

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

EFFECTIVE DATE: September 13, 2021

REVISION DATE: July 24, 2023

ISSUED TO

**Martin Marietta Materials
Martin Marietta Magnesia Specialties, LLC**

State Registration Number (SRN): A3900

LOCATED AT

1800 Eastlake Road, Manistee, Manistee County, Michigan 49660

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-A3900-2021a

Expiration Date: September 13, 2026

Administratively Complete ROP Renewal Application Due Between:
March 13, 2025 and March 13, 2026

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-A3900-2021a

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

Shane Nixon, Cadillac / Gaylord 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.

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

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

Equipment & Design

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

Emission Limits

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

The grading of visible emissions shall be determined in accordance with Rule 303.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

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

Monitoring/Recordkeeping

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

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which 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.

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

Permit to Install (PTI)

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

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

DESCRIPTION

NA

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 the facility unless the Malfunction Abatement Plan (MAP), as described in Rule 911(2), or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. 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 336.1225, R 336.1910, R 336.1911, R 336.1912)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall implement and maintain a program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations as approved by the District Supervisor.² **(Act 451 Part 55, Section 324.5524)**
2. The provisions and procedures of the fugitive dust program shall be reviewed by the permittee on an annual basis and the permittee shall submit any updates/changes the District Supervisor, Air Quality Division, for approval. **(R 336.1213(3))**
3. The permittee shall maintain a MAP for the facility. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - e. 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 the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies. **(R 336.1213(3), R 336.1911)**

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
EUHCLTANK	A 20,000-gallon tank, located in the Hydrate Area, that stores hydrochloric acid which is used to acidify wash water and various effluent brine streams to prevent precipitation of magnesium hydroxide or calcium carbonate within the system. Air emissions are controlled by a packed-bed water fume scrubber system.	09-25-1984 07-27-2015	NA
EUANIMAG	Material handling operation located in the #4 Packhouse area consisting of: one belt loadout station, in the #4 Packhouse. Air emissions are controlled by Pulse Jet baghouses 25-0832 and 25-0929.	07-11-1983 01-14-1992	NA
EUN2SMILL	Material handling operation located in the #4 Packhouse Area consisting of: one Raymond mill. Air emissions are controlled by a Pulse Jet baghouse 25-0887.	10-25-1979	NA
EURK3	Rotary Kiln No.3 is a calciner fired with petroleum coke, coal, oil fuel and/or natural gas that is used to remove free and chemically bound water from the magnesium hydroxide slurry to produce magnesium oxide. Air emissions are controlled by the 3ESP electrostatic precipitator 26-1024.	07-01-1960 04-03-1992 11-26-1997	NA
EUDRYMAGDRYER	An air swept dryer with two natural gas burners each with a maximum capacity of 9 MMBTU/hr. Air emissions are controlled by a fabric filter 25-1111.	06-01-2007	FGDRYER&MILL
EUDRYMAGMILL	A proprietary milling system with a MAC fabric filter 25-2222 for control of air emissions. The exhaust is directed to the EUDRYMAGDRYER inlet air duct.	06-01-2007	FGDRYER&MILL
EURK3-S-FUEL	Solid fuel handling operation located in the Rotary Kiln area consisting of one coal/coke mill and one cyclone classifier. Air emissions are controlled by Pulse Jet baghouse 25-1026 and Cyclone 25-1024.	07-01-1960 09-26-1989	FGGROUP-A

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUROLLERMILL	Material handling operation located in the Rotary Kiln area consisting of one conveyor, one elevator, and one roller mill. Air emissions are controlled by Pulse Jet baghouse 25-1059.	01-26-1985 04-29-1990 05-31-1990	FGGROUP-A
EU2-BAGGER	Material handling operation located in the #2 and #3 Packhouse area consisting of: one Symons mill, one elevator, one packer, six conveyors, one pan conveyor, and one feed hopper. Air emissions are controlled by Pulse Jet baghouse 25-0664.	06-15-1957 09-11-1989	FGGROUP-A
EU3PH-ADD-DC	Material handling operation located in the #2 and #3 Packhouse Area consisting of: one belt conveyor, and three bins. Air emissions are controlled by Pulse Jet baghouses. Note: Baghouses 25-0781, 25-0782, and 25-0783 all share a common stack (SV25-0781STK).	01-01-1969 03-02-1987	FGGROUP-A
EU98-PUL-DC	Material handling operation located in the #2 and #3 Packhouse Area consisting of: one bin. Air emissions are controlled by Pulse Jet baghouse 25-0746.	01-01-1969 03-02-1987	FGGROUP-A
EU-PER-PRIM-DC	Material handling operation located in the #2 and #3 Packhouse Area consisting of: one ball mill, one rod mill, one cone crusher, eight conveyors, six bins, six elevators, nine feeders, and three screens - one primary screen, two secondary screens. Air emissions are controlled by Pulse Jet baghouse 25-0745.	02-10-1969 03-02-1987	FGGROUP-A
EUMIDLAND-SYS	Material handling operation located in the #2 and #3 Packhouse Area consisting of: three conveyors, two unloading areas, two feeders, and one elevator. Air emissions are controlled by Pulse Jet baghouse 25-0827.	01-01-1977 02-10-1987	FGGROUP-A
EU2HERRLB-BIN	Material handling operation located in the Periclase Area consisting of one bin, two screw conveyors and an elevator. Air emissions are controlled by Pulse Jet baghouse 25-XXXX.	12-19-2017	FGGROUP-A
EUNSMILLS	Material handling operation located in the #4 Packhouse Area consisting of: two Raymond mills, two feed hoppers, and one elevator. Air emissions are controlled by Pulse Jet baghouses 25-0769 and 25-0770.	01-01-1969 09-24-1986	FGGROUP-A
EU6TRAKLOADOUT	Material handling operation located in the #4 Packhouse Area consisting of: one bulk loadout spout. Air emissions are controlled by Pulse Jet baghouse 25-0774.	01-01-1969 01-01-1988	FGGROUP-A

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCHANGE-LS	Material handling operation located in the #4 Packhouse Area consisting of: four bins, three bagger/sackers, five belt conveyor, four vibrating conveyors, and three loadout spouts. Air emissions are controlled by Pulse Jet baghouses 25-0768, 25-0828 and 25-0894.	01-01-1969 01-01-1978 09-15-1980	FGGROUP-A
EU3RKPRIMSCREEN	Material handling operation located in the #4 Packhouse Area consisting of: one screen. Air emissions are controlled by Pulse Jet baghouse 25-0834.	01-01-1978 09-15-1980 01-26-1985	FGGROUP-A
EU1+2LB-DC	Material handling operation located in the Periclase Area consisting of one bin, eight conveyors, and two elevators. Air emissions are controlled by Pulse Jet baghouses 25-1067 and 25-1068.	09-18-1991 02-01-1992	FGGROUP-A
EUP-ADD-BINS	Material handling operation located in the Periclase Area consisting of two feed hoppers and five bins. Air emissions are controlled by Pulse Jet baghouses 25-0749, 25-0759, 25-1065, 25-1073, 25-1074, 25-1078 and 25-1079.	11-21-1956 01-01-1969 10-16-1979 01-11-1991 05-19-1993	FGGROUP-A
EUP-STOR-SILO	Material handling operation consisting of two belt conveyors and one elevator. Air emissions are controlled by Pulse Jet baghouse 25-0895.	02-01-1981	FGGROUP-A
EUSK-BINS-TRANS	Material handling operation located in the Periclase Area consisting of one feed hopper, five screens, six elevators, three dense bins, and three elevators. Air emissions are controlled by Pulse Jet baghouses 25-1031, 25-1032 and 25-1033.	11-21-1956 09-09-1986	FGGROUP-A
EUSK-TRAN-DC	Material handling operation located in the Periclase Area consisting of three belt conveyors and one Thayer scale. Air emissions are controlled by Pulse Jet baghouse 25-0824.	01-01-1977 03-02-1987	FGGROUP-A
EUSK-FINES-BIN	Material handling operation located in the Periclase Area consisting of one bin and one loadout spout. Air emissions are controlled by Pulse Jet baghouse 25-1011 for control.	11-21-1956 12-15-1982	FGGROUP-A
EU88-SCRNR	Material handling operation located in the #2 and #3 Packhouse Area consisting of: two screens, two conveyors, and six bins. Air emissions are controlled by Pulse Jet baghouse 25-0890.	12-01-1979	FGGROUP-B
EUN2SMILLTRANS	Material handling operation located in the #4 Packhouse Area consisting of: two belt conveyors, one feed hopper, one screw conveyor, and one load out spout. Air emissions are controlled by Pulse Jet baghouse 25-1020.	01-15-1980 09-11-1989	FGGROUP-B

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU88-PRIMARY	Material handling operation located in the #2 and #3 Packhouse Area consisting of: three conveyors, eight weigh belts, one elevator, and two mills. Air emissions are controlled by Pulse Jet baghouse 25-0709.	06-15-1961	FGGROUP-C
EUDAY-BIN-DC	Material handling operation located in the #2 and #3 Packhouse Area consisting of: one conveyor, eleven bins, one elevator, and five weigh belts. Air emissions are controlled by Pulse Jet baghouse 25-0708.	06-15-1961	FGGROUP-C
EUNO3BAGGER	Material handling operation located in the #2 and #3 Packhouse Area consisting of: one conveyor, one elevator, one mixer, and two bagger/sackers. Air emissions are controlled by Pulse Jet baghouse 25-0706.	06-15-1961 01-01-1962	FGGROUP-C
EU88SECONDARY	Material handling operation located in the #2 and #3 Packhouse Area consisting of: two mills, two feed hoppers (bins), two screens, and one packer. Air emissions are controlled by Pulse Jet baghouse 25-0707.	06-15-1961 01-01-1962	FGGROUP-C
EU2DUSTEX	Material handling operation located in the Periclase Area consisting of one bin, five chutes, 19 conveyors, two elevators, and one feeder. Air emissions are controlled by Pulse Jet baghouse 25-0799.	01-01-1975	FGGROUP-C
EU3DUSTEX	Material handling operation located in the Periclase Area consisting of three bins, five chutes, 22 conveyors, three elevators, and one feeder. Air emissions are controlled by Pulse Jet baghouse 25-0808.	01-01-1976	FGGROUP-C
EUADDITIVE-DC	Material handling operation consisting of one bin, two feed hoppers, and one elevator. Air emissions are controlled by Pulse Jet baghouse 25-0881, which shares a common stack with 25-0879.	04-01-1978 11-01-1985	FGGROUP-D
EUHB-BINS	Material handling operation located in the #4 Packhouse Area consisting of: one screen, five HB-bins, five belt conveyors, one elevator, three vibrating feeders, one vibrating conveyor, one pneumatic transfer, and one loadout spout. Air emissions are controlled by Pulse Jet baghouse 25-0880. 957-78	04-01-1978	FGGROUP-D
EULB-BINS	Material handling operation located in the #4 Packhouse Area consisting of: five LB-bins, one pneumatic transfer, and one loadout spout. Air emissions are controlled by Pulse Jet baghouse 25-0879. 957-78	01-01-1978	FGGROUP-D

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUGYRADISC	Material handling operation located in the #2 and #3 Packhouse Area consisting of: one GYRADISC, five conveyors, one bin, one elevator, two feeders, and two screens. Air emissions are controlled by Pulse Jet baghouse 25-0892.	10-09-1979 05-01-1997 01-10-2012	FG2+3-PACKHS
EUP-LOADOUT	Material handling operation located in the #2 and #3 Packhouse Area consisting of: one conveyor, and one load out spout. Air emissions are controlled by Pulse Jet baghouse 25-123822, with indoors exhaust.	01-10-2012	FG2+3-PACKHS
EUHERRFUR1	No. 1 Herreshoff furnace natural gas fired calciner located in the Herreshoff Furnace and Shaft Kiln Area used for calcining magnesium hydroxide slurry to produce various grades of magnesium oxide. Air emissions are controlled by HF-ESP1 ESP.	01-01-1969 01-05-1989	FGPERICLASEPLNT
EUHERRFUR2	No. 2 Herreshoff furnace natural gas fired calciner located in the Herreshoff Furnace and Shaft Kiln Area used for calcining magnesium hydroxide slurry to produce various grades of magnesium oxide. Air emissions are controlled by HF-ESP2 ESP.	01-01-1975 01-05-1989	FGPERICLASEPLNT
EUHERRFUR3	No. 3 Herreshoff natural gas fired calciner furnace located in the Herreshoff Furnace and Shaft Kiln Area used for calcining magnesium hydroxide slurry to produce various grades of magnesium oxide. Air emissions are controlled by HF-ESP 3 ESP.	06-01-1981 01-05-1989	FGPERICLASEPLNT
EUSHAFTKILN2	No. 2 SHAFT KILN located in the Herreshoff Furnace and Shaft Kiln Area is used to heat magnesium oxide produced in the Herreshoff furnaces and compressed into pellets to high temperatures to produce grades of magnesium oxide called Periclase. Fuel is natural gas. Air emissions are controlled by one of three ESPs - HF-ESP1, HF-ESP2, HF-ESP3 and Single Cyclones - COOLER-CYCLON2, SK2CYCLONE.	01-01-1975 01-05-1989	FGPERICLASEPLNT
EUSHAFTKILN3	No. 3 SHAFT KILN located in the Herreshoff Furnace and Shaft Kiln Area is used to heat magnesium oxide produced in the Herreshoff furnaces and compressed into pellets to high temperatures to produce grades of magnesium oxide called Periclase. Fuel is natural gas Air emissions are controlled by one of three ESPs - HF-ESP1, HF-ESP2, HF-ESP3 and Single Cyclones - COOLER-CYCLON3, SK3CYCLONE.	06-01-1978 01-05-1989	FGPERICLASEPLNT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUC-LIME	Material handling operation located in the Hydrate area consisting of one conveyor, and one weigh belt. Air emissions are controlled by Pulse Jet baghouse 25-0873, with indoors exhaust.	11-21-1956 03-02-1987	FGLIMESYSTEM
EUC-CRUSHER	Material handling operation located in the Hydrate area consisting of one Jeffrey 45B Hammermill dedicated to lime crushing. Air emissions are controlled by Pulse Jet baghouse 25-2659-89 with outdoors exhaust.	05-17-2022	FGLIMESYSTEM
EUUPPERLIME	Material handling operation located in the Hydrate Area for the dolomitic lime (dolime) processes. These handling operations include: the east and west transfer elevators and the north lime silo. Air emissions are controlled by Pulse Jet baghouse 25-1050.	06-21-1989	FGLIMESYSTEM
EUMIDDLELIME	Material handling operation located in the Hydrate Area for the dolomitic lime (dolime) processes. These handling operations include: the east and west transfer elevators, B system day bin, and two conveyors. Air emissions are controlled by Pulse Jet baghouse 25-1051.	06-21-1989	FGLIMESYSTEM
EUBOTTOMLIME	Material handling operation located in the Hydrate Area for the dolomitic lime (dolime) processes. These handling operations include: the bottom of the incoming lime elevator, the bottom of the east and west transfer elevators, material transfer equipment near the bottom of two lime silos (includes three new sealed oscillating conveyor systems). Air emissions are controlled by Pulse Jet baghouse (bottom-lime) 25777777 vented to the in-plant environment.	11-14-2013	FGLIMESYSTEM
EUB-REACTOR	Transfer equipment near the B reactor. The transfer equipment air emissions are controlled by Pulse Jet baghouse (B-system) 25133855 vented to the in-plant environment.	11-14-2013	FGLIMESYSTEM
EU#3COKESILOBVDC	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	04-25-1984	FGRULE290
EUDDAYBINDC	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	10-01-1982	FGRULE290
EUDMBAGGINGDC	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	06-30-1997	FGRULE290
EUDMNORTHDRYERBH	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	07-01-1997	FGRULE290

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUDMSOUTHMILLBH	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	09-01-2004	FGRULE290
EUDMSTURTEVANTMI	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	11-15-1998	FGRULE290
EULBBAGGERDC	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	12-12-1995	FGRULE290
EUSPECCALC-A	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	NA	FGRULE290
EUSPECCALCA-B	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	05-01-2009	FGRULE290
EUSPECCALC-C	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	NA	FGRULE290
EUSPECMILL	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	05-01-2009	FGRULE290
EUSPECPKGDC	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	05-01-2009	FGRULE290
EUPOWDERBLENDERDC	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290.	NA	FGRULE290
EUHYDRATE	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	NA	FGCOLDCLEANERS
EUMAINMAINTENANCE	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	NA	FGCOLDCLEANERS
EUPACKHOUSE	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	NA	FGCOLDCLEANERS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUPERICLASE	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	NA	FGCOLDCLEANERS
EU-FIREPUMP-6CYL	One diesel powered emergency fire pump rated at 340 hp, which is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	06-01-1987	FGMACTZZZZ
EU-FIREPUMP-8CYL	One diesel powered emergency fire pump rated at 269 hp. which is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	01-01-1975	FGMACTZZZZ
EU-INGROUND-DIES	One diesel powered emergency spill containment pump rated at 148 hp. which is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	05-01-2015	FGMACTZZZZ
EU-3PMPH-GEN	One diesel powered emergency generator rated at 132 hp, which is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	11-01-2010	FGMACTZZZZ
EU-3RK-GAS-PONY	One gasoline powered emergency kiln drive unit rated at 100 hp, which is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	05-01-1970	FGMACTZZZZ
EU-P-ONAN-GEN	One diesel powered emergency generator rated at 236 hp, which is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	07-01-1985	FGMACTZZZZ
EU-HERR-CS-DIESL	One diesel powered emergency generator for furnace agitator drives rated at 50 hp, which is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	05-27-1983	FGMACTZZZZ
EU-UPOFFICE-GEN	One natural gas fired emergency generator for the upper plant offices rated at 30 KW. which is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	11-15-2010	FGMACTZZZZ
EU-LABEMERG-GEN	One natural gas fired emergency generator for the laboratory and lower plant offices rated at 150 KW which is a Stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions.	10-01-2014	FGMACTZZZZ

EUHCLTANK EMISSION UNIT CONDITIONS

DESCRIPTION

A 20,000-gallon Tank, located in the Hydrate Area, that stores hydrochloric acid which is used to acidify wash water and various effluent brine streams to prevent precipitation of magnesium hydroxide or calcium carbonate within the system.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Packed-bed water fume scrubber.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the EUHCLTANK unless the fume scrubber is installed and operating properly. Proper operation includes maintaining a pressure drop in the range listed in Appendix A of the MAP.² **(R 336.1224, R 336.1225, R 336.1910)**
2. The liquid flow rate in the fume scrubber shall be maintained at a minimum of 1.5 gallons per minute.² **(R 336.1910)**
3. The permittee shall not operate EUHCLTANK unless a MAP as described in Rule 911(2), for the fume scrubber system is implemented and maintained. 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 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 336.1225, R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the fume scrubber with gauge to measure pressure drop across the fume scrubber system.² **(R 336.1910)**
2. The permittee shall equip and maintain the fume scrubber system with a liquid flow indicator.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 monitor and record the liquid flow rate to the fume scrubber, once per operating shift. If any readings are outside of the ranges listed in the MAP, the permittee shall make necessary corrections pursuant to the MAP.² (R 336.1225, R 336.1910)
2. The permittee shall monitor and record the pressure drop across the fume scrubber, once per operating shift. If any readings are outside of the ranges listed in the MAP, the permittee shall make necessary corrections pursuant to the MAP.² (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))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSCRUBBERSTK	6 ¹	40 ¹	R 336.1225

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).

**EUANIMAG
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Material handling operation located in the #4 Packhouse Area consisting of one belt loadout station.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Pulse Jet Baghouse BAGHOUSE 25-0832.
 Pulse Jet Baghouse BAGHOUSE 25-0929.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate emission	0.01 lbs/ 1,000 lbs of exhaust gases, calculated on a dry gas basis ²	Hourly	EUANIMAG	SC V.1 SC VI.1	R 336.1331(1)(c)
2. Visible emissions	10% opacity ²	6-minute average	EUANIMAG	SC V.1	R 336.1301(1)(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUANIMAG unless the baghouses are installed and operating properly.² **(R 336.1910)**
2. The permittee shall maintain the differential pressures across each baghouse within the parameters listed in the MAP. **(R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across the baghouse.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))**

1. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on EUANIMAG at least once per operating day. The visible emission check shall simply verify the presence of visible emissions and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3))**
 - a. If visible emissions have been observed during the 6-minute non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Test Method 9 visible emission observation. If the results of the USEPA Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
 - b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.

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 pressure drop across the baghouse, once per operating shift. If any readings are outside of the ranges listed in the MAP, permittee shall make necessary corrections pursuant to the MAP. **(R 336.1910, R 336.1213(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))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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).

**EUN2SMILL
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Material handling operation located in the #4 Packhouse Area consisting of one Raymond mill.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Pulse Jet Baghouse 25-0887.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate emission	0.1 lbs/ 1,000 lbs of exhaust gases, calculated on a dry gas basis. ²	Hourly	EUN2SMILL	SC V.1 SC VI.1	R 336.1331(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUN2SMILL unless the baghouse is installed and operating properly.² **(R 336.1910)**
2. The permittee shall maintain the differential pressures across each baghouse within the parameters listed in the MAP. **(R 336.1910, R 336.1213(3))**
3. The permittee shall not operate the Raymond mill unless the fugitive dust program specified in the Michigan Air Pollution Control Commission has been implemented and maintained.² **(Act 451 Part 55, Section 324.5524)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the baghouse with a gauge to measure the differential pressure across the baghouse. **(R 336.1910, R 336.1213(3))**

V. TESTING/SAMPLING

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

1. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on EUN2SMILL at least once per operating day. The visible emission check shall simply verify the presence of visible emissions and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately implement one of the following procedures: (R 336.1213(3))
 - a. If visible emissions have been observed during the 6-minute non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Test Method 9 visible emission observation. If the results of the USEPA Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
 - b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.

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 pressure drop across the baghouse, once per operating shift. If any readings are outside of the ranges listed in the MAP, the permittee shall make necessary corrections pursuant to the MAP. (R 336.1213(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))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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).

**EURK3
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Rotary Kiln No.3 is a calciner fired with petroleum coke, coal, oil fuel and or natural gas that is used to remove free and chemically bound water from the magnesium hydroxide slurry to produce magnesium oxide.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Electrostatic Precipitator DV3ESP.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO ₂	2.4 lbs/ MMBTUs heat input ²	When firing coal, based upon a 24-hour period	EURK3	SC V.1 SC VI.2	R 336.1402(1)
2. PM	0.13 lbs/ 1,000 lbs of exhaust gases, calculated on a dry gas basis ²	Hourly	EURK3	SC V.1	R 336.1331(1)(c)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Coke fuel	5% sulfur by weight ²	NA	EURK3	SC V.2	R 336.1402(1)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EURK3 unless the electrostatic precipitators are installed and operating properly. Operating properly includes running the electrostatic precipitators with four fields at a minimum of 50% power or three fields at 100% power.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))**

1. The permittee shall verify PM and SO₂ emission rates from EURK3 by testing at owner's expense, in accordance with the Department requirements. 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
SO ₂	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. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall verify the PM and SO₂ emission rates from EURK3, 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)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3))**
4. The permittee shall analyze the sulfur and BTU content of each coal and coke shipment received.² **(R 336.1402(1))**
5. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on EURK3 at least once per operating day. The visible emission check shall simply verify the presence of visible emissions and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3))**
 - a. If visible emissions have been observed during the 6-minute non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Test Method 9 visible emission observation. If the results of the USEPA Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
 - b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.

VI. MONITORING/RECORDKEEPING

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

1. When firing with coal, the permittee shall monitor and record the coal usage rates in EURK3 daily. **(R 336.1402(1), R 336.1213(3))**
2. When firing with coal, the permittee shall calculate and record the SO₂ emission rates from EURK3 utilizing calculations detailed in Appendix 7 for each 24-hour period in pounds per million BTUs heat input, using the latest fuel analysis. **(R 336.1402(1), R 336.1213(3))**
3. For EURK3, the permittee shall utilize the voltage and the sparking rate as indicators of a properly functioning electrostatic precipitator. **(40 CFR 64.6(c)(1)(i and ii))**

4. The permittee shall monitor and record the voltage and the sparking rate for the ESP. The sparking rate for the ESP shall be measured continuously and recorded at least once per operating shift. The normal operating range for spark rate shall be 0-60 sparks per minute. Voltage from the ESP shall be measured continuously and recorded at least once every two hours. The normal operating range for voltage shall be 100-480 volts. **(40 CFR 64.6(c)(1)(iii))**
5. The permittee shall monitor and record the number of fields operating for the ESP. For EURK3, there shall be at least 3 of 4 fields operating in the automatic mode for the appropriate ESP or 3 fields operating at 100% power on manual mode while EURK3 is operating. If voltage is greater than 0, the precipitator section is operating. A voltage reading of 0 indicates the field is "OFF." **(R 336.1213(3))**
6. An excursion for PM is defined as a spark rate above 60 sparks per minute or recorded voltage below 90 volts. **(40 CFR 64.6(c)(2))**
7. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of EURK3 including the electrostatic precipitator, to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
8. The permittee shall record the voltage and the sparking rate data during all required periods when EURK3 is operating. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities, the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that EURK3 is operating. The permittee shall use all the data collected during all other periods in assessing the operation of the electrostatic precipitator. A monitoring malfunction is any sudden, in frequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Data recorded during monitoring malfunctions, associated repair activities and QA/QC operations shall not be used for 40 CFR Part 64 compliance. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
9. The permittee shall properly maintain the monitoring system, including keeping the necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
10. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

See Appendix 7

VII. REPORTING

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

- Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV3ESPSTK	42 ²	163 ²	R 336.1331(1)(c)

IX. OTHER REQUIREMENT(S)

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

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
FGPERICLASEPLNT	FGPERICLASEPLNT includes the three Herreshoff furnaces and two Shaft Kilns. Emissions are controlled by 3 ESPs and 4 cyclones.	EUHERRFUR1 EUHERRFUR2 EUHERRFUR3 EUSHAFTKILN2 EUSHAFTKILN3
FGDRYER&MILL	FGDRYER&MILL includes an air swept dryer EUDRYMAGDRYER that has two natural gas burners with a maximum capacity of 9 MMBTU/hr. each and a proprietary milling system EUDRYMAGMILL, exhaust is directed to the EUDRYMAGDRYER inlet air duct.	EUDRYMAGDRYER EUDRYMAGMILL
FGGROUP-A	FGGROUP-A is a collection of material handling operations including: two crushers, eight mills or grinders, 22 feed hoppers, 28 conveyors (belt conveyors, vibrating conveyors), 10 screens, two pneumatic transfer systems, 25 elevators, 35 storage bins or silos, six loadouts, unloading equipment, three baggers, and packers that share the same emission limits.	EURK3-S-FUEL EUROLLER-MILL EU2-BAGGER EU3PH-ADD-DC EU98-PUL-DC EUPER-PRIM-DC EUMIDLAND-SYS EUNSMILLS EU6TRAKLOADOUT EUCHANGE-LS EU3RKPRIMSCREEN EU1+2LB-DC EUP-ADD-BINS EUP-STOR-SILO EUSK-BINS-TRANS EUSK-TRAN-DC EUSK-FINES-BIN EU2HERRLB-BIN
FG2+3-PACKHS	FG2+3PACKHS is a collection of material handling equipment including a Gyradisc, screens, feed hoppers, belt conveyors, elevators, storage bins and silos, and loading and unloading equipment that share the same emission limits.	EUGYRADISC EUP-LOADOUT
FGGROUP-B	FGGROUP-B includes material handling equipment in the #2 and #3 Packhouse area and the #4 Packhouse area, consisting of two screens, one feed hopper, five conveyors, six storage bins and silos, and one load out spout that share the same emission limits.	EU88-SCRNR EUN2SMILLTRANS

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGGROUP-C	FGGROUP-C includes material handling operations consisting of: 67 conveyors, 13 weigh belts, 11 elevators, four mills, 16 bins, one mixer, two bagger/sackers, five feed hoppers, two screens, one packer, and 13 that share the same emission limits.	EU88-PRIMARY EUDAY-BIN-DC EUNO3BAGGER EU88SECONDARY EU2DUSTEX EU3DUSTEX
FGGROUP-D	FGGROUP-D consists of material handling equipment including: one bin, one load out spout, the additive silos, and a rail car unloading station that share the same emission limits.	EUADDITIVE-DC EUHB-BINS EULB-BINS
FGLIMESYSTEM	FGLIMESYSTEM includes material handling operations located in the Hydrate Area for the dolomitic lime (dolime) processes. These processes include elevators, conveyors, mills, and silos that share the same emission limits.	EUC-LIME EUC-CRUSHER EUUPPERLIME EUMIDDLELIME EUBOTTOMLIME EUB-REACTOR
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUHYDRATE EUMAINMAINTENANCE EUPACKHOUSE EUPERICLASE
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.	EU#3COKESILOBVDC EUDDAYBINDC EUDMBAGGINGDC EUDMNORTHDRYERBH EUDMSOUTHMILLBH EUDMSTURTEVANTMI EULBBAGGERDC EUSPECCALC-A EUSPECCALC-B EUSPECCALC-C EUSPECMILL EUSPECPKGDC EUPOWDERBLENDERDC
FGMACTZZZZ	Stationary reciprocating internal combustion engines (RICE) located at area source of HAP emissions: One diesel powered emergency fire pump rated at 340 hp, one diesel powered emergency fire pump rated at 269 hp, one diesel powered emergency spill containment pump rated at 148 hp, one diesel powered emergency generator rated at 132 hp, one gasoline powered emergency kiln drive unit rated at 100 hp, one diesel powered emergency generator rated at 236 hp, one diesel powered emergency generator for furnace agitator drives rated at 50 hp, and one natural gas fired emergency generator for the upper plant offices rated at 30 kw.	EU-FIREPUMP-6CYL EU-FIREPUMP-8CYL EU-INGROUND-DIESEL EU-3PMPH-GEN EU-3RK-GAS-PONY EU-P-ONAN-GEN EU-HERR-CS-DIESEL EU-UPOFFICE-GEN EU-LABEMERG-GEN

**FGPERICLASEPLNT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

FGPERICLASEPLNT includes the three Herreshoff furnaces and two Shaft Kilns with coolers.

Emission Units: EUHERRFUR1, EUHERRFUR2, EUHERRFUR3, EUSHAFTKILN2, EUSHAFTKILN3

POLLUTION CONTROL EQUIPMENT

Three ESPs - HF-ESP1, HF-ESP2, HF-ESP3 and four cyclones - COOLER-CYCLON2, SK2CYCLONE, COOLER-CYCLON3, SK3CYCLONE.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate emissions	0.20 lbs / 1,000 lbs of exhaust gases ²	Hourly	EUHERRFUR1 EUSHAFTKILN2	SC V.1 SC VI.1	R 336.1331(1)(a)
2. Particulate emissions	0.20 lbs / 1,000 lbs of exhaust gases ²	Hourly	EUHERRFUR2 EUSHAFTKILN2 EUSHAFTKILN3	SC V.2 SC VI.1	R 336.1331(1)(c)
3. Particulate emissions	0.055 lbs/ 1,000 lbs of exhaust gases ²	Hourly, When Controlled by HF-ESP3	EUHERRFUR3	SC V.8 SC VI.10	R 336.1331(1)(c)
4. Particulate emissions	0.055 lbs/ 1,000 lbs of exhaust gases ²	Hourly, when Controlled by HF-ESP3	EUHERRFUR3 EUSHAFTKILN2 EUSHAFTKILN3	SC V.3 SC V.8 SC VI.10	R 336.1331(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any emission unit in FGPERICLASEPLNT unless the associated electrostatic precipitator is installed and operating properly.² **(R 336.1910)**
2. The permittee shall not operate EUHERRFUR3, and the two shaft kilns when their exhaust gases are diverted to the #3 Herreshoff ESP, unless the ESP is installed and operating properly.² **(R 336.1910)**
3. The permittee shall not operate EUHERRFUR3 unless the HF-ESP3 is installed and operating properly.² **(R 336.1910)**
4. The permittee shall not recycle the shaft kilns for more than two hours during equipment malfunctions.² **(R 336.1910)**
5. The permittee shall operate each ESP in automatic mode. For any operation in manual mode, operator shall record the reason for operating in manual mode, the duration of the incident, and the corrective action taken to return to operating in automatic mode. **(R 336.1910)**
6. FGPERICLASEPLNT shall only be fired with natural gas. **(R 336.1213(3), R 336.1331 (1)(c)(i))**

7. Operation of EUHERRFUR2 using the bypass stack shall be allowed only for the purpose of emergency release of emissions during shut-down of operations when adequate control of emissions is not maintained in accordance with requirements listed in SC III.1.² **(R 336.1910)**
8. The permittee shall not operate FG-PERICLASEPLNT unless the cyclone differential pressures are within the ranges specified in Appendix A of the AQD approved MAP. **(R 336.1910)**
9. The permittee shall not run production in EUHERRFUR3 during bypass of HF-ESP3.² **(R 336.1910)**
10. The permittee shall not bypass the exhaust(s) of EUSHAFTKILN2 or EUSHAFTKILN3 for more than 2 hours during equipment malfunction.² **(R 336.1201(3))**
11. HF-ESP1 shall only be used to control exhaust gases from EUHERRFUR1 and EUSHAFTKILN2. **(R 336.1910)**
12. HF-ESP2 shall only be used to control exhaust gases from EUHERRFUR2, and any one or both EUSHAFTKILN2 and/or EUSHAFTKILN3, plus it may be used to control EUHERRFUR3 but only during startup. **(R 336.1910)**
13. HF-ESP3 shall only be used to control exhaust gases from EUHERRFUR3, and any one or both of the EUSHAFTKILN2 and/or EUSHAFTKILN3. **(R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The duct from EUHERRFUR3, exhaust to HF-ESP2, inside diameter shall not exceed a maximum of 24 inches.² **(R 336.1331)**
2. The permittee shall install and maintain a gauge to measure pressure drop across #2SHAFT KILN CYCLONE, and #3SHAFT KILN CYCLONE, on each of the shaft kilns. **(R 336.1213(3))**
3. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1 of Appendix B, 40 CFR Part 60. **(40 CFR 60.48b(a), 40 CFR 60.48b(e)(1), R 336.1213(3))**

V. TESTING/SAMPLING

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

1. Stack testing of particulate emissions from the EUHERRFUR1 and EUSHAFTKILN2 shall be performed at least once every five years when the exhaust gases, from EUHERRFUR1 and EUSHAFTKILN2 is diverted to the HF-ESP1. **(R 336.2001, R 336.2003, R 336.2004, R 336.1213(3) 40 CFR 64.4(e), 40 CFR 64.6(d))**
2. Stack testing of particulate emissions from the EUHERRFUR2, EUSHAFTKILN2, and EUSHAFTKILN3 shall be at least once every five years, when the exhaust gases from EUHERRFUR2, EUSHAFTKILN2, and EUSHAFTKILN3 are diverted to the HF-ESP2. **(R 336.2001, R 336.2003, R336.2004, R 336.1213(3), 40 CFR 64.4(e), 40 CFR 64.6(d))**
3. Stack testing of particulate emissions from the EUHERRFUR3, EUSHAFTKILN2 and EUSHAFTKILN3 shall be performed at least once every five years when the exhaust gases from EUHERRFUR3 and EUSHAFTKILN2 and EUSHAFTKILN3 are diverted to the HF-ESP3. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

4. The permittee shall verify PM emission rates from FGPERICLASEPLNT by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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)**
5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**
6. If production levels do not allow operation of the above equipment for the purposes of stack testing, during the appointed year, then the permittee shall perform the stack test within 60 days following the startup of that equipment. **(R 336.1213(3))**
7. The permittee shall perform an annual audit of all COMS using the procedures set forth in USEPA Publication 450/4-92-010, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to AQD. **(40 CFR 60.48b(e)(1))**
8. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on HF-ESP3 at least once per operating day. The visible emission check shall simply verify the presence of visible emissions and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3))**
 - a. If visible emissions have been observed during the 6-minute non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Test Method 9 visible emission observation. If the results of the USEPA Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
 - b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.
9. Whenever EUHERRFUR3, EUSHAFTKILN2, and/or EUSHAFTKILN3 is operated and exhausted through HF-ESP3, the permittee shall have the visible emissions from HF-ESP3 read by a certified reader using USEPA Test Method 9 at least once per month while these emission units are operating. **(R 336.1213(3)(c)(i))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall utilize COMS-recorded opacity as an indicator of the proper functioning of the electrostatic precipitators HF-ESP1 and HF-ESP2. The appropriate range of opacity defining proper function of each electrostatic precipitator is 0-20 % opacity. **(40 CFR 64.6(c)(1)(i and ii))**
2. The permittee shall continuously record opacity from HF-ESP1 and HF-ESP2 in FGPERICLASEPLNT. 6-minute average values shall be based on 24 or more equally spaced instantaneous opacity measurements per 6-minute period. The COMS shall be calibrated in accordance with 40 CFR Part 60, Subpart A. **(40 CFR 64.6(c)(1)(iii), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall use the COMS to assure compliance with the PM limits associated with emission units controlled by HF-ESP1 and HF-ESP2. An excursion for PM shall be 2 consecutive 1-hour block average opacity values greater than 12 %. This condition does not affect compliance with R 336.1301. **(40 CFR 64.6(c)(2))**

4. The permittee shall utilize sparking rate and voltage as an indicator of the proper functioning of the electrostatic precipitator HF-ESP3. The appropriate range of sparking rate defining proper function of the electrostatic precipitator is 0-60 sparks per minute, the appropriate range of voltage defining proper function of the electrostatic precipitator is 100 to 480 volts. **(40 CFR 64.6(c)(1)(i and ii))**
5. The permittee shall use the sparking rate and voltage from HF-ESP3 to assure compliance with the PM limits associated with emission units controlled by HF-ESP3. An excursion for PM shall be, a spark rate above 60 sparks per minute or the voltage is below 100 volts. The precipitator shall be inspected, and any problems found shall be documented along with corrections made and if necessary, the process shall be shut down. This condition does not affect compliance with R 336.1301. **(40 CFR 64.6(c)(2))**
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 FGPERICLASEPLNT is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for 40 CFR Part 64 compliance, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, in frequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
7. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the emission units controlled by HF-ESP3 to their normal and/or usual manner of operation as expeditiously and as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
8. The permittee shall properly maintain the monitoring systems including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
9. 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, records of monitoring maintenance, or corrective actions. **(40 CFR 64.9(b)(1))**
10. The permittee shall check and record the number of fields operating, the sparking rate, and voltage in each ESP twice each shift while EUHERRFUR1, EUHERRFUR2, EUHERRFUR3, EUSHAFTKILN2, or EUSHAFTKILN3 is operating. There shall be at least 4 of the 6 fields operating in the automatic mode for HF-ESP3 or 4 fields operating at 100% power on manual mode for HF-ESP3 while EUHERRFUR3 is operating. If voltage is greater than 0 the precipitator section is operating. A voltage reading of 0 indicates the field is "OFF." **(40 CFR 64.6(c)(1)(iii))**
11. A record of shut-down and bypass operations from EUHERRFUR3 to HF-ESP2 will be maintained to indicate frequency and duration of each such episode. The AQD District Office shall be notified, within one working day, of all such emergency uses of the bypass stack. **(R 336.1912, R 336.1213(3))**
12. The permittee shall record the duration of all shaft kiln exhaust bypassing whenever any of the shaft kiln exhausts are bypassed during periods of malfunction of HF-ESP3. **(R 336.1213(3))**
13. The permittee shall monitor and record the pressure drop across the cyclones, once per shift, when EUSHAFTKILN2 or EUSHAFTKILN3 is operating. **(R 336.1213(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))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions, and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**
6. The permittee shall submit any performance test reports 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. In accordance with 40 CFR 60.7(c) and (d) an Excess Emissions Report (EER) and Summary Report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for the COMS. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, permittee shall report that fact. **(40 CFR 60.7, R 336.2170, R 336.1213(3)(c)(i))**
8. The results of the annual audit of the COMS shall be submitted to the AQD within 30 days of completion of the audit. **(40 CFR 60.7)**

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. SV25-0886STK (ESP#3)	77 ²	152 ²	R 336.1331

IX. OTHER REQUIREMENT(S)

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

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).

**FGDRYER&MILL
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

FGDRYER&MILL includes an air swept dryer EUDRYMAGDRYER that has two natural gas burners with a maximum capacity of 9 MMBTU/hr each and a proprietary milling system EUDRYMAGMILL. Exhaust from EUDRYMAGMILL is directed to the EUDRYMAGDRYER inlet air duct.

Emission Units: EUDRYMAGDRYER, EUDRYMAGMILL

POLLUTION CONTROL EQUIPMENT

Fabric filter systems MAC model 168MCF572-425 fabric filter.
 MAC fabric filter model 55MCF80.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.01 lbs/1000 lbs of calculated on a dry gas basis ²	Hourly	FGDRYER&MILL	SC V.1 SC VI.1	R 336.1331
2. PM-10	0.9 pph ²	Hourly	FGDRYER&MILL	SC V.1 SC VI.1	40 CFR 52.21(c)&(d)
3. Visible emissions	5% opacity based ²	6-Minute Average	FGDRYER&MILL	SC V.1 SC VI.1	R 336.1301 R 336.1331 40 CFR 52.21

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGDRYER&MILL unless the fabric filters are installed, maintained, and operated in a satisfactory manner.² **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21 (c)&(d))**
2. The permittee shall not operate FGDRYER&MILL unless the fabric filter differential pressures are within the ranges specified in Appendix A of the AQD approved MAP. **(R 336.1910)**
3. The permittee shall not operate FGDRYER&MILL unless a preventative maintenance plan is implemented and maintained. The preventative maintenance plan and all modifications to such plan must be approved by the Air Quality Division District Supervisor within 30 days of issuance of this permit.² **(R 336.1205, R 336.1225, R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each fabric filters with a gauge to measure the differential pressure across the fabric filters. **(R 336.1910)**

V. TESTING/SAMPLING

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

1. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on FGDRYER&MILL at least once per operating day. The visible emission check shall simply verify the presence of visible emissions and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately implement one of the following procedures:² **(R 336.1910, R 336.1331, 40 CFR 52.21(c)&(d), R 336.1213(3))**
 - a. If visible emissions have been observed during the 6-minute non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Test Method 9 visible emission observation. If the results of the USEPA Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
 - b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.

VI. MONITORING/RECORDKEEPING

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

1. The fabric filter differential pressures shall be monitored and recorded once-per-shift when FGDRYER&MILL is operating. If any baghouse differential pressure readings are outside of the ranges listed in the MAP, the permittee shall take corrective actions as detailed in the MAP.² **(R 336.1205, R 336.1910, R 336.1911, R 336.1213(3))**
2. The permittee shall complete all applicable records in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1225, R 336.1910, R 336.1911)**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDRYMAGDRYER	36 ²	142 ²	R 336.1225 40 CFR 52.21(c)&(d)
2. SVDRYMAGMILL	18 ²	25 ²	R 336.1225 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).

**FGGROUP-A
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

FGGROUP-A is a collection of material handling operations including: two crushers, eight mills or grinders, 22 feed hoppers, 28 conveyors (belt conveyors, vibrating conveyors), 10 screens, two pneumatic transfer systems, 25 elevators, 35 storage bins or silos, six loadouts, unloading equipment, three baggers, and packers that share the same emission limits.

Emission Units: EURK3-S-FUEL, EUROLLER-MILL, EU2-BAGGER, EU3PH-ADD-DC, EU98-PUL-DC, EUPER-PRIM-DC, EUMIDLAND-SYS, EUNSMILLS, EU6TRAKLOADOUT, EUCHANGE-LS, EU3RKPRIMSCREEN, EU1+2LB-DC, EUP-ADD-BINS, EUP-STOR-SILO, EUSK-BINS-TRANS, EUSK-TRAN-DC, EUSK-FINES-BIN, EU2HERRLB-BIN

POLLUTION CONTROL EQUIPMENT

EURK3-S-FUEL Pulse Jet Baghouse 25-1026 and cyclone 25-1024.
 EUROLLER-MILL Pulse Jet Baghouse 25-1059.
 EU2-BAGGER Pulse Jet Baghouse 25-0664.
 EU3PH-ADD-DC Pulse Jet Baghouses 25-0781, 25-0782, and 25-0783.
 EU98-PUL-DC Pulse Jet Baghouse 25-0746.
 EUPER-PRIM-DC Pulse Jet Baghouse 25-0745.
 EUMIDLAND-SYS Pulse Jet Baghouse 25-0827.
 EUSK-FINES-BIN Pulse Jet Baghouse 25-1011.
 EUNSMILLS Pulse Jet Baghouses 25-0769 and 25-0770.
 EU6TRAKLOADOUT Pulse Jet Baghouse 25-0774.
 EUCHANGE-LS Pulse Jet Baghouses 25-0768, 25-0828, and 25-0894.
 EU3RKPRIMSCREEN Pulse Jet Baghouse 25-0834.
 EU1+2LB-DC Pulse Jet Baghouse 25-1067 and 25-1068.
 EUP-ADD-BINS Pulse Jet Baghouses 25-0749, 25-0759, 25-1065, 25-1073, 25-1074, 25-1078, and 25-1079.
 EUP-STOR-SILO Baghouses 25-0895.
 EUSK-TRAN-DC Pulse Jet Baghouse 25-0824.
 EUSK-BINS-TRANS Pulse Jet Baghouses 25-1031, 25-1032, and 25-1033.
 EUHERR2LB-BIN Pulse Jet Baghouse 25-XXXX.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.0095 lbs/ 1,000 lbs of dry exhaust gas ²	Hourly	Each emission unit in FGGROUP-A	SC V.1 SC VI.1	R 336.1331(1)(c)
2. PM10	0.098 pph ²	Hourly	EUHERR2LB-BIN	SC V.1 SC V.2 SC VI.1,	40 CFR 52.21(c)&(d)
3. PM2.5	0.098 pph ²	Hourly	EUHERR2LB-BIN	SC V.1 SC V.2 SC VI.1,	40 CFR 52.21(c)&(d)
4. Visible emissions	5% opacity ²	6-Minute Average	Each emission unit in FGGROUP-A	SC V.1	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate each emission unit in FGGROUP-A unless the associated dust collector is installed and operating properly.² **(R 336.1910)**
2. The permittee shall maintain the differential pressures in each baghouse within the parameters listed in the table in the MAP.² **(R 336.1910)**
3. The permittee shall not operate any equipment in FGGROUP-A unless a MAP as described in Rule 911(2), for both baghouses is implemented and maintained. 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 dust collector with a gauge to measure the differential pressure across the dust collector.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))**

1. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on each exhaust point in FGGROUP-A at least once per operating day. The visible emission check shall assess whether visible emissions are present and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.² **(R 336.1301, R 336.1910)**
2. The permittee may be required to verify PM10/2.5 emission rates from EUHERR2LB-BIN by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 51, Appendix M. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be 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. The permittee shall monitor and record the pressure drop across each dust collector, once per shift, when the equipment is operating. If any baghouse differential pressure readings are outside of the ranges listed in the MAP, the permittee shall take corrective actions as detailed in the MAP.² (R 336.1910)
2. If visible emissions are observed during observations conducted for SC V.1, the permittee shall record the following in the operations log:
 - a. The color of the visible emissions
 - b. The cause of the visible emissions
 - c. The total duration of any visible emissions incident
 - d. Any corrective action taken to address the visible emissions

The permittee shall keep the operations log at the facility and make it available to the Department upon request.² (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))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV25-1026STK	18.4 ²	33.8 ²	40 CFR 52.21(c)&(d)
2. SV25-1059STK	12.75 x 11 ²	48 ²	40 CFR 52.21(c)&(d)
3. SV25-0881STK	24 ²	138 ²	40 CFR 52.21(c)&(d)
4. SV25-0769STK	20 ²	69 ²	40 CFR 52.21(c)&(d)
5. SV25-0770STK	20 ²	69 ²	40 CFR 52.21(c)&(d)
6. SV-2HERRLB-BIN ^A	13 x 8.5 ²	68.9 ²	R 363.1225 40 CFR 52.21(c)&(d)

^A Stack or vent may discharge horizontally.

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).

**FG2+3-PACKHS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

FG2+3PACKHS is a collection of material handling equipment including a Gyradisc, screens, feed hoppers, belt conveyors, elevators, storage bins and silos, and loading and unloading equipment that share the same emission limits.

Emission Units: EUGYRADISC, EUP-LOADOUT

POLLUTION CONTROL EQUIPMENT

EUGYRADISC Pulse Jet Baghouse 25-0892.
 EUP-LOADOUT Pulse Jet Baghouse 25123822.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate emission	0.01 lbs/ 1,000 lbs of exhaust gases ²	Hourly	EUGYRADISC EUP-LOADOUT	SC V.1 SC VI.1	R 336.1331(1)(c)
2. Particulate emission	0.054 pph ²	Hourly	EUP-LOADOUT	SC V.1 SC VI.1	R 336.1331(1)(c)
3. Visible emissions	0% opacity ²	6-Minute Average	EUGYRADISC EUP-LOADOUT	SC V.1	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUGYRADISC or EUP-LOADOUT unless the associated baghouse is installed, maintained and operated in a satisfactory manner. Satisfactory operation includes but is not limited to submitting and following an approved malfunction abatement plan for each of the baghouses in FG2+3PACKHS.² **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
2. The permittee shall not operate any equipment in FG2+3PACKHS unless a MAP as described in Rule 911(2), for both baghouses is implemented and maintained. 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 336.1225, R 336.1301, R 336.1331, R 336.1910, R 336.1911)**

3. The permittee shall maintain the differential pressures in each baghouse within the parameters listed below:² (R 336.1910)

Emission Unit Name	Description	Equip. No.	Differential Pressure Range	ACFM
EUGYRADISC	GYRADISC DUST COLLECTOR	25-0892	1-8	8000
EUP-LOADOUT	PERICLASE LOADOUT DUST COLLECTOR	25123822	1-11	3000

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across the baghouse.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))

1. Once each day that the equipment is operating, an employee shall perform non-certified opacity observations of each baghouse stack in FG2+3PACKHS. A record of these observations shall be kept on file and made available to the Department upon request. An employee shall observe the exhaust from the baghouse stacks, for visible emissions. If any visible emissions are observed, the permittee shall also note the following in the operations log:² (R 336.1301)
- a. The color of the visible emissions;
 - b. Whether the visible emissions are representative of normal visible emissions;
 - c. If the visible emissions are not representative of normal operations, the cause of the abnormal visible emissions;
 - d. The total duration of any abnormal visible emissions incident;
 - e. Any corrective action taken to eliminate the visible emissions.

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 pressure drop across each baghouse, once per shift, when each emission unit in FG2+3PACKHS is operating, in a manner and with instrumentation acceptable to the Department. All records of the pressure drop across each baghouse shall be kept on file and made available to the Department upon request.² (R 336.1205(3), R 336.1225, R 336.1331)

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)

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).

**FGGROUP-B
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

FGGROUP-B includes material handling equipment in the #2 and #3 Packhouse area and the #4 Packhouse area, consisting of two screens, one feed hopper, five conveyors, six storage bins and silos, and one load out spout that share the same emission limits.

Emission Units: EU88-SCRNR, EUN2SMILLTRANS

POLLUTION CONTROL EQUIPMENT

EU88-SCRNR Pulse Jet Baghouse 25-0890.
 EUN2SMILLTRANS Pulse Jet Baghouse 25-1020.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate emission	0.01 lbs/ 1,000 lbs, calculated on a dry gas basis ²	Hourly	EU88-SCRNR, EUN2SMILLTRANS	SC V.1 SC VI.1	R 336.1331(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the equipment unless the baghouses are installed and operating properly.² **(R 336.1213(3), R 336.1910)**
2. The permittee shall not operate FGGROUP-B unless the baghouse differential pressures are within the ranges specified in the AQD approved MAP. **(R 336.1910)**
3. The permittee shall not operate EU88-SCRNR unless the fugitive dust program has been implemented and is maintained.² **(Act 451 Part 55, Section 324.5524)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across the baghouse. **(R 336.1910)**

V. TESTING/SAMPLING

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

1. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on EU88-SCRNR and EUN2SMILLTRANS at least once per operating day. The visible emission check shall simply verify the presence of visible emissions and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3))**
 - a. If visible emissions have been observed during the 6-minute non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Test Method 9 visible emission observation. If the results of the USEPA Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
 - b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.

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 pressure drop across each baghouse, once per shift, when the equipment is operating. If any baghouse differential pressure readings are outside of the ranges listed in the MAP, the permittee shall take corrective actions as detailed in the MAP. **(R 336.1213(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))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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).

**FGGROUP-C
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

FGGROUP-C includes material handling operations consisting of 67 conveyors, 13 weigh belts, 11 elevators, four mills, 16 bins, one mixer, two bagger/sackers, five feed hoppers, two screens, one packer, and 13 that share the same emission limits.

Emission Units: EU88-PRIMARY, EUDAY-BIN-DC, EUNO3BAGGER, EU88SECONDARY, EU2DUSTEX, EU3DUSTEX

POLLUTION CONTROL EQUIPMENT

EU88-PRIMARY Pulse Jet Baghouse 25-0709
 EUDAY-BIN-DC Pulse Jet Baghouse 25-0708
 EUNO3BAGGER Pulse Jet Baghouse 25-0706
 EU2DUSTEX Baghouse 25-0799
 EU3DUSTEX Baghouse 25-0808.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate emission	0.10 lbs/ 1,000 lbs of dry exhaust gases	Hourly	EU88-PRIMARY, EUDAY-BIN-DC, EUNO3BAGGER, EU2DUSTEX, EU3DUSTEX	SC V.1 SC VI.1	R 336.1331(1)(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the emission units in FGGROUP-C unless each baghouse is installed and operating properly. **(R 336.1213(3), R 336.1910)**
2. The permittee shall not operate FGGROUP-C unless the baghouse differential pressures are within the ranges specified in the AQD approved MAP. **(R 336.1213(3), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across each baghouse. **(R 336.1213(3), R 336.1910)**

V. TESTING/SAMPLING

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

1. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on FGGROUP-C at least once per operating day. The visible emission check shall simply verify the presence of visible emissions and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3))**
 - a. If visible emissions have been observed during the 6-minute non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Test Method 9 visible emission observation. If the results of the USEPA Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
 - b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.

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 pressure drop across the baghouse, once per shift, when the equipment in each emission unit in FGGROUP-C is operating. If any baghouse differential pressure readings are outside of the ranges listed in the MAP, the permittee shall take corrective actions as detailed in the MAP. **(R 336.1213(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))**
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)

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).

**FGGROUP-D
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

FGGROUP-D consists of material handling equipment including: one bin, one load out spout, the additive silos, and a rail car unloading station that share the same emission limits.

Emission Units: EUADDITIVE-DC, EUHB-BINS, EULB-BINS

POLLUTION CONTROL EQUIPMENT

EUADDITIVE-DC Pulse Jet Baghouse 25-0881

EUHB-BINS Pulse Jet Baghouse 25-0880

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate emissions	0.0095 lbs/ 1,000 lbs of dry exhaust gases ²	Hourly	EUADDITIVE-DC EUHB-BINS	SC V.1 SC VI.1	R 336.1331(1)(c)
2. Visible emissions	10% opacity ² .	6-Minute Average	EUHB-BINS	SC V.1	R 336.1301(1)(c)
3. Visible emissions	5% opacity ²	6-minute average	EUADDITIVE-DC	SC V.1	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGGROUP-D unless the baghouse differential pressures are within the ranges specified in Appendix A of the AQD approved MAP. **(R 336.1910)**
2. The permittee shall not operate the emission units in FGGROUP-D unless the baghouses are installed and operating properly.² **(R 336.1910)**
3. The permittee shall not operate the equipment unless the fugitive dust program has been implemented and is maintained.² **(Act 451 Part 55, Section 324.5524)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each baghouse with a gauge to measure the differential pressure across the baghouse.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))**

1. The permittee shall perform and record the results of a 6-minute non-certified visible emission check on FGGROUP-D at least once per operating day. The visible emission check shall simply verify the presence of visible emissions and need not follow the procedures specified in USEPA Test Method 9. Therefore, multiple stacks may be observed simultaneously. Each visible emission check shall be taken during routine operating conditions. If visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3))**
 - a. If visible emissions have been observed during the 6-minute non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Test Method 9 visible emission observation. If the results of the USEPA Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
 - b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of visible emissions.

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 pressure drop across each baghouse, once per shift, when the equipment is operating. If any baghouse differential pressure readings are outside of the ranges listed in the MAP, the permittee shall take corrective actions as detailed in the MAP. **(R 336.1213(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))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV25-0881STK	24 ²	138 ²	R 336.1331(1)(c)

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).

**FGLIMESYSTEM
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

FGLIMESYSTEM includes material handling operations located in the Hydrate Area for the dolomitic lime (dolime) processes. These processes include elevators, conveyors, mills, and silos that share the same emission limits.

Emission Units: EUC-LIME, EUC-CRUSHER, EUUPPERLIME, EUMIDDLELIME, EUBOTTOMLIME, EUB-REACTOR

POLLUTION CONTROL EQUIPMENT

EUC-LIME, Pulse Jet baghouse 25-0873, 2000 CFM exhaust fan.
 EUC-CRUSHER, Pulse Jet baghouse 25-2659-89, 2750 CFM exhaust fan
 EUUPPERLIME, Pulse Jet baghouse 25-1050.
 EUMIDDLELIME, Pulse Jet baghouse 25-1051.
 EUBOTTOMLIME, bottom-lime baghouse 25777777 (from MAP).
 EUB-REACTOR, B-system baghouse 25133855 (from MAP).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate emission	0.0095 lbs/ 1,000 lbs of exhaust gases, calculated on a dry gas basis ²	Hourly	For each unit in FGLIMESYSTEM (EUUPPERLIME EUMIDDLELIME EUBOTTOMLIME EUB-REACTOR EUC-LIME)	SC V.1 SC VI.1	R 336.1331(1)(c)
2. Visible emission	5% Opacity ²	6-Minute Average	EUC-LIME	SC V.1	R 336.1301(1)(c)
3. Visible emission	5% Opacity ²	6-Minute Average	EUC-CRUSHER	SC V.1	R 336.1301(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any equipment in FGLIMESYSTEM unless a MAP as described in Rule 911(2), for each of the baghouses associated with FGLIMESYSTEM, has been submitted within 60 days of permit issuance, 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 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))**

2. The permittee shall not operate any process in FGLIMESYSTEM unless the associated baghouse is installed and operating properly.² **(R 336.1910)**
3. The permittee shall maintain the differential pressures across each baghouse associated with FGLIMESYSTEM within the parameters as specified in the MAP.² **(R 336.1910)**
4. The permittee shall not operate EUC-LIME and EUC-CRUSHER unless the fugitive dust program has been implemented and is maintained.² **(R 336.1371)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each baghouse in FGLIMESYSTEM with a gauge to measure the differential pressure across the baghouse.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))**

1. Once each day that FGLIMESYSTEM is operating, an employee shall perform non-certified opacity observations. A record of this observation shall be kept on file and made available to the Air Quality Division upon request. An employee shall observe the exhaust from the baghouse stacks, for visible emissions. If visible emissions are observed, the permittee shall also note the following in the operations log:² **(R 336.1301, R 336.1331)**
 - a. The color of the visible emissions;
 - b. Whether the emissions are representative of normal visible emissions;
 - c. the cause of the abnormal visible emissions;
 - d. The total duration of any abnormal visible emissions incident;
 - e. Any corrective action taken to eliminate the abnormal visible emissions

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 pressure drop across each baghouse in FGLIMESYSTEM, once per shift, when the equipment is operating, in a manner and with instrumentation acceptable to the Air Quality Division. All records of the pressure drop across the baghouse shall be kept on file and made available to the Department upon request.² **(R 336.1331, 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))**

- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV25-1050STK	16 ²	67 ²	R 336.1225 R 336.1331(1)(c) R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
2. SV25-1051STK	16 ²	52 ²	R 336.1225 R 336.1331(1)(c) R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
3. SVC-CRUSHER	12 ²	36.5 ²	R 336.1331 40 CFR 52.21(c)&(d)
4. SVC-LIME	12 ²	36.5 ²	R 336.1331 40 CFR 52.21(c)&(d)

- The exhaust gases from EUBOTTOMLIME and EUB-REACTOR shall not be discharged to the ambient air at any time and shall be vented to the in-plant environment.² **(R 336.1225, R 336.1331, 40 CFR 52.21(c) & (d))**

IX. OTHER REQUIREMENT(S)

- The permittee shall not substitute any raw materials for those described in the permit application which would result in an appreciable change in the quality or any appreciable increase in the quantity of the emissions of an air contaminant without prior notification to and approval by the Air Quality Division.² **(R 336.1225, R 336.1331)**

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).

FGRULE290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

Emission Units installed on or after December 20, 2016: NA

Emission Units installed prior to December 20, 2016: EU#3COKESILOBVDC, EUDDAYBINDC, EUDMBAGGINGDC, EUDMNORTHDRYERBH, EUDMSOUTHMILLBH, EUDMSTURTEVANTMI, EULBBAGGERDC, EUSPECCALC-A, EUSPECCALCA-B, EUSPECCALC-C, EUSPECMILL, EUSPECPKGDC, EUPOWDERBLENDERDC.

POLLUTION CONTROL EQUIPMENT

#3 COKE Silo Bin Vent dust collector, D dust collector, #3 PH Bulk Sack Station dust collector, Dry Mag Packaging dust collector, North Dryer baghouse, South Dryer baghouse, South Mill baghouse, North Mill baghouse, #2 Packhouse Bulk Bagger dust collector, Light Burn Bagger dust collector, Calciner A dust collector, Calciner B dust collector, Calciner C dust collector, Spec Plant Mill dust collector, Spec Plant Packaging dust collector, and Mag Hydroxide Powder Blender dust collector.

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(2)(a)(i))**
2. Any emission unit for which CO₂ equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**
 - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**
 - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**
 - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**
 - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
 - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**

3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(a)(iii))**
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**
 - b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
 - c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**
2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
 - a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i), R 336.1910)**
 - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
 - ii. Wet scrubbers equipped with a liquid flow rate monitor.
 - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
 - b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii), 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 maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
 - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
 - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
 - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). **(R 336.1213(3))**

- e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
 - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(2)(c), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
 - 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Units: EUHYDRATE, EUMAINMAINTENANCE, EUPACKHOUSE, EUPERICLASE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five % by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

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

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FGMACTZZZZ
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Stationary reciprocating internal combustion engines (RICE) located at area source of HAP emissions: One diesel powered emergency fire pump rated at 340 hp, one diesel powered emergency fire pump rated at 269 hp, one diesel powered emergency spill containment pump rated at 148 hp, one diesel powered emergency generator rated at 132 hp, one gasoline powered emergency kiln drive unit rated at 100 hp, one diesel powered emergency generator rated at 236 hp, one diesel powered emergency generator for furnace agitator drives rated at 50 hp, one natural gas fired emergency generator for the upper plant offices rated at 30 KW, and one natural gas fired emergency generator for the laboratory and lower plant offices rated at 150 KW.

Emission Units: EU-FIREPUMP-6CYL, EU-FIREPUMP-8CYL, EU-INGROUND-DIES, EU-3PMPH-GEN, EU-3RK-GAS-PONY, EU-P-ONAN-GEN, EU-HERR-CS-DIESL, EU-UPOFFICE-GEN, EU-LABEMERG-GEN

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee may operate FGMACTZZZZ as necessary during emergencies with no time limit. **(40 CFR 63.6640(f)(1))**
2. The permittee may operate FGMACTZZZZ for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the engine manufacturer or vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing is limited to 100 hours per calendar year. **(40 CFR 63.6640(f)(2)(i))**
3. The permittee may operate FGMACTZZZZ for up to 50 hours per engine per calendar year in non-emergency situations. The 50 hours are counted as part of the 100 hours of operation allowed under SC III.2. The 50 hours cannot be used for peak shaving, or non-emergency demand response or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(4)(iii))**
4. The permittee must operate and maintain FGMACTZZZZ according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e)(iii))**
5. The permittee must be in compliance with the emission limitations and operating limitations in this subpart that apply to FGMACTZZZZ at all times. **(40 CFR 63.6605(a))**

6. The permittee at all times must operate and maintain FGMACTZZZZ in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of FGMACTZZZZ. **(40 CFR 63.6605(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip each engine in FGMACTZZZZ with a non-resettable hour meter. **(40 CFR 63.6625(f))**

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 the following records: **(40 CFR 63.6655)**
 - a. Records of the maintenance conducted on FGMACTZZZZ in order to demonstrate that FGMACTZZZZ are operated and maintained according to the maintenance plan. **(40 CFR 66.6655(e)(2))**
 - b. Records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation and how many hours were spent during non-emergency operation. **(40 CFR 66.6655(f)(2))**

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)

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).

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
EURK3-S-FUEL	40 CFR Part 60, Subpart Y, Standards of performance for new Stationary Sources for Coal Preparation Plants	The provisions of this Subpart are applicable to facilities that process more than 200 tons of coal per day (40 CFR 60.250). This facility uses a maximum of 36 tons of coal or petroleum coke per day. Therefore, this facility is not subject to this Subpart.

APPENDICES

Appendix 1. Acronyms and Abbreviations

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

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-A3900-2015. 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-A3900-2015b is being reissued as Source-Wide PTI No. MI-PTI-A3900-2021a.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
190-16	201800002	Incorporate PTI No. 190-16 into the ROP, which was issued to install a new storage silo for its "Lightburn MgO" product (magnesium oxide). The installation includes associated conveying and emission control equipment. The new emission unit for the equipment is included in the flexible group FGGROUP-A, thereby having the emission limits and other requirements of other equipment in the flexible group. The emission unit consists of the new storage silo, the associated conveying equipment, and baghouse. The emissions are collected and routed to the baghouse that sits on top of the storage silo, so that collected material is dropped into the silo.	EUHERR2LB-BIN FGGROUP-A
128-15	2016700040	Incorporate PTI No. 128-15 into the ROP, which was issued for replacing a 20,000 gallon hydrochloric acid tank (EUHCLTANK) and fume scrubber stack (SVSCRUBBERSTK) with a new 20,000 gallon tank and scrubber system.	EUHCLTANK

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-A3900-2021.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
61-22	202300083 / July 24, 2023	The changes were to incorporate PTI No. 61-22 into the ROP, which was to add a dust collector and dedicate it to the hammermill in EUC-LIME. In addition, the existing collector in EUC-LIME was re-routed from the in-plant environment to a separate, dedicated stack.	EUC-LIME, EUC-CRUSHER, FGLIMESYSTEM

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EURK3.

- Fuel analysis (a) = % Sulfur / # fuel
- Fuel analysis (b) = BTU / # fuel
- (f) # fuel = Weight of fuel in # burned in 24 Hr
- (e) = Emission rate in # SO₂ / MMBTU
- Conversion Factors
- 2 # SO₂ / 1 # Sulfur
- 1,000,000BTU / MMBTU

$$(e) = \frac{(a) \times (f) \times (2 \text{ \# SO}_2 / 1 \text{ \# Sulfur}) \times (1,000,000 \text{ BTU} / \text{MMBTU})}{(b) \times (f)}$$

Appendix 8. 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.