on a continuous basis during the operation of the CVG scrubber. The white liquor flow rate monitoring system shall be equipped with an audio alarm which will be activated when the emergency vent is operated and the white liquor flow rate is less than 10 gallons per minute for the CVG scrubber.² **(R 336.1201(3))**
2. The permittee shall measure and record the sodium hydroxide concentration from the white liquor tank on an intermittent basis as approved by the AQD District Supervisor.² **(R 336.1201(3))**
3. For each applicable enclosure opening and closed vent system the permittee shall maintain a site-specific inspection plan.² **(40 CFR 63.454(b))**
 - a. Each closed-vent system shall be inspected once per month for evidence of visible defects. The visual inspection shall include inspections of reasonably accessible ductwork, piping, enclosures, and connections to covers.² **(40 CFR 63.453(k)(1))**
 - b. 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).² **(40 CFR 63.453(k)(3))**
 - c. If an inspection identifies visible defects in the ductwork, piping or connections to covers or in an instrument reading of 500 ppm by volume or greater above background is measured, then corrective actions shall meet the criteria in 40 CFR 63.453(k)(6).² **(40 CFR 63.453(k)(6))**

VII. REPORTING

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

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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 comply with the applicable notification and reporting requirements as specified in 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart S. **(40 CFR 63.9, 40 CFR 63.10, 40 CFR 63.455, R 336.1901, 40 CFR 52.21)**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63 Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. **(40 CFR Part 63, Subpart S)**

Footnotes:

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

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

**FG2335-1 DVG (HVLC) SYSTEM
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

DVG (Dilute Vent Gas) SYSTEM – Collects off high volume low concentration (HVLC) gases from the following emission units which are regulated by the MACT standard Subpart S: Brown Stock Washers (EU0368-1) and Oxygen Delignification System (EU0460-1). The following unregulated sources are also included in the DVG collection system: weak black liquor tank, intermediate black liquor tank, black liquor filter reject tank, combined condensate tank, salt cake mix tank, and precipitator surge tank. Collected gases are incinerated in either the waste fuel boiler (primary) or chemical recovery furnace (secondary).

Emission Units:

- EU0368-1 (Brown Stock Washers) – Pulp from the Digester System is transferred to the Brown Stock Washers where the pulp is screened and cleaned.
- EU0460-1 (Oxygen Delignification System) – Washed brown stock pulp is treated with oxygen and various chemicals to remove lignin.

POLLUTION CONTROL EQUIPMENT

Dilute Vent Gas (DVG) System gases are collected in a closed vent collection system and routed to the Waste Fuel Boiler (primary) or Chemical Recovery Furnace (secondary) for incineration.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall control HAP emissions from each applicable DVG system unit to comply with 40 CFR 63.443(a)(1). **(40 CFR 63.6(i), 40 CFR 63.440, 40 CFR 63.443(a)(1), R 336.1201(3))**
2. The DVG source group emissions shall be enclosed and vented into a closed-vent system and routed to the waste fuel boiler or recovery furnace. **(40 CFR 63.443(c))**
3. The closed-vent system shall meet the requirements in 40 CFR 63.450. **(40 CFR 63.450(c) & (d))**
4. The emissions from the DVG source group shall be introduced into the Waste Fuel Boiler or Recovery Furnace in the flame zone or with the primary fuel. **(40 CFR 63.443(d), 40 CFR 52.21(j)(3))**
5. Records shall be maintained for all periods of excess emissions. Periods of excess emissions from the DVG source group are not violations of 40 CFR 63.443(c) and (d) provided that the time of excess emissions divided by the total process operating time in a semiannual reporting period does not exceed four (4) percent for control devices used to reduce the total HAP emissions from the DVG system. **(40 CFR 63.443(e)(2), R 336.1201(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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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. For each applicable enclosure opening, closed vent system, and closed collection system, the permittee shall implement monitoring in accordance with a site-specific inspection plan, in accordance with 40 CFR 63.454(b). **(40 CFR 63.454(b))**
2. The monitoring requirements for enclosure and closed vent systems shall be met:
 - a. For each enclosure opening, a visual inspection of the closure mechanism shall be performed at least once every month to ensure the opening is maintained in the closed position and sealed. **(40 CFR 63.453(k))**
 - b. Each closed-vent system shall be inspected at least once every month for evidence of visible defects. The visual inspection shall include inspection of reasonably accessible ductwork, piping, enclosures, and connections to covers. **(40 CFR 63.453(k))**
 - 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). **(40 CFR 63.453(k))**
 - d. Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR 63.457(e). **(40 CFR 63.453(k))**
 - e. 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. **(40 CFR 63.453(k))**
 - f. If an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers, or in an instrument reading of 500 ppm by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then corrective actions shall meet the criteria in 40 CFR 63.453(k)(6). **(40 CFR 63.453(k))**

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 comply with the applicable notification and reporting requirements as specified in 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart S. **(40 CFR 63.9, 40 CFR 63.10, 40 CFR 63.455)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

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IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart S National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. **(40 CFR Part 63, Subpart S)**

Footnotes:

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

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

**FGBBKRAFT-1 KRAFT MILL SUBPART BB SYSTEMS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

KRAFT MILL SUBPART BB SYSTEMS flexible group regulated under CFR 40 Part 60, Subpart BB, applicable to the following associated emission units:

Emission Units:

- EU0203-1 (Chip Bin) – The Chip Bin serves as the feed point for the Digester System
- EU0204-1 (Digester System) – Chips that have been conveyed to the chip bin are metered into the digester. In the digester, chips and cooking additives are combined with steam to produce pulp
- EU0205-1 (Digester Blow Tank) – Pulp from the digester process is transferred to this tank prior to processing in the brown stock washing system
- EU0368-1 (Brown Stock Washers) – Pulp from the digester system is transferred to the brown stock washers where the pulp is screened and cleaned using a water solution
- EU0765-1 (Evaporator System) – Liquor from the digester and pulp washer systems are processed in the evaporator system to increase solids content of the liquor
- EU0766-1 (Hotwell) – This unit is part of the evaporator and receives condensate from the evaporator surface condenser
- EU0767-1 (Condensate Stripper) - Condensate from the evaporator system is steam–stripped to remove organics

POLLUTION CONTROL EQUIPMENT

Vent gasses from EU0204-1, EU0765-1, EU0766-1 and EU0767-1 are collected in the CVG System (FG2334-1) and incinerated in the Lime Kiln or Waste Fuel Boiler. Vent gasses from the EU0203-1, EU0205-1 and EU0368-1 are collected in the DVG System (FG2335-1) and incinerated in the Waste Fuel Boiler or Recovery Furnace.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total Reduced Sulfur (TRS)	5 ppmv on a dry basis, at 10% oxygen ^{(a)2}	Hourly	EU0203-1 EU0204-1 EU0205-1 EU0765-1 EU0766-1 EU0767-1	See FG2334-1 SC VI.3a – VI.3c	R 336.1901 40 CFR 60.283 (a)(1)(i) & (iii)
			EU 0368-1	See FG 2335-1 SC VI.1, VI.2a – V1.2f	R 336.1201(3) 40 CFR 60.283 (a)(1)(ii) & (iii)

^(a) This limit applies unless the gases are combusted in either the Lime Kiln (EU0917-1), Waste Fuel Boiler (EU1121-1), or Recovery Furnace (EU1121-1).

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II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Pulp	1725 tons ²	Per day	EU0204-1	SC VI.1	R 336.1205(3) R 336.901 R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
2. Pulp	572,959 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU0204-1	SC VI.1	R 336.1205(3) R 336.901 R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall route the exhaust gases from the Condensate Stripper, the Digester System, Digester Blow Tank, and Evaporator System to either the Lime Kiln, Waste Fuel Boiler, or Recovery Furnace for incineration.² **(R 336.1224, R 336.1225, R 336.1901, R 336.1910, 40 CFR 52.21(j)(3), 40 CFR 60.284, 40 CFR 60.283(a)(1)(i), (ii) & (iii))**
2. The permittee shall not vent the digester low pressure feeder except to the chip bin.² **(R 336.1901, 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))**

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 records, on a daily basis and on a 12-month rolling time period basis, of the tons of pulp produced in EU0204-1.² **(R 336.1205(3), R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))**

VII. REPORTING

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

See Appendix 8

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VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable requirements of 40 CFR Part 60, Subpart BB – Standards of Performance for New Stationary Sources: Kraft Pulp Mills. **(40 CFR Part 60, Subpart BB)**

Footnotes:

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

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

**FGBLEACH-1 BLEACH AND EXTRACTION STAGES
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

The units in FGBLEACH-1 are used to whiten brownstock pulp. Bleached and washed pulp is stored in hardwood pulp storage chests prior to being used on the paper machine or converted to dried pulp.

Emission Units:

- EU0508-1 (BLEACH PLANT PROCESS) – Washed pulp is treated with various chemicals for brightening
- EU0513-1 (EXTRACTION STAGE (Eop) TOWER) – Pulp is mixed with chemicals and additives in the Eop tower
- EU0514-1 (EXTRACTION STAGE (Eop) WASHER AND FILTRATE STORAGE) -- pulp from the Eop tower is washed using hot water and filtrate

POLLUTION CONTROL EQUIPMENT

Emissions are treated in the D stage scrubbers.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total Gaseous Non-Methane Organics (TGNMO)	0.10 lb / ton of air-dried bleach pulp ²	3-hour average	EU0508-1 EU0513-1 EU0514-1	SC VI.1 SC VI.2	R 336.1702(a) 40 CFR 52.21(j)(3)
2. TGNMO	6.0 pph ²	3-hour average	EU0508-1 EU0513-1 EU0514-1	SC VI.1 SC VI.2	R 336.1702(a) 40 CFR 52.21(j)(3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The emissions of the listed pollutants from the bleach equipment, including the refilling of the towers, and associated with the bleach plant process (EU0508-1), shall not exceed the following mass in pound per hour, nor concentrations in milligrams per cubic meter, corrected to 70 degrees F and 29.92 inches Hg, both based on a 3-hour average:¹ **(R 336.1224(1))**

POLLUTANT	CONCENTRATION (mg/m ³)	MASS (pph)
1. Chlorine	14.8	0.61
2. Chlorine Dioxide	4.2	0.18
3. Chloroform	25.4	1.05
4. Carbon tetrachloride	0.58	0.024

2. Emissions from applicable equipment in the Bleach Plant Process group (EU0508-1) shall be controlled to meet one of the following:

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- a. Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99% or more;
 - b. Achieve a treatment device outlet concentration of 10 ppmv or less of total chlorinated HAP; or
 - c. Achieve a treatment device outlet mass emission rate of 0.002 pounds of total chlorinated HAP per ton of oven dried pulp.² **(40 CFR 63.445(c))**
3. The permittee shall not use sodium or calcium hypochlorite or chlorine for bleaching in the bleaching system (EU0508-1).² **(40 CFR 63.445(d))**
 4. Regulated emission units in the bleach plant process source group (EU0508-1) shall be enclosed such that HAP emissions generated are vented into a closed-vent system and routed to the bleach plant scrubbers.² **(40 CFR 63.445(b))**
 5. The enclosures and closed-vent system requirements shall be met for applicable units in the bleach plant process group (EU0508-1).² **(40 CFR 63.450(b) - (d))**
 6. Each enclosure of applicable units in the bleach plant process group (EU0508-1) shall maintain negative pressure at each enclosure or hood opening demonstrated by procedures in 40 CFR 63.457(e).² **(40 CFR 63.457(e))**
 7. For applicable equipment in the bleach plant process group (EU0508-1) each enclosure or hood opening closed during the initial performance test shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.² **(40 CFR 63.450(b))**
 8. The bleach plant scrubber (EU0508-1) shall be operated in accordance with the parameter value ranges established in accordance with 40 CFR 63.453(n).² **(40 CFR 63.453(o))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the bleach equipment (EU0508-1) unless the D100 and D stage scrubbers are operating properly.² **(R 336.1910)**
2. The permittee shall not operate the bleach equipment (EU0508-1) unless 100% of the total oxidizing potential of the bleaching compounds added in the D100 tower is chlorine dioxide.¹ **(R 336.1224(1))**

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 verify chlorinated HAP emission rates from EU0508-1 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 63, Subparts A and S. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.7, 40 CFR 63.457(a)(1))**
2. The permittee shall verify the chlorinated HAP emission rates (not including chloroform) from EU0508-1, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.457(a)(2), 40 CFR 63.7(b), 40 CFR 63.7(c))**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. Gas scrubber liquid inlet flow rate and gas scrubber effluent pH in the bleach plant process group (EU0508-1) shall be monitored with continuous monitoring systems (CMS). Fan operation shall be measured and recorded as an indicator of gas scrubber vent gas inlet flow rate. The CMS shall be operated and maintained according to the manufacturer’s specifications and include a continuous recorder.² **(40 CFR 63.453(a) & (c))**
2. For the bleach plant process group (EU0508-1):
 - a. For each applicable enclosure opening and closed-vent system the permittee shall maintain a MACT inspection plan.² **(40 CFR 63.454(b))**
 - b. The monitoring requirement for enclosures and closed vent systems shall be met:² **(40 CFR 63.453(k))**
 - i. For each enclosure opening, a visual inspection of the closure mechanism shall be performed monthly to ensure the opening is maintained in the closed position and sealed.
 - ii. Each closed vent-system shall be inspected monthly for evidence of visible defects. The visual inspection shall include inspection of reasonable accessible ductwork, piping, enclosures, and connections to covers.
 - iii. Demonstrate initially and annually that each enclosure opening is maintained at negative pressure.
 - iv. If an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers, or if enclosure openings are not maintained at negative pressure, then corrective actions shall meet the criteria in 40 CFR 63.453(k)(6).² **(40 CFR 63.453(k)(6))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. The permittee shall comply with the notification and reporting requirements of 40 CFR 63.9, 40 CFR 63.10, and 40 CFR 63.455.² **(40 CFR 63.9, 40 CFR 63.10, 40 CFR 63.455)**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV05-ST-001-001	40 ²	199 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. There shall be no visible emissions from the combined bleach plant processes (EU0508-1, EU0513-1, EU0514-1) equipment stack, including the bleach equipment consisting of the D100 washer and D100 seal tank (controlled by the D100 scrubber), the D100 tower, D1 tower, D1 washer and D1 seal tank, D2 tower, D2 washer and D2 seal tank including the refilling of towers (controlled by the D stage scrubber); and the Eop tower, Eop washer, and Eop seal tank.² **(R 336.1301(1)(c))**

Footnotes:

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

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

**FGSOLIDFUEL-1 SOLID FUEL PROCESSING AND TRANSFER
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

The FGSOLIDFUEL-1 flexible group addresses coal and hogged fuel processing and transfer.

Emission Units:

- EU1125-1 (COAL CRUSHER/UNLOADING AND HANDLING)
- EU1127-1 (FUEL HOGGING OPERATIONS) – Bark and wood waste from the pulping operations are processed and transferred to the wood yard and wood refuse boiler
- EU1137-1 (HOGGED FUEL/COAL TRANSFER)

POLLUTION CONTROL EQUIPMENT

Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.03 gr/dscf of exhaust gases ²	Hourly	EU1125-1 EU1127-1 EU1137-1	SC VI.2	40 CFR 52.21(j)(3)
2. Visible Emissions	0%	6-minute average	EU1125-1 EU1127-1 EU1137-1	SC VI.1	R 336.1213(3)(a)(ii)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the boiler house coal silo, the coal crusher house, or the hogged fuel operation unless the fabric filter collectors are operating properly.² **(R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

The permittee shall install a device to monitor the pressure drop across the fabric filter baghouse. **(40 CFR 64.4(e))**

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 record a weekly, non-certified visible opacity observations as an indicator of proper operation of the dust collectors. The indicator is the presence of visible emissions. **(40 CFR 64.6(c)(1)(i & ii))**

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2. The permittee shall continuously measure the differential pressure gauge pressure drops and record once per day as an indicator of proper operation of the dust collectors. The averaging period is daily. The monitors shall be calibrated annually. **(40 CFR 64.6(c)(1)(i, ii and iii))**
3. An excursion is the presence of any visible emissions and/or a departure from the differential pressure gauge indicator ranges of:
 - EU1125-1 (Coal Crusher/Unloading and Handling) – 0.1 to 4.0 inches of water column;
 - EU1127-1 (Fuel Hogging Operations) – 0.1 to 4.0 inches of water column;
 - EU1137-1 (Hogged Fuel/Coal Transfer) – 0.05 to 1.0 inches of water column **(40 CFR 64.6(c)(2))**
4. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. An excursion response triggers an inspection, corrective action, and a reporting requirement. 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 monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
6. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
7. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

VII. REPORTING

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

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- 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 8-1

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV11-ST-021-001	18 ²	68 ²	R 336.1201(3)
2. SV11-ST-018-001	18 ²	66 ²	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d)
3. SV11-ST-022-001	18 ²	152 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

- 1. All coal handling and storage, except the outdoor coal storage pile, shall be totally enclosed or equipped with bag filter control equipment.² **(R 336.1910, 40 CFR 52.21(j)(3))**
- 2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
- 3. 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 ROP and 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))**

Footnotes:

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

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

**FGQ41STARCH-1 STARCH HANDLING
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Starch is unloaded, stored and transferred for use on the paper machine.

Emission Units:

EU1229-1 – (Q41 STARCH HANDLING)

EU1239-1 – (Q41 STARCH HANDLING)

EU1240-1 – (Q41 STARCH HANDLING)

POLLUTION CONTROL EQUIPMENT

3 Baghouses

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.01 gr/dscf ²	Hourly	EU1229-1 EU1239-1 EU1240-1	SC VI.1	R 336.1331(1)(c)
2. PM	0.10 pph ²	Hourly	EU1229-1 EU1239-1 EU1240-1	SC VI.1	R 336.1331(1)(c)
3. Opacity	5 percent opacity ²	6-minute average	EU1229-1 EU1239-1 EU1240-1	SC VI.1	R 336.1213(3)(a)(ii)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the starch handling and storage equipment unless the baghouses are operating properly.² (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))

NA

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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 perform and record weekly non-certified visible opacity observations as an indicator of proper operations of the fabric filter collector. The permittee shall make the records available to the AQD upon request. **(R 336.1213(3)(a)(ii))**

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))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV12-ST-037-001	6 ²	76 ²	R 336.1201(3)
2. SV12-ST-039-001	6 ²	76 ²	R 336.1201(3)
3. SV12-ST-041-001	6 ²	76 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**FGCIRICEMACT-1
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition (CI) RICE less than 500 brake HP.

Emission Unit ID: EU22CI001-1 (Fire Water Pump)

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Each engine in FGCIRICEMACT-1 shall be installed, maintained, and operated in a satisfactory manner. The permittee must comply with work practice standards as specified in 40 CFR 63.6602 and Table 2c, Item 1 or the permittee may petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. The following are the recommended work practices specified in 40 CFR Part 63, Subpart ZZZZ Table 2c:

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2,
- b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine 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 or the unacceptable risk under Federal, State or local government has been abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local government or which the risk was deemed unacceptable. **(40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ Table 2c, Item 1)**

2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency as oil changes are required. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c of 40 CFR Part 63, Subpart ZZZZ. **(40 CFR 63.6625(i))**

3. The permittee shall install, maintain and operate each engine in FGCIRICEMACT-1 and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own 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 63.6605, 40 CFR 63.6625(e))**

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4. The permittee shall minimize the time spent at idle during startup and minimize the startup time of each engine in FGCIRICEMACT-1 to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. **(40 CFR 63.6625(h))**
5. There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 63.6640(f)(1))**
6. The permittee may operate each engine FGCIRICEMACT-1 for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**
7. Each engine FGCIRICEMACT-1 may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 63.6640(f)(2). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(3))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install a non-resettable hour meter on each engine FGCIRICEMACT. **(40 CFR 63.6625(f))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(40 CFR 63.6655)**

1. If using the oil analysis program, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(i))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(40 CFR 63.6655)**

1. For each engine FGCIRICEMACT-1 the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operating limitations. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(d), 40 CFR 63.6660)**
2. For each engine FGCIRICEMACT-1 the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(e), 40 CFR 63.6660)**
3. The permittee shall monitor and record the total hours of operation for FGCIRICEMACT-1 per calendar year, recorded through the non-resettable hours meter, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation; including what

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classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation. **(40 CFR 63.6655(f))**

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 comply with the applicable notification and reporting requirements as specified in 40 CFR Part 63, Subpart A and 40 CFR Part 63, Subpart ZZZZ. **(40 CFR 63.9, 40 CFR 63.10, 40 CFR 63.6650)**

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

**FGSIRICEMACT-1
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing spark ignition RICE less than or equal to 100 brake HP.

Emission Units:

- EU09SI001-1 (Lime Mud Storage Tank Auxiliary Gas Engine)
- EU09SI002-1 (Lime Kiln Auxiliary Gas Engine)
- EU23SI001-1 (Admin Computer Room Backup Generator)

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own 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))**
2. The permittee shall minimize the time spent at idle during startup and minimize the engine startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR Part 63, Subpart ZZZZ apply. **(40 CFR 63.6625(h))**
3. The permittee must demonstrate continuous compliance by following the work practice standards as specified in 40 CFR Part 63, Subpart ZZZZ Table 2c:
 - a. Change oil and filter every 1440 hours of operation or annually, whichever comes first, except as allowed in SC III.4,
 - b. Inspect the spark plugs every 1440 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect all hoses and belts every 1440 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6640(a))**

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4. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement. The oil analysis must be performed at the same frequency as oil changes are required. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c of 40 CFR Part 63, Subpart ZZZZ. **(40 CFR 63.6625(j))**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(40 CFR 63.6660)**

1. If using the oil analysis program in order to extend the specified oil change requirement in 40 CFR Part 63, Subpart ZZZZ Table 2c, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(j))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(40 CFR 63.6660)**

1. For each engine in FGSIRICEMACT-1 the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with operating limitations in SC III.3. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(d), 40 CFR 63.6660)**
2. For each engine in FGSIRICEMACT-1 the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(e), 40 CFR 63.6660)**

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 comply with the applicable notification and reporting requirements as specified in 40CFR Part 63, Subpart A and 40 CFR Part 63, Subpart ZZZZ. **(40 CFR 63.9, 40 CFR 63.10, 40 CFR 63.6650)**

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VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

**FGNSPSSSIICE-1
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

This flexible group contains requirements of the New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines (SI-ICE), 40 CFR Part 60, Subpart JJJJ, emergency SI ICE greater than 25 HP manufactured on or after 1/1/2009.

Emission Units:

- EU12SSI001-1 (41 Computer Room Backup Generator) — USEPA certified to 40 CFR 1048, natural gas emergency engine 176 HP; engine manufacture date: 4/15/2010; installation date: 12/15/2011

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	2.0 g/HP-hr	Hourly	Emergency HP<130	SC VI.1	40 CFR 60.4233(e) 40 CFR Part 60, Subpart JJJJ Table 1
2. CO ^(a)	4.0 g/HP-hr	Hourly	Emergency HP<130	SC VI.1	40 CFR 60.4233(e) 40 CFR Part 60, Subpart JJJJ Table 1
3. VOC	1.0 g/HP-hr	Hourly	Emergency HP<130	SC VI.1	40 CFR 60.4233(e) 40 CFR Part 60, Subpart JJJJ Table 1

^(a) For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR Part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to 40 CFR Part 60, Subpart JJJJ, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified. **(40 CFR 60.4233(e))**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee must demonstrate compliance for EU12SSI001-1 according to one of the methods specified below:
 - a. If you operate and maintain the certified stationary SI-ICE and control device according to the manufacturer’s emission-related written instructions, you must keep records of maintenance. You must adjust engine settings according to and consistent with the manufacturer’s instructions. **(40 CFR 60.4243(a)(1), (40 CFR 60.4243(b)(1))**

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- b. If you do not operate and maintain the certified stationary SI-ICE \geq 100 HP and control device according to the manufacturer's emission-related written instructions, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup. **(40 CFR 60.4243(a)(1), (40 CFR 60.4243(b)(2))**
2. Permittee must operate the emergency stationary ICE according to the requirements in paragraphs (a) through (c) of this condition. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c) of this condition, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines (40 CFR 60.4243(d))
 - a. There is no time limit on the use of emergency stationary ICE in emergency situations. **(40 CFR 60.4243(d)(1))**
 - b. Permittee may operate the emergency stationary ICE for a combination of the purposes specified in paragraph (i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph. (40 CFR 60.4243(d)(2))
 - i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **(40 CFR 60.4243(d)(2)(i))**
 - c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d)(3))**
 - i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all the following situations are met:
 - A. The engine is dispatched by the local balancing authority or local transmission and distribution operator;
 - B. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
 - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;
 - D. The power is provided only to the facility itself or to support the local transmission and distribution system.
 - E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. **(40 CFR 60.4243(d)(3)(i))**

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3. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternate fuel solely during emergency operations but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. **(40 CFR 60.4243(e))**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

1. If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). **(40 CFR 60.4243(f))**
2. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. Performance test reports using USEPA Method 18, USEPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7. **(40 CFR 60.4245(d))**

VI. MONITORING/RECORDKEEPING

1. The owner or operator must keep records of maintenance conducted on the engine. **(40 CFR 60.4245(a)(2))**
2. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable. **(40 CFR 60.4245(a)(3))**
3. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. **(40 CFR 60.4245(a)(4))**
4. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4245(a)(4)(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))**

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VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. After July 1, 2010 for non-emergency SI-ICE <500 HP or January 1, 2011 for emergency stationary SI-ICE >25 HP, the permittee may not install a stationary SI ICE that does not meet the applicable requirements of 40 CFR 60.4233.

**FGWFBMOD-1
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Emission units affected by the NSR reform rules for using baseline actual emissions and future projected actual emissions to provide a determination of project-related emissions increases for the modified and affected emission units.

Emission Units:

- EU1121-1
- EU1128-1
- EUCOOLTWR-1

POLLUTION CONTROL EQUIPMENT

Over-fired air and fabric filter dust collector

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall calculate and keep records of the annual emissions of NOx, SO2, PM, PM10, PM2.5, CO, VOC, and H2SO4 from FGWFBMOD-1 described in Appendix 12-1, in tons per calendar year. Calculations and record keeping shall begin the month in which regular operations of EU1121-1 commence (12/2011) with the OFA installed and shall continue for ten (10) years.² (R 336.2818, 40 CFR 52.21(r)(6)(c)(iii))

See Appendix 12-1

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VII. REPORTING:

1. The permittee shall submit records of the annual emission of NOx, SO2, PM, PM10, PM2.5, CO, VOC, and H2SO4 from FGWFBMOD-1 described in Appendix 12-1, in tons per calendar year, to the AQD Permit Section Supervisor within 60 days following the end of each reporting year if both the following occur:
 - a. The calendar year actual emission of any pollutant exceeding the baseline actual emissions (BAE) by a significant amount, and
 - b. The calendar year actual emissions differ from the pre-construction projection.

The report shall contain the name, address, and telephone number of the facility (major stationary source); the annual emissions as calculated pursuant to SC VI.1, 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 52.21(r)(6)(c)(iii))**

See Appendix 12-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

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
EU0611-1	40 CFR Part 60 Subpart Kb	Storage tank is less than 151 m ³ and the maximum true vapor pressure of the liquid is less than 15.0 kPa.
	40 CFR Part 63 Subpart EEEE	USEPA interpretation: Methanol storage associated with ClO ₂ systems are subject to 40 CFR Part 63, Subpart S, therefore are not subject Subpart EEEE .
EU0815-1	Rule 336.1801	The Recovery Furnace does not meet the fossil-fuel-fired definition in the rule because it burns less than 50% fossil fuel.
EU0917-1	Rule 336.1801	The Lime Kiln does not meet the R 336.1801 because it is rated at less than 250 MMBtu/hr heat input.
EU1122-1	Rule R 336.1801	The Package Boiler is subject to an NSPS standard more stringent than R 336.1801, rendering the requirement non – applicable under R 336.1801(14)(a).
EU1227-1	40 CFR Part 63 Subpart JJJJ	USEPA has interpreted that on-machine coating/sizing press operations are considered substrate formation and are not subject to Subpart JJJJ
	40 CFR Part 63 Subpart HHHHH	Q41 coating preparation is related to substrate formation and not subject to Subpart HHHHH
EU0106-1 EU0204-1 EU0205-1 EU0368-1 EU0407-1 EU0508-1 EU0610-1 EU0765-1 EU0766-1 EU0767-1 EU0917-1 EU1019-1 EU1122-1 EU1228-1 EU1229-1 EU1239-1 EU1240-1 FG2334-1	40 CFR Part 64	The emission units are not subject to Compliance Assurance Monitoring requirements based on the uncontrolled emission rate and/or existing monitoring requirements.

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Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
FG2335-1 EU2336-1 EU1121-1		

APPENDICES

Appendix 1-1. Acronyms and Abbreviations

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

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

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Appendix 2-1. 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 3-1. 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 4-1. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in EU1121-1. Alternative formats must be approved by the AQD District Supervisor.

Coal Analysis

- a. For each new lot of coal received, the permittee shall obtain from the coal supplier a laboratory analysis of the ash content, sulfur content, and the BTU content. The determination of sulfur content shall be carried out in accordance with one of the following procedures: ASTM Method 3177-75 or ASTM Method 4239-85 or an alternative method approved by the AQD District Supervisor. For each coal shipment received, the permittee shall record the date received, source of coal and shipper, and tons received. These records shall be retained by the permittee for a minimum of 5 years and made available to the AQD upon request.
- b. At least once per calendar year if a new lot of coal is received, the permittee shall have an analysis performed of the coal ash content, sulfur content, and BTU content for one sample each of eastern coal and western coal (provided both eastern and western coal was supplied during the year). These analyses shall be independent of the analyses received from the coal supplier with each shipment. The determination of coal sulfur content shall be carried out in accordance with one of the following procedures: ASTM Method 3177-75 or ASTM Method 4239-85 or an alternative method approved by the AQD District Supervisor. These records shall be retained by the permittee for a minimum of 5 years and made available to the AQD upon request.

Appendix 5-1. 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 6-1. 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-B7192-2013. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B7192-2013 is being reissued as Source-Wide PTI No. MI-PTI-B7192-2020a

Permit to Install Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
55-12B	Digester System – Chips and cooking additives are combined with steam in the digester to produce pulp.	EU0204-1, FG2334-1 and FG2334-1
	Chemical Recovery Furnace – Capable of burning black liquor solids, salt cake and ESP hopper solids. Also capable of	EU0815-1

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Permit to Install Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
	firing natural gas and incinerating vent gases (containing TRS compounds) from the pulping processes.	
	Smelt Dissolving Tank – Inorganics from the chemical recovery furnace and precipitator are mixed with weak wash to form green liquor.	EU0816-1
	CVG System – Collects gases from the Evaporator System, Digester System, Condensate Stripper. Collected gases are combusted in the lime kiln (primary), waste fuel boiler (backup), or the scrubber system (secondary backup)	EU0203-1, EU0204-1, EU0205-1, EU0765-1, EU0766-1, EU0767-1 and FG2334-1

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-B7192-2020.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	202200087 / June 6, 2022	To update the CAM indicator range of the pressure drop for the Donaldson baghouse for emission unit EU0102-1, SC VI.3 and SC VI.4. The new indicator range was based on the manufacturer's recommendation, and the range should be between 0.5 to 10.0 inches water column.	EU0102-1

Appendix 7-1. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible group Special Conditions. Therefore, this appendix is not applicable.

Appendix 8-1. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

Appendix 9-1. Requirements for Demonstrating Compliance through Performance Testing

1. If the permittee demonstrates compliance through performance testing, the permittee must establish each site-specific operating limit in Table 4 of 40 CFR Part 63, Subpart DDDDD that applies according to the requirements in 40 CFR 63.7520, Table 7 of 40 CFR Part 63, Subpart DDDDD, and paragraph (b)(4) of 40 CFR 63.7530, as listed below, as applicable. The permittee must also conduct initial fuel analyses according to 40 CFR 63.7521 and establish maximum fuel pollutant input levels according to paragraphs (b)(1) through (3) of 40 CFR 63.7530, as listed below, as applicable, and as specified in 40 CFR 63.7510(a)(2). (Note that

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40 CFR 63.7510(a)(2), exempts certain fuels from the fuel analysis requirements.) However, if the permittee switches fuel(s) and cannot show that the new fuel(s) does (do) not increase the chlorine, mercury, or TSM input into the unit through the results of fuel analysis, then the permittee must repeat the performance test to demonstrate compliance while burning the new fuel(s). **(40 CFR 63.7530(b))**

- a. The permittee must establish the maximum chlorine fuel input (Clinput) during the initial fuel analysis according to the procedures in paragraphs (b)(1)(i) through (iii) of 40 CFR 63.7530, as listed below. **(40 CFR 63.7530(b)(1))**
 - i. The permittee must determine the fuel type or fuel mixture that the permittee could burn in the boiler or process heater that has the highest content of chlorine. **(40 CFR 63.7530(b)(1)(i))**
 - ii. During the fuel analysis for hydrogen chloride, the permittee must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (Ci). **(40 CFR 63.7530(b)(1)(ii))**
 - iii. The permittee must establish a maximum chlorine input level using Equation 7 of 40 CFR 63.7530: **(40 CFR 63.7530(b)(1)(iii))**

$$Clinput = \sum_{i=1}^n (Ci \times Qi) \quad (Eq. 7)$$

Where:

Clinput = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.

Ci = Arithmetic average concentration of chlorine in fuel type, i, analyzed according to 40 CFR 63.7521 (Fuel Analysis Requirements), in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If the permittee does not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Qi.

n = Number of different fuel types burned in the boiler or process heater for the mixture that has the highest content of chlorine.

- b. The permittee must establish the maximum mercury fuel input level (Mercuryinput) during the initial fuel analysis using the procedures in paragraphs (b)(2)(i) through (iii) of 40 CFR 63.7530, as listed below. **(40 CFR 63.7530(b)(2))**
 - i. The permittee must determine the fuel type or fuel mixture that the permittee could burn in the boiler or process heater that has the highest content of mercury. **(40 CFR 63.7530(b)(2)(i))**
 - ii. During the compliance demonstration for mercury, the permittee must determine the fraction of total heat input for each fuel burned (Qi) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HG_i). **(40 CFR 63.7530(b)(2)(ii))**
 - iii. The permittee must establish a maximum mercury input level using Equation 8 of 40 CFR 63.7530: **(40 CFR 63.7530(b)(2)(iii))**

$$Mercuryinput = \sum_{i=1}^n (HG_i \times Qi) \quad (Eq. 8)$$

Where:

Mercuryinput = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.

HG_i = Arithmetic average concentration of mercury in fuel type, i, analyzed according to 40 CFR 63.7521 (Fuel Analysis Requirements), in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If the permittee does not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of "1" for Qi.

n = Number of different fuel types burned in the boiler or process heater for the mixture that has the highest content of mercury.

Appendix 10-1. Fuel Analysis Requirements.

1. For each boiler or process heater that the permittee elects to demonstrate compliance with the applicable emission limits in 40 CFR 63.7500/Table 2 of Subpart DDDDD for HCl, mercury, or TSM through fuel analysis, the permittee's initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR 63.7521, stated in Conditions 3 through 7 of this Appendix, and Table 6 of 40 CFR Part 63, Subpart DDDDD and establish operating limits according to 40 CFR 63.7530, stated in Condition 8 of this Appendix, and Table 8 of 40 CFR Part 63, Subpart DDDDD. The fuels described in paragraphs (a)(2)(i) and (ii) of 40 CFR 63.7510, are exempt from these fuel analysis and operating limit requirements. The fuels described in paragraph (a)(2)(ii) of 40 CFR 63.7510 are exempt from the chloride fuel analysis and operating limit requirements. Boilers and process heaters that use a CEMS for mercury or HCl are exempt from the performance testing and operating limit requirements specified in paragraph (a) of 40 CFR 63.7510 for the HAP for which CEMS are used. (40 CFR 63.7510(b))
2. If the permittee demonstrates compliance with the mercury, HCl, or TSM emission limits based on fuel analysis, the permittee must conduct a monthly fuel analysis according to 40 CFR 63.7521, stated in Conditions 3 through 11 of this Appendix, for each type of fuel burned that is subject to an emission limit in Table 2 of 40 CFR Part 63, Subpart DDDDD. The permittee may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If the permittee burns a new type of fuel, the permittee must conduct a fuel analysis before burning the new type of fuel in the boiler or process heater. The permittee must still meet all applicable continuous compliance requirements in 40 CFR 63.7540. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, the permittee may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or the permittee begins burning a new type of fuel, the permittee must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75 percent of the compliance level. If sampling is conducted on one day per month, samples should be no less than 14 days apart, but if multiple samples are taken per month, the 14-day restriction does not apply. (40 CFR 63.7515(e))
3. For solid and liquid fuels, the permittee must conduct fuel analyses for chloride and mercury according to the procedures in paragraphs (b) through (e) of 40 CFR 63.7521, stated in Conditions 4 through 7 of this Appendix, and Table 6 of 40 CFR Part 63, Subpart DDDDD, as applicable. For solid fuels and liquid fuels, the permittee must also conduct fuel analyses for TSM if the permittee is opting to comply with the TSM alternative standard. For gas 2 (other) fuels, the permittee must conduct fuel analyses for mercury according to the procedures in paragraphs (b) through (e) of 40 CFR 63.7521, stated in Conditions 4 through 7 of this Appendix, and Table 6 of 40 CFR Part 63, Subpart DDDDD, as applicable. (For gaseous fuels, the permittee may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) For purposes of complying with 40 CFR 63.7521, a fuel gas system that consists of multiple gaseous fuels collected and mixed with each other is considered a single fuel type and sampling and analysis is only required on the combined fuel gas system that will feed the boiler or process heater. Sampling and analysis of the individual gaseous streams prior to combining is not required. The permittee is not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. The permittee is required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury, HCl, or TSM in Table 2 of 40 CFR Part 63, Subpart DDDDD. Gaseous and liquid fuels are exempt from the sampling requirements in paragraphs (c) and (d) of 40 CFR 63.7521 stated in Conditions 5 and 6 of this Appendix. (40 CFR 63.7521(a))
4. The permittee must develop a site-specific fuel monitoring plan according to the following procedures and requirements in paragraphs (b)(1) and (2) of 40 CFR 63.7521, as listed below, if required to conduct fuel analyses as specified in 40 CFR 63.7510. (40 CFR 63.7521(b))
 - a. If the permittee intends to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that the permittee intends to conduct the initial compliance demonstration described in 40 CFR 63.7510. (40 CFR 63.7521(b)(1))
 - b. The permittee must include the information contained in paragraphs (b)(2)(i) through (vi) of 40 CFR 63.7521, as listed below, in the fuel analysis plan. (40 CFR 63.7521(b)(2))

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- i. The identification of all fuel types anticipated to be burned in each boiler or process heater. **(40 CFR 63.7521(b)(2)(i))**
 - ii. For each anticipated fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel analysis. **(40 CFR 63.7521(b)(2)(ii))**
 - iii. For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the procedures are different from paragraph (c) or (d) of 40 CFR 63.7521, stated in Conditions 5 and 6 of this Appendix. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. **(40 CFR 63.7521(b)(2)(iii))**
 - iv. For each anticipated fuel type, the analytical methods from Table 6 of 40 CFR Part 63, Subpart DDDDD, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury. **(40 CFR 63.7521(b)(2)(iv))**
 - v. If the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that the permittee is proposing to use. Methods in Table 6 of 40 CFR Part 63, Subpart DDDDD shall be used until the requested alternative is approved. **(40 CFR 63.7521(b)(2)(v))**
 - vi. If the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7521(b)(2)(vi))**
5. You must obtain composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of 40 CFR 63.7521, as listed below, or the methods listed in Table 6 of 40 CFR Part 63, Subpart DDDDD, or use an automated sampling mechanism that provides representative composite fuel samples for each fuel type that includes both coarse and fine material. At a minimum, for demonstrating initial compliance by fuel analysis, you must obtain three composite samples. For monthly fuel analyses, at a minimum, you must obtain a single composite sample. For fuel analyses as part of a performance stack test, as specified in 40 CFR 63.7510(a), you must obtain a composite fuel sample during each performance test run. **(40 CFR 63.7521(c))**
- a. If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of 40 CFR 63.7521, as listed below. **(40 CFR 63.7521(c)(1))**
 - i. Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. The permittee must collect all the material (fines and coarse) in the full cross-section. The permittee must transfer the sample to a clean plastic bag. **(40 CFR 63.7521(c)(1)(i))**
 - ii. Each composite sample will consist of a minimum of three samples collected at approximately equal one-hour intervals during the testing period for sampling during performance stack testing. **(40 CFR 63.7521(c)(1)(ii))**
 - b. If sampling from a fuel pile or truck, the permittee must collect fuel samples according to paragraphs (c)(2)(i) through (iii) of 40 CFR 63.7521, as listed below. **(40 CFR 63.7521(c)(2))**
 - i. For each composite sample, the permittee must select a minimum of five sampling locations uniformly spaced over the surface of the pile. **(40 CFR 63.7521(c)(2)(i))**
 - ii. At each sampling site, the permittee must dig into the pile to a uniform depth of approximately 18 inches. The permittee must insert a clean shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling; use the same shovel to collect all samples. **(40 CFR 63.7521(c)(2)(ii))**
 - iii. The permittee must transfer all samples to a clean plastic bag for further processing. **(40 CFR 63.7521(c)(2)(iii))**
6. The permittee must prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of 40 CFR 63.7521, as listed below. **(40 CFR 63.7521(d))**
- a. The permittee must thoroughly mix and pour the entire composite sample over a clean plastic sheet. **(40 CFR 63.7521(d)(1))**

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- b. The permittee must break large sample pieces (e.g., larger than 3 inches) into smaller sizes. **(40 CFR 63.7521(d)(2))**
 - c. The permittee must make a pie shape with the entire composite sample and subdivide it into four equal parts. **(40 CFR 63.7521(d)(3))**
 - d. The permittee must separate one of the quarter samples as the first subset. **(40 CFR 63.7521(d)(4))**
 - e. If this subset is too large for grinding, the permittee must repeat the procedure in paragraph (d)(3) of 40 CFR 63.7521 with the quarter sample and obtain a one-quarter subset from this sample. **(40 CFR 63.7521(d)(5))**
 - f. The permittee must grind the sample in a mill. **(40 CFR 63.7521(d)(6))**
 - g. The permittee must use the procedure in paragraph (d)(3) of 40 CFR 63.7521 to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure. **(40 CFR 63.7521(d)(7))**
7. The permittee must determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD, for use in Equations 7, 8, and 9 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7521(e))**
8. If the permittee elects to demonstrate compliance with an applicable emission limit through fuel analysis, the permittee must conduct fuel analyses according to 40 CFR 63.7521, stated in Conditions 3 through 7 of this Appendix, and follow the procedures in paragraphs (c)(1) through (5) of 40 CFR 63.7530, as listed below. **(40 CFR 63.7530(c))**
- a. If the permittee burns more than one fuel type, the permittee must determine the fuel mixture the permittee could burn in the boiler or process heater that would result in the maximum emission rates of the pollutants that the permittee elects to demonstrate compliance through fuel analysis. **(40 CFR 63.7530(c)(1))**
 - b. The permittee must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided t-statistic test described in Equation 15 of 40 CFR 63.7530: **(40 CFR 63.7530(c)(2))**

$$P90 = mean + (SD \times 1) \quad (Eq. 15)$$

Where:

P90 = 90th percentile confidence level pollutant concentration, in pounds per million Btu.

Mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to 40 CFR 63.7521, stated Conditions 4 through 7 of this Appendix, in units of pounds per million Btu.

SD = Standard deviation of the mean of pollutant concentration in the fuel samples analyzed according to 40 CFR 63.7521, stated in Conditions 4 through 7 of this Appendix, in units of pounds per million Btu. SD is calculated as the sample standard deviation divided by the square root of the number of samples.

t = t distribution critical value for 90th percentile ($t_{0.1}$) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a t-Distribution Critical Value Table.

- c. To demonstrate initial compliance with the applicable emission limit for HCl, the HCl emission rate that the permittee calculates for the boiler or process heater using Equation 16 of 40 CFR 63.7530 must not exceed the applicable emission limit for HCl: **(40 CFR 63.7530(c)(3))**

$$HCl = \sum_{i=1}^n (Ci90 \times Qi \times 1.028) \quad (Eq. 16)$$

Where:

HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.

Ci90 = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 15 of 40 CFR 63.7530, stated in Condition 8b of this Appendix.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If the permittee does not burn multiple fuel types, it is not necessary to determine the value of this

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term. Insert a value of “1” for Q_i . For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used along with equation 6.

n = Number of different fuel types burned in the boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

- d. To demonstrate initial compliance with the applicable emission limit for mercury, the mercury emission rate that the permittee calculates for the boiler or process heater using Equation 17 of 40 CFR 63.7530 must not exceed the applicable emission limit for mercury: **(40 CFR 63.7530(c)(4))**

$$\text{Mercury} = \sum_{i=1}^n (Hg_{i90} \times Q_i) \text{ (Eq. 17)}$$

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

Hg_{i90} = 90th percentile confidence level concentration of mercury in fuel, i , in units of pounds per million Btu as calculated according to Equation 15 of 40 CFR 63.7530, stated in Condition 8b of this Appendix.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest mercury content. If the permittee does not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Q_i . For continuous compliance demonstration, the actual fraction of the fuel burned during the month should be used along with equation 7.

n = Number of different fuel types burned in the boiler or process heater for the mixture that has the highest mercury content.

9. The permittee must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to 40 CFR 63.7530 and Table 7 of 40 CFR Part 63, Subpart DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in 40 CFR 63.7550. **(40 CFR 63.7515(f))**

Appendix 11-1. Requirements for a Generic 40 CFR 63.7540 Compliance Plan

1. The permittee must demonstrate continuous compliance with each emission limit in Table 2 of 40 CFR Part 63, Subpart DDDDD, the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD, and the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in Table 8 of 40 CFR Part 63, Subpart DDDDD and paragraphs (a)(1) through (19) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
- a. Following the date on which the initial compliance demonstration is completed or is required to be completed under 40 CFR 63.7 and 40 CFR 63.7510, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of 40 CFR Part 63, Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests. **(40 CFR 63.7540(a)(1))**
- b. As specified in 40 CFR 63.7550(c), the permittee must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in either of the following: **(40 CFR 63.7540(a)(2))**
- i. Lower emissions of HCl, mercury, and TSM than the applicable emission limit for each pollutant, if the permittee demonstrates compliance through fuel analysis. **(40 CFR 63.7540(a)(2)(i))**
- ii. Lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test, if the permittee demonstrates compliance through performance testing. **(40 CFR 63.7540(a)(2)(ii))**
- c. If the permittee demonstrates compliance with an applicable HCl emission limit through fuel analysis for a solid or liquid fuel and the permittee plans to burn a new type of solid or liquid fuel, the permittee must

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- recalculate the HCl emission rate using Equation 12 of 40 CFR 63.7530 according to paragraphs (a)(3)(i) through (iii) of 40 CFR 63.7540, as listed below. The permittee is not required to conduct fuel analyses for the fuels described in 40 CFR 63.7510(a)(2)(i) through (iii). The permittee may exclude the fuels described in 40 CFR 63.7510(a)(2)(i) through (iii), when recalculating the HCl emission rate. **(40 CFR 63.7540(a)(3))**
- i. The permittee must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or the permittee's fuel analysis, according to the provisions in the site-specific fuel analysis plan developed according to 40 CFR 63.7521(b). **(40 CFR 63.7540(a)(3)(i))**
 - ii. The permittee must determine the new mixture of fuels that will have the highest content of chlorine. **(40 CFR 63.7540(a)(3)(ii))**
 - iii. Recalculate the HCl emission rate from the boiler or process heater under these new conditions using Equation 12 of 40 CFR 63.7530. The recalculated HCl emission rate must be less than the applicable emission limit. **(40 CFR 63.7540(a)(3)(iii))**
- d. If the permittee demonstrates compliance with an applicable HCl emission limit through performance testing and the permittee plans to burn a new type of fuel or a new mixture of fuels, the permittee must recalculate the maximum chlorine input using Equation 7 of 40 CFR 63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of 40 CFR 63.7530 are greater than the maximum chlorine input level established during the previous performance test, then the permittee must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in 40 CFR 63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. The permittee must also establish new operating limits based on this performance test according to the procedures in 40 CFR 63.7530(b). In recalculating the maximum chlorine input and establishing the new operating limits, the permittee is not required to conduct fuel analyses for and include the fuels described in 40 CFR 63.7510(a)(2)(i) through (iii). **(40 CFR 63.7540(a)(4))**
- e. If the permittee demonstrates compliance with an applicable mercury emission limit through fuel analysis, and the permittee plans to burn a new type of fuel, the permittee must recalculate the mercury emission rate using Equation 13 of 40 CFR 63.7530, according to the procedures specified in paragraphs (a)(5)(i) through (iii) of 40 CFR 63.7540, as listed below. The permittee is not required to conduct fuel analyses for the fuels described in 40 CFR 63.7510(a)(2)(i) through (iii). The permittee may exclude the fuels described in 40 CFR 63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate. **(40 CFR 63.7540(a)(5))**
- i. The permittee must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or the permittee's fuel analysis, according to the provisions in the site-specific fuel analysis plan developed according to 40 CFR 63.7521(b). **(40 CFR 63.7540(a)(5)(i))**
 - ii. The permittee must determine the new mixture of fuels that will have the highest content of mercury. **(40 CFR 63.7540(a)(5)(ii))**
 - iii. Recalculate the mercury emission rate from the boiler or process heater under these new conditions using Equation 13 of 40 CFR 63.7530. The recalculated mercury emission rate must be less than the applicable emission limit. **(40 CFR 63.7540(a)(5)(iii))**
- f. If the permittee demonstrates compliance with an applicable mercury emission limit through performance testing, and the permittee plans to burn a new type of fuel or a new mixture of fuels, the permittee must recalculate the maximum mercury input using Equation 8 of 40 CFR 63.7530. If the results of recalculating the maximum mercury input using Equation 8 of 40 CFR 63.7530 are higher than the maximum mercury input level established during the previous performance test, then the permittee must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in 40 CFR 63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. The permittee must also establish new operating limits based on this performance test according to the procedures in 40 CFR 63.7530(b). The permittee is not required to conduct fuel analyses for the fuels described in 40 CFR 63.7510(a)(2)(i) through (iii). The permittee may exclude the fuels described in 40 CFR 63.7510(a)(2)(i) through (iii), when recalculating the mercury emission rate. **(40 CFR 63.7540(a)(6))**
- g. If the boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, the permittee must conduct an annual (13 months) tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. This frequency does not apply to limited-use boilers and process heaters, as defined in 40 CFR 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. **(40 CFR 63.7540(a)(10))**

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- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
- vi. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
 - (1). The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - (2). A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
 - (3). The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
- h. If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1; units designed to burn gas 2 (other); or units designed to burn light liquid subcategories, or meets the definition of limited-use boiler or process heater in 40 CFR 63.7575, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of this section until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. **(40 CFR 63.7540(a)(12))**
- i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**

Appendix 12-1. Recordkeeping Provisions for PSD Source Using Actual to Projected-Actual Applicability Test

All information in this Appendix shall be maintained pursuant to R 336.2818 and 40 CFR 52.21(r)(6)(i) for ten years after the emission unit(s) identified in Table C resume normal operations after the OFA has been installed on EU1121-1, and shall be provided to the Department for the first year and thereafter made available to the Department upon request.

A. Project Description:

The Quinnesec Mill, a bleached Kraft pulp and paper mill, is installing a 29 megawatt (MW) steam turbine to generate electricity to support Mill operations and reduce the reliance on purchased electricity. The Mill is also proposing to modify the Waste Refuse Boiler (EU1121-1) to increase its heat input capacity and equipment

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related to hog fuel handling to increase the hog fuel throughput. Steam generated by EU1121-1 will be used to supply the existing and new steam turbines at the Mill.

B. Applicability Test Description:

The Hybrid Test was used to determine project-related emissions increase for each new, modified, and affected emission unit.

New emissions units: EU1128-1 and EU1128-2.

For these new emission units, the project-related emissions increase (including fugitive emissions) was calculated as the potential-to-emit (PTE).

Modified emission unit: EU1121-1.

For this emission unit, the project-related emissions increase was calculated using the difference between projected actual emissions and baseline actual emissions.

C. Emission Limitations:

Table C

	Emission Unit/Flexible Group ID	Pollutant	Emissions (tpy)			Reason for Exclusion
			Baseline Actual	Projected Actual	Excluded	
	EU1121-1	NOx	521.60	619.50	70.50	Emissions were annualized during the respective baseline period using a sustained hourly fuel throughput rate, from EU1121-1, over a 3-month period.
		SO2	189.00	291.00	86.70	
		PM	18.90	15.90	2.10	
		PM10	40.50	57.20	8.60	
		PM2.5	38.74	55.36	8.18	
		CO	1,145.30	973.10	136.28	
		VOC	12.50	9.89	0.72	
		H2SO4	14.50	22.30	6.90	
	EU1128-1	PM	0	13.65	0	No emissions excluded, new equipment added to process
		PM10	0	4.10	0	
		PM2.5	0	1.38	0	
	EU1128-2	PM	0	0.11	0	No emissions excluded, new equipment
		PM10	0	0.11	0	
		PM2.5	0	0.11	0	

D. Netting Calculations and Discussion: NA

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

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

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

Permit Shield

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

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

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

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- 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))**

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Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

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Permit to Install (PTI)

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

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

C. EMISSION UNIT SPECIAL 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
EU2550-2	Carbonator System – Exhaust gases from the wood refuse boiler or package boiler is used to generate precipitated calcium carbonate.	11/01/1990 12/01/2005	NA
EU2551-2	PCC Lime Silos – Lime used in the precipitated calcium carbonate process is stored prior to usage.	11/01/1990	NA

**EU2550-2 CARBONATOR SYSTEM
EMISSION UNIT CONDITIONS**

DESCRIPTION

CARBONATOR SYSTEM — Exhaust gases from the wood refuse boiler, lime kiln, or package boiler are used to generate precipitated calcium carbonate. Alternatively, liquid CO₂ may be used in place of or to supplement the exhaust gasses.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Demister on each carbonator.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.017 gr/dscf of exhaust gases, corrected to 4% oxygen ²	Hourly	EU2550-2	SC VI.1	40 CFR 52.21(j)(3)
2. PM	2.1 pph ²	Hourly	EU2550-2	SC VI.1	40 CFR 52.21(j)(3)
3. NOx	387.5 ppmv, on a dry basis, corrected to 4% oxygen ²	Hourly	EU2550-2	SC V.1	40 CFR 52.21(j)(3)
4. NOx	39.6 pph ²	Hourly	EU2550-2	SC V.1	40 CFR 52.21(j)(3)
5. SO ₂	130 ppmv, on a dry basis, corrected to 4% oxygen ²	Hourly	EU2550-2	SC V.1	40 CFR 52.21(j)(3)
6. SO ₂	18.4 pph ²	Hourly	EU2550-2	SC.V.1	40 CFR 52.21(j)(3)
7. CO	524 ppmv, on a dry basis, corrected to 4% oxygen ²	Hourly	EU2550-2	SC V.1	40 CFR 52.21(j)(3)
8. CO	32.6 pph ²	Hourly	EU2550-2	SC V.1	40 CFR 52.21(j)(3)
9. VOC	148.5 ppmv, on a dry basis, corrected to 4% oxygen ²	Hourly	EU2550-2	SC V.1	40 CFR 52.21(j)(3)
10. VOC	5.28 pph ²	Hourly	EU2550-2	SC V.1 SC V.1	40 CFR 52.21(j)(3)
11. TRS compounds	4.0 ppmv, on a dry basis, corrected to 4% oxygen, measured as hydrogen sulfide ²	Hourly	EU2550-2	SC V.1	40 CFR 52.21(j)(3)
12. TRS compounds	0.41 pph ²	Hourly	EU2550-2	SC V.1	40 CFR 52.21(j)(3)

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II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU2550-2 using combustion gas from the lime kiln, waste fuel boiler or package boiler unless the venture scrubber followed by packed column scrubber, located upstream of the gas compressors and carbonators, and a demister located downstream of the gas compressors and carbonators, are operating properly.² **(R 336.1910)**
2. The permittee shall not operate EU2550-2 using only liquid carbon dioxide unless the demisters located downstream of the gas compressors and carbonators, are operating properly.² **(R 336.1910)**
3. The permittee shall maintain EU2550-2 with demisters located downstream of the carbonators.² **(R 336.1910)**
4. The above referenced equipment, utilized to produce precipitated calcium carbonate, shall not be used to manufacture any compound other than precipitated calcium carbonate unless a New Source Review Permit to Install which authorizes the manufacture of such other compound(s) has been approved.² **(R 336.1201)**
5. In the event that the TRS emission from the lime kiln exceeds 10 ppmv @ 10% O₂, on a dry basis, based on a 1-hour block average, as recorded by the continuous monitoring system for TRS; the permittee shall switch to the gas fired package boiler, the wood/coal fired boiler, or use liquid CO₂ to produce precipitated calcium carbonate immediately, consistent with safe operating procedures. All such events shall be recorded and reported to the AQD District Supervisor within 10 days after the occurrence of each such event.² **(R 336.1201(3))**

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 verify NO_x, CO, and VOC emission rates from EU2550-2 by testing at owner's expense, in accordance with the Department requirements, every five years from the date of the last test. Upon request from the AQD District Supervisor, the permittee may be required to verify SO₂ and TRS, at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
NO _x	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
SO ₂	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A
TRS	40 CRF Part 60, Appendix A

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

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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 perform and record weekly non-certified visible opacity observations as an indicator of proper operations of the fabric filter collector. The permittee shall make the records available to the AQD upon request. (R 336.1213(3)(a)(ii))

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 9-2

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV12-ST-070-001	36 ¹²	100 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU2551-2 PCC LIME SILOS
EMISSION UNIT CONDITIONS**

DESCRIPTION

PCC LIME SILOS - Lime used in the precipitated calcium carbonate process is stored prior to use. Exhaust gases from the wood refuse boiler or package boiler are used to generate precipitated calcium carbonate (PCC).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Baghouse and bin vents on the lime silo stack.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.02 gr/dscf of exhaust gases ²	Hourly	EU2551-2	SC.VI.1	40 CFR 52.21(j)(3)
2. PM	0.20 pounds per hour ²	Hourly	EU2551-2	SC.VI.1	40 CFR 52.21(j)(3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU2551-2 unless the baghouse dust collector and bin vent is maintained and operating properly.² (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))

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 perform and record weekly non-certified visible opacity observations as an indicator of proper operations of the fabric filter collector. The permittee shall make the records available to the AQD upon request. (R 336.1213(3)(a)(ii))

VII. REPORTING

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

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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))**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV12-ST-153-001	12 ²	80 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

D. FLEXIBLE GROUP CONDITIONS

Part D outlines 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.

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
EU2550-2 (Carbonator)	40 CFR Part 64	The emission units are not subject to Compliance Assurance Monitoring requirements based on the uncontrolled emission rate and/or existing monitoring requirements
EU2551-2 (PCC Lime Silos)	40 CFR Part 64	

APPENDICES

Appendix 1-2. Acronyms and Abbreviations

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

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

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Appendix 2-2. 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 3-2. 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 4-2. Recordkeeping

Specific recordkeeping requirement formats and procedures 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 5-2. 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 6-2. 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-B7192-2013. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B7192-2013 is being reissued as Source-Wide PTI No. MI-PTI-B7192-2020a.

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

Appendix 7-2. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible group Special Conditions. Therefore, this appendix is not applicable.

Appendix 8-2. Reporting

A. Annual and Deviation Certification Reporting

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