Michigan Department of Environmental Quality
Air Quality Division

EFFECTIVE DATE: August 20, 2014

ISSUED TO:

St. Barbara Cement, Inc.

St. Marys Cement, Inc. (US)

State Registration Number (SRN): B1559

LOCATED AT:

16000 Bells Bay Road, Charlevoix, Charlevoix County, Michigan 49720

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B1559-2014

Expiration Date: August 20, 2019

Administratively Complete ROP Renewal Application Due Between
February 20, 2018 and February 20, 2019

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B1559-2014

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

Michigan Department of Environmental Quality

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Janis Ransom, Cadillac 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 Environmental Quality (MDEQ) or his or her designee.

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

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

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

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

This permit does not relieve the permittee from any responsibilities or obligations imposed on the permittee, at this source, under Consent Decree Case No. 1:06-cv-607 entered on December 12, 2006 between the United States of America and the permittee.

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). **(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: **(R 336.1301(1))**
    a. A 6 minute average of 20 percent opacity, except for one 6 minute average per hour of not more than 27 percent opacity.
    b. A limit specified by an applicable federal new source performance standard.

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

12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
    a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.[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). **(R 336.2001)**

14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**

15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

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

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

Certification & Reporting

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

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

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

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

c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
    a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
    b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete". The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.

23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**

24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**

25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA. **(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(9))**

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(7))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F.

37. If the permittee is subject to 40 CFR, Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR, Part 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR, Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).

39. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall comply with the requirements of 40 CFR, Part 68, no later than the latest of the following dates as provided in 40 CFR, Part 68.10(a):
    a. June 21, 1999,
    b. Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
    c. The date on which a regulated substance is first present above a threshold quantity in a process.

40. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR, Part 68.

41. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR, Part 68)**

Emission Trading

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

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. [2] **(R 336.1201(1))**

44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. [2] **(R 336.1201(8), Section 5510 of Act 451)**

45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. [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, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. [2] **(R 336.1201(4))**

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).

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the stationary source unless the Preventative Maintenance/Malfunction Abatement Plan (MAP) is implemented and maintained.[2] **(R 336.1205, R 336.1911)**

2. The permittee shall not operate the stationary source unless the program for continuous fugitive emissions control for all facility roadways, the facility yard, all storage piles, and all material handling operations is implemented and maintained as specified in the approved Fugitive Dust Control Program (FDCP).[2] **(R 336.1205, R 336.1371, R 336.1372, R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep records of all repairs initiated as a result of inspections pursuant to the MAP. All records shall be made available to the Department upon request.[2] **(R 336.1911)**

2. The permittee shall keep the records specified in the FDCP. All records shall be made available to the Department upon request.[2] **(R 336.1371(2)(c), R 336.1372)**

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the approved MAP, or an alternate plan approved by the AQD District Supervisor. The plan shall include the following:
   a. Procedures for maintaining and operating in a satisfactory manner the equipment covered by the plan, including add-on air pollution control devices;
   b. Procedures for monitoring equipment during malfunction events; and
   c. A program for corrective action for such events.

   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, including an event involving equipment not specifically addressed in the approved plan, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor.[2] **(R 336.1911)**

2. The permittee shall comply with the approved FDCP, or an alternate plan approved by the AQD District Supervisor. If the plan fails to address or inadequately addresses an event involving fugitive dust 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 to the AQD District Supervisor.[2] **(R 336.1371, R 336.1372)**

3. The permittee shall comply with the requirements of USEPA Consent Decree Case No. 1:06-cv-607. The conditions contained in this ROP for which the Consent Judgment is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Judgment. **(Consent Decree Case No. 1:06-cv-607)**

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).

C. EMISSION UNIT CONDITIONS

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

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA 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
EUQUARRYFUGITIVE	This emission unit includes all sources within the Quarry, including screening, fugitives, roads and overburden. It also includes drilling and blasting.	6/1/1967	FGQUARRY FGALTSAND/SOIL
EUPRIMARYCRUSH	Represents equipment associated with primary crushing and conveying of material out of the quarry.	6/1/1967	FGQUARRY FGALTSAND/SOIL
EUHAMMER	3,000 pounds of force per hammer cycle primary crusher rock breaker	1/1/2006	FGQUARRY
EUSECONDARYCRUSH	This emission unit includes: No. 1 north vibrating screen, No. 2 south vibrating screen, secondary crusher and dust collector, conveyor, and transfer house.	6/1/1967	FGQUARRY FGALTSAND/SOIL
EUPORTABLECRUSH	A 100 ton per hour portable nonmetallic mineral crushing facility consisting of a crusher and associated process equipment including grinding mills, loading operations, and any other material handling equipment operated at the site. The crusher shall be equipped with appropriate dust suppression equipment or shall be located within an enclosed building. Operation of the control equipment is required only when necessary to meet applicable emission limits.	1/5/2007	NA
EURAWMATHANDSTOR	Raw material loading, unloading and raw material transfer, including the material handling equipment that takes a feed into the kiln feed shelf. Also contains spill conveyors under the bottom ash feeder.	6/1/1967	FGNONKILNFACILITY
EURAWMILLS	Includes: storage and handling equipment, weigh feeder, raw mill elevator to 501 belt and dust collector, 501 belt, blending silo and dust collector, blending air slides, dynamic classifier, raw mill, and baghouse.	2/23/1978	FGKILNRAWMILLS FGALTSAND/SOIL

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUKILN	Represents the in-line calciner with indirect firing, in-line kiln with indirect firing and equipment associated with the treatment of exhaust gases including the north conditioning tower, south conditioning tower, the main stack baghouse, and bypass stack baghouse.	2/23/1978	FGKILNRAWMILLS FGALTSAND/SOIL
EUCLINKERHAND	Represents equipment associated with the handling of clinker into and out of the cooler. The emission unit includes: gravel bed clinker dust bucket elevator, clinker cooler outlet pan conveyor/elevator dust collector, clinker cooler almund elevators, clinker conveyor belt 89, enclosed clinker drags, M3 belt conveyor and reclaim system, clinker heat exchanger, clinker ladder, clinker domes, clinker silos, clinker handling belts, and heat exchanger transporter pods.	6/1/1967	FGNONKILNFACILITY
EUCLINKERCOOL	Represents equipment associated with the cooling of clinker and the treatment of the cooler gases, including: clinker cooler, gravity cooler, gravity cooler dust collector, clinker heat exchanger, and heat exchanger transporter pods.	2/23/1978	FGKILNRAWMILLS
EUFINISHMILL1	The emission unit includes: #1 Finish Mill Clinker Feeder with dust collector (M161B), #1 Finish Mill Clinker Feeder with dust collector (M163B), gypsum silo 23, fringe silo 24, #1 Finish Mill with dust collector.	6/1/1967	FGFINISHMILLS
EUFINISHMILL2	The emission unit includes: #2 Finish Mill Clinker Feeder with dust collector (M194B), #2 Finish Mill Clinker Feeder with dust collector (M196B), gypsum silo 25, #2 Finish Mill with dust collector.	6/1/1967	FGFINISHMILLS
EUFINISHMILL3	The emission unit includes: #3 Finish Mill Clinker Feeder with dust collector (M063B), #3 Finish Mill Clinker Feeder with dust collector (M067B), gypsum silo 21, fringe silo 22, limestone silo 18, #3 Finish Mill with dust collector.	1/9/1966	FGFINISHMILLS
EUCEMENTHAND&STO	Includes: pneumatic conveyors; silos #1- 12, 26-29, 6A; air slides #1-12 & below silos #1-6; dust collectors top of old silos #1-3, SE, NW and below silos #1-6; bucket elevator with dust collector; storage dome & dust collector; truck loading & dust collector, and ship loading.	2/1/1978 12/1/1999	FGNONKILNFACILITY
EUCOALSYSTEM	Equipment associated with the storage, crushing, and transport of coal. Includes: coal and pet coke storage piles, coal crusher, M40 belt when carrying solid fuels, flash furnace solid fuels mill, and kiln solid fuels mill.	6/1/1967	FGNONKILNFACILITY

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCKDHANDSTOR	Equipment associated with handling and storage of cement kiln dust. Includes: cement kiln dust elevator, north pug tank, south pug tank, and pug mill. Also includes all truck loading at 80 percent removal efficiency.	2/23/1978 10/1/1985	FGNONKILNFACILITY
EUCOLDCLEANER	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	6/1/1967	FGCOLDCLEANERS
EUKILNDONKEY	Existing Detroit Diesel CI emergency stationary reciprocating internal combustion engine (RICE) that has a rating of 238 brake horsepower (HP) and no emission controls.	<2006	FGMACTZZZZEMERGENCY
EUEMERGENCYGEN	Existing Cummins CI emergency stationary reciprocating internal combustion engine (RICE) that has a rating of 68 brake horsepower (HP) and no emission controls.	2005	FGMACTZZZZEMERGENCY

EUPORTABLECRUSH
EMISSION UNIT CONDITIONS

DESCRIPTION

This emission unit consists of a 100 ton per hour portable nonmetallic mineral crushing facility consisting of a crusher and associated process equipment including grinding mills, loading operations, and any other material handling equipment operated at the site.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Water spray bars or enclosed building.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	15 percent opacity[2]	NA	Crusher	SC VI.3	**R 336.1205, R 336.1301, R 336.1901, 40 CFR 60.672(b) and Table 3**
2. Visible Emissions	10 percent opacity[2]	NA	Conveyors/Transfer points	SC VI.3	**R 336.1205, R 336.1301, R 336.1901, 40 CFR 60.672(b) and Table 3**
3. Visible Emissions	5 percent opacity[2]	NA	Wheel loaders and truck traffic, and material storage piles	SC VI.3	**R 336.1205, R 336.1301, R 336.1901**
4. Visible Emissions	10 percent opacity[2]	NA	Any other process equipment which is part of the nonmetallic mineral crushing facility or related processes	SC VI.3	**R 336.1205, R 336.1301, R 336.1901, 40 CFR 60.672(b) and Table 3**

There shall be no visible emissions from any equipment enclosed within a building.[2] **(R 336.1205, R 336.1301, R 336.1901, 40 CFR 60.672(e)(1))**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Non-metallic mineral	876,000 tons per year.[2]	NA	EUPORTABLECRUSH	SC VI. 1	**R 336.1205**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not crush any asbestos tailings or asbestos containing waste materials in EUPORTABLECRUSH.[2] **(40 CFR 61.141)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The crusher shall be equipped with appropriate dust suppression equipment which may include spray bars or shall be located within an enclosed building. The control equipment shall be properly operated as necessary to comply with all emission limits.[2] **(R 336.1205, R 336.1301, 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 keep, in a satisfactory manner, daily and annual records of the amount of material processed and the source of the material.[2] **(R 336.1213(3), R 336.1205)**

2. The permittee shall verify that any material processed by EUPORTABLECRUSH does not contain asbestos tailings or asbestos containing waste materials.[1] **(R 336.1213(3))**

3. Verification of visible emissions from EUPORTABLECRUSH shall be performed once daily while the process is operating using a 6 minute non-certified USEPA Method 22 visible emissions reading. If visible emissions are observed, a 15 minute USEPA Method 9 (Method 9D for roads) test shall be conducted within one hour to determine compliance with the emission limits in SC I.1-4. **(R 336.1205, R 336.1301, R 336.1901, 40 CFR 60.672(b) and Table 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)

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

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

IX. OTHER REQUIREMENT(S)

1. In the event that EUPORTABLECRUSH is removed from this location, the permittee may return, install and operate this equipment at this location pursuant to the conditions in this Renewable Operating Permit, provided that all of the following conditions are met:
   a. There are no outstanding and unresolved compliance issues, resulting from written notification by the AQD, involving either EUPORTABLECRUSH or this location.[2]
   b. The permittee provides written notification to the AQD District Supervisor, prior to the removal of this equipment, stating an intent to return and operate EUPORTABLECRUSH within 12 months of its removal from this location.[2]
   c. The permittee provides written notification to the AQD District Supervisor, at least one week prior to the return of EUPORTABLECRUSH, that the equipment is scheduled to return to this location.[2]
   d. The permittee returns EUPORTABLECRUSH to this location within 12 months of its removal.[2] **(Act 451, Part 55, 324.5505, R 336.1205, R 336.1901)**

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

D. FLEXIBLE GROUP CONDITIONS

Part D outlines 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
FGQUARRY	This Flexible Group deals with the initial mining and crushing of the limestone. Included here are the drilling, blasting and hauling of the limestone; the crushing of the limestone in the primary and secondary crushers; and handling of dust including fugitive emissions from the quarry and dust from the secondary crusher.	EUQUARRYFUGITIVE EUPRIMARYCRUSH, EUHAMMER, EUSECONDARYCRUSH,
FGKILNRAWMILLS	This Flexible Group deals with mixing and grinding, then heating the ingredients to make cement. Included are limestone, shale, bottom ash, fly ash, bauxite, mill scales, slag, various sands, numerous iron sources, clay, overburden that are ground and mixed in EURAWMILLS. These raw materials are then sent to the EUKILN where they are heated and become clinker. This Flexible Group also contains the requirements for the use of asphalt flakes and plastic as a fuel in the in-line calciner with indirect firing.	EURAWMILLS, EUKILN, EUCLINKERCOOL
FGFINISHMILLS	This Flexible Group deals with pulverizing the clinker after it has left the kiln and cooling area. The clinker is ground in the mills-which are horizontal steel tubes filled with steel balls. As the tubes rotate, the steel balls tumble and crush the clinker into a superfine gray powder known as Portland Cement. A small amount of gypsum is added during the final grinding to control the set upon use of the cement.	EUFINISHMILL1, EUFINISHMILL2, EUFINISHMILL3
FGNONKILNFACILITY	This Flexible Group deals with handling the materials, gasses, fuels, and dust associated with the production of cement. Included are limestone, bottom ash, fly ash, sand; clinker cooler gasses; coal and petroleum coke; and the finished cement product that is shipped for sale.	EURAWMATHANDSTOR, EUCLINKERHAND, EUCEMENTHAND&STO, EUCOALSYSTEM, EUCKDHANDSTOR,
FGALTSAND/SOIL	This flexible group covers the extraction and screening of alternative sand/soils from the former City of Charlevoix landfill located in the Quarry (alternative sand/soils) and the use of the alternative sand/soils as raw feed to the kiln.	EUQUARRYFUGITIVE, EUPRIMARYCRUSH, EUSECONDARYCRUSH, EURAWMILLS, EUKILN

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGMACTZZZZEMERGENCY	This flexible group includes two compression ignition (CI) existing emergency stationary reciprocating internal combustion engines (RICE) that have a maximum site rating of 500 brake horsepower (HP) (238HP and 68HP)at a major source of hazardous air pollutants (HAPs) and that are subject to Title 40 of the Code of Federal Regulations (CFR), Part 63, Subpart ZZZZ (40 CFR 63.6580-6675), the "RICE MACT".	EUKILNDONKEY, EUEMERGENCYGEN
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUCOLDCLEANER

FGQUARRY
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This Flexible Group deals with the initial mining and crushing of the limestone. Included here are the drilling, blasting and hauling of the limestone in the quarry; the crushing of the limestone in the primary and secondary crushers; and handling of dust including fugitive emissions from the quarry and dust from the secondary crusher.

Emission Units: EUQUARRYFUGITIVE, EUPRIMARYCRUSH, EUSECONDARYCRUSH, EUHAMMER

POLLUTION CONTROL EQUIPMENT

Fabric filter on rock drill included in EUQUARRYFUGITIVE, baghouse on EUSECONDARYCRUSH

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	15 percent opacity[2]	6 minute average	EUHAMMER	SC VI.1	**40 CFR 60.672(b) and Table 3**
2. Visible Emissions	5 percent opacity	6 minute average	EUQUARRYFUGITIVE (roads, lots, storage piles, material handling at storage piles)	SC VI.1	**Act 451, Part 55 324.5524(2)**
3. Visible Emissions	20 percent opacity	6 minute average	EUSECONDARYCRUSH	SC VI.1	**R 336.1301(1)(a)**

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. Monthly 1 minute visible emissions observation using USEPA Method 22 shall be conducted on EUQUARRYFUGITIVE, EUHAMMER, and EUSECONDARYCRUSH. If visible emissions are observed, a 6-minute USEPA Method 9 (Method 9D for roads) test shall be conducted within one hour. The test frequency shall be semiannual for a source for which there are no visible emissions observed over six consecutive monthly tests. The test frequency shall be annually if there are no visible emissions observed for a source during the semiannual test for the source. If any visible emissions are observed in the semiannual or annual visible emissions observations for a source, the facility shall resume monthly testing until the source again meets the requirements for semiannual or annual testing. **(R 336.1213(3), Act 451, Part 55, 324.5525(j), Act 451, Part 55, 324.5524(2))**

2. The permittee shall keep, in a satisfactory manner, visible emission records for FGQUARRY. All records shall be made available to the Department upon request. **(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)

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

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

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the New Source Performance Standards for Nonmetallic Mineral Processing Plants as specified in 40 CFR, Part 60, Subpart OOO, for EUHAMMER. **(40 CFR, Part 60, Subpart OOO)**

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).

FGKILNRAWMILLS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This Flexible Group deals with mixing and grinding, then heating the ingredients to make cement. Included are limestone, shale, bottom ash, fly ash, bauxite, mill scales, slags, various sands, numerous iron sources, clay, overburden, aluminum pot furnace refractory, and clear, brown and green glass that are ground and mixed in EURAWMILLS. These raw materials are then sent to the EUKILN where they are heated and become clinker. This Flexible Group also contains the requirements for the use of asphalt flakes and plastic as a fuel in the in-line calciner with indirect firing.

Emission Units: EURAWMILLS, EUKILN, EUCLINKERCOOL

POLLUTION CONTROL EQUIPMENT

Main stack baghouse, Bypass stack baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.25 lb/1000 lbs exhaust gas[2]	Test Protocol*	FGKILNRAWMILLS	SC V.1, VI.1, VI.2	**R 336.1331(1)(a)**
2. SO_2	2800 lbs/hour[2]	Hourly, as the average of each calendar day's emissions over the time of operation.	FGKILNRAWMILLS	SC VI.5, VI.7	**40 CFR 52.21(c) and (d)**
3. SO_2	550 tons/month[2]	Calendar month.	FGKILNRAWMILLS	SC VI.5, VI.7	**R 336.1205 40 CFR 52.21(c) and (d)**
4. SO_2	4404 tons/year[2]	12 month rolling time period, as determined at the end of each calendar month.	FGKILNRAWMILLS	SC VI.5, VI.7	**R 336.1205 40 CFR 52.21(c) and (d)**
5. NO_x	6.50 lbs/ton of clinker produced[1]	Monthly average, as determined at the end of each calendar month, from May 1 through September 30.	FGKILNRAWMILLS	SC VI.2, VI.6, VI.8	**R 336.1801(4)(e)**
6. NO_x	7.67 lbs/ton of clinker produced[2]	Monthly average, as determined at the end of each calendar month, from October 1 through April 30.	FGKILNRAWMILLS	SC VI.2, VI.6, VI.8	**R 336.1205**
7. Nickel when burning 100 percent petroleum coke	0.36 lb/hour[1]	Test Protocol*	FGKILNRAWMILLS	SC V.2	**R 336.1224, R 336.1225**

*Test Protocol shall specify averaging time.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Petroleum coke	69 ng of mercury/gram of petroleum coke[1]	NA	EUKILN	SC V.5	**R 336.1228**
2. Asphalt Flake and Recyclable Plastic	8.0 tons per hour[2]	Daily Average	In-line calciner of EUKILN	SC VI.12	**R 336.1205(1) R 336.1225**
3. Asphalt Flake and Recyclable Plastic	121 ppbw of mercury in the Asphalt Flake or Recycled Plastic[1]	Each Sample taken from a Batch	In-line calciner of EUKILN	SC VI.11	**R 336.1228**

4. The permittee shall not burn any fuel with asbestos tailing or asbestos containing waste materials as defined in 40 CFR 61.141 in FGKILNRAWMILLS.[2] **(R 336.1224, R 336.1225, R 336.1901, 40 CFR 61.141)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not produce more than 4,840 tons of clinker per day from EUKILN as determined on a daily basis.[2] **(R 336.1205(1)(a)(i), 40 CFR 52.21(c) and (d))**

2. The permittee shall burn petroleum coke as fuel in the EUKILN only when introduced at the entrance of the kiln.[2] **(R 336.1205(1)(a)(ii), R 336.1225)**

3. The permittee shall not use as a raw material any glass other than clear, brown or green glass, excluding emerald and fluorescent green glass colored using chromium or uranium and "leaded" glass.[1] **(R 336.1225)**

4. The permittee may use aluminum based refractory as a raw material. This aluminum based refractory shall not come from a source that combusts hazardous waste.[1] **(R 336.1225)**

5. The permittee shall only feed the asphalt flake and/or plastic fuel to the in-line calciner of EUKILN of FGKILNRAWMILLS.[2] **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))**

6. The permittee shall not discharge exhaust gases through SVBYPASS unless the SVBYPASS baghouse is installed, maintained and operated in a satisfactory manner.[2] **(R 336.1910)**

7. The permittee shall not operate SVBYPASS of FGKILNRAWMILLS unless a broken bag detector is installed, maintained, and operated in a satisfactory manner for the baghouse for SVBYPASS. The detector shall be equipped with an audible alarm that will sound when a broken bag is detected.[2] **(R 336.1910)**

8. The permittee shall install, operate and maintain a differential pressure gauge to determine the pressure across the SVMAIN baghouse. **(R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The CEMS and COMS shall be installed, calibrated, maintained and operated in accordance with the procedures set forth in 40 CFR 60.13 and Performance Specification 1 (PS-1) for visible emissions, Performance Specification 2 (PS-2) for NOx and SO2, Performance Specification 3 (PS-3) for Oxygen, and Performance Specification 4 (PS-4) for Carbon Monoxide. These Performance Specifications are located in 40 CFR, Part 60, Appendix B.[2] **(40 CFR 60.13, R 336.2150)**

2. The span value for the NOx and SO2 CEMS shall be 2.0 times the lowest emission standard or as specified in the federal regulations.[2] **(40 CFR 60.13, R 336.2154)**

V. TESTING/SAMPLING

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

1. Annual verification of PM emission rates from EUKILN, by testing at owner's expense in accordance with Department requirements shall be required. PM emission rates shall be correlated with percent opacity measured during testing. Monitoring and recording of SVMAIN baghouse differential pressure and SVBYPASS baghouse bag leak detection system during the test is also required. In accordance with 40 CFR 60.64, stack testing procedures shall be in accordance with federal Reference Methods 5 or 5I, 40 CFR, Part 60, Appendix A[2] **(R 336.2001, R 336.2003, R 336.1331(1)(a), 40 CFR 64.4(e), 64.6(d))**

2. The permittee shall verify nickel emission rates with 100 percent petroleum coke used as fuel in the EUKILN, by testing at owner's expense, in accordance with Department requirements once every five years.[1] **(R 336.1224, R 336.1225)**

3. The permittee shall verify each shipment of asphalt flakes and/or plastic are acceptable to use as fuel in FGKILNRAWMILLS, by testing at owner's expense, in accordance with Department requirements and as specified in Appendix 5.[2] **(R 336.2001, R 336.2003)**

4. The permittee shall perform an annual audit of the COMS using the procedures set forth in USEPA Publication 450/4-92-010, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to the AQD.[2] **(40 CFR 64.3(b)(3), R 336.1213(3))**

5. Each calendar quarter, the permittee shall perform the NOx Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR, Part 60.[2] **(40 CFR 60.13, Appendix F)**

6. Each calendar quarter, the permittee shall perform the SO_2 Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR, Part 60.[2] **(40 CFR 60.13, Appendix F)**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor and record the kiln feed rate in tons of dry feed per hour through FGKILNRAWMILLS with instrumentation acceptable to the AQD. The kiln feed production rate is determined from the 557 scale. All records shall be made available to the Department upon request.[2] **(R 336.1205)**

2. The permittee shall calculate and record the production rate in tons of clinker produced per hour and per day from FGKILNRAWMILLS on a daily basis using the equation in Appendix 3.[2] **(R 336.1801, 40 CFR 52.21(c) and (d))**

3. On a quarterly basis, the permittee shall determine, record, and maintain a record of the accuracy of the 557 belt scale used for measuring hourly kiln feed rates. **(R 336.1213(3))**

4. The permittee shall continuously monitor and record visible emissions of the exhaust gases from EUKILN

routed through SVMAIN and SVBYPASS with a COMS located in both SVMAIN and SVBYPASS. The permittee shall maintain a QA/QC program as specified in Method 203 of 40 CFR, Part 60 and comply with the requirements as specified in PS 1, Appendix B of 40 CFR, Part 60.[2] **(40 CFR 60.13, R 336.2150, 40 CFR 64.6(c)(1)(iii))**

5. The permittee shall continuously monitor and record the SO_2 emissions of the exhaust gases from EUKILN routed through SVMAIN and SVBYPASS with a CEMS. The permittee shall maintain a QA/QC program as specified in Appendix F of 40 CFR, Part 60 and to comply with the requirements as specified in PS 6, Appendix B of 40 CFR, Part 60.[2] **(40 CFR 60.13, R 336.1205(1)(a)(ii)(E), R 336.1213(3))**

6. The permittee shall continuously monitor and record the NO_x emissions and volumetric flow of the exhaust gases from EUKILN routed through SVMAIN and SVBYPASS with a CEMS. The permittee shall maintain a QA/QC program as specified in Appendix F of 40 CFR, Part 60 and to comply with the requirements as specified in PS 6, Appendix B of 40 CFR, Part 60.[2] **(R 336.1213(3), R 336.1205(1)(a)(ii)(E), R 336.1801(8), 40 CFR 60.13,)**

7. The permittee shall keep, in a satisfactory manner, lb/hour, tons per month, and 12-month rolling time period SO_2 emission records from the SO_2 CEMS for FGKILNRAWMILLS.[2] **(R 336.1213(3), 40 CFR 52.21(c) and (d))**

8. The permittee shall keep, in a satisfactory manner, NO_x emission records in lb/ton of clinker produced from the NOx CEMS and clinker produced for FGKILNRAWMILLS.[2] **(R 336.1801, R 336.1213(3), 40 CFR 52.21(c) and (d))**

9. The permittee shall monitor and record the pressure drop on the SVMAIN baghouse to verify operation is within the range as described in the MAP. The compliant differential pressure range shall be established during stack testing to verify PM emission rates.[2] **(R 336.1213(3))**

10. The permittee shall keep records of the amount and type of glass used as a raw material and the amount and type of refractory used as a raw material. [1] **(R 336.1225)**

11. The permittee shall retain and record the supplier certificates of quality, sampling analysis results, and manifests for each delivery (as described in Appendix 5) of asphalt flake and plastic fuel used in the in-line calciner of EUKILN of FGKILNRAWMILLS. All documentation shall be made available to the AQD upon request.[1] **(R 336.1225, R 336.1228)**

12. The permittee shall continuously monitor the asphalt flake feed rate and plastic feed rate to the in-line calciner of EUKILN of FGKILNRAWMILLS using an in-line belt scale. The asphalt flake feed rate and plastic feed rate to the in-line calciner of EUKILN of FGKILNRAWMILLS shall be continuously recorded in tons per hour as determined on a daily average using the plants electronic (computer) monitoring system and make all records available to the Department upon request.[2] **(R 336.1205(1), R 336.1225)**

13. The permittee shall keep all sampling and/or testing results for the asphalt flake and plastic used as fuel for FGKILNRAWMILLS. The permittee shall use a recordkeeping method acceptable to the AQD District Supervisor and make all records available to the Department upon request.[1] **(R 336.1225)**

14. The permittee shall utilize COMS recorded opacity as an indicator of the proper functioning of the baghouses. The appropriate range of opacity defining proper function of the baghouses is 0-20 percent opacity. **(40 CFR 64.6(c)(1)(i) & (ii))**

15. The permittee shall use the COMS to assure compliance with the PM limit. An excursion for PM shall be two consecutive 1-hour block average opacity values greater than 15 percent opacity. This condition does not affect compliance with R 336.1301. **(40 CFR 64.6(c)(2))**

16. The permittee shall properly maintain the COMS including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**

17. 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 permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The permittee 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. The permittee shall operate the COMS during all required periods when the kilns are operating. Data recorded during monitoring malfunctions, repair activities and QA/QC operations shall not be used for 40 CFR, Part 64 compliance. **(40 CFR 64.6(c)(3), 64.7(c))**

18. Upon detecting an excursion or exceedance, the permittee shall restore operation of the kiln (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**

19. The permittee shall verify that any material processed by FGKILNRAWMILLS does not contain asbestos tailings or asbestos containing waste materials. **(R 336.1213(3))**

20. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; malfunction of the baghouse, or any periods during which the COMS is inoperative. **(40 CFR 60.7(b))**

See Appendix 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), 40 CFR 64.9(a)(2)(i)&(iii))**

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. Within 30 days following the end of each calendar quarter, the permittee shall submit the results of the NOx Quality Assurance Procedures to the AQD in the format of the data assessment report (Figure 1, Appendix F of 40 CFR, Part 60).[2] **(40 CFR 60.13, Appendix F)**

5. 60 days after the end of each ozone control period, the permittee shall submit to the AQD a summary report of the NOx emissions during the ozone control period as specified in Rule 801(12).[2] **(R 336.1801(12))**

6. In accordance with 40 CFR 60.7(c) and (d) an 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 NOx CEMS of the NOx emissions in lb/ton of clinker produced for FGKILNRAWMILLS. 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, the permittee shall report that fact.[2] **(R 336.1801, R 336.1910, R 336.1213(3))**

7. In accordance with 40 CFR 60.7(c) and (d) an 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 COMS for FGKILNRAWMILLS. 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, the permittee shall report that fact.[2] **(R 336.1201(3), R 336.1910, R 336.1213(3), 40 CFR 60.7(c) and (d))**

8. In accordance with 40 CFR 60.7(c) and (d) an 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 SO2 CEMS for FGKILNRAWMILLS. 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, the permittee shall report that fact.[2] **(R 336.1201(3), R 336.1213(3))**

9. On or before March 15th of each year after entry of Consent Decree Case No. 1:06-cv-607 until its termination, the permittee shall submit to the USEPA and the MDEQ an annual report for the preceding year that shall include a discussion of the status of the installation of the main stack baghouse and a discussion of the permittee's progress in satisfying their obligations in connection with the indirect firing system. At a minimum the report shall include a narrative description of activities undertaken and an itemization (with copies of supporting documentation) of costs incurred since the previous report. **(Consent Decree Case No. 1:06-cv-607, Paragraph VII.23.a)**

10. If the permittee violates, or has reason to believe that it may violate, any requirement of the Consent Decree Case No. 1:06-cv-607, the permittee shall notify the MDEQ of such violation and its likely duration in writing within ten working days of the day the permittee first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, and/or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, the permittee shall include a statement to that effect in the report. The permittee shall investigate to determine the cause of the violation and then shall submit an amendment to the report, including a full explanation of the cause of the violation, within 30 days of the day the permittee becomes aware of the cause of the violation. **(Consent Decree Case No. 1:06-cv-607, Paragraph VII.23.b)**

11. In the case of any violation of Consent Decree Case No. 1:06-cv-607 or other event that may pose an immediate threat to the public health or welfare or the environment, the permittee shall notify the MDEQ orally or by electronic or facsimile transmission as soon as possible, but not later than 24 hours after the permittee first knew of the violation or event. **(Consent Decree Case No. 1:06-cv-607, Paragraph VII.24)**

12. Each report submitted by the permittee pursuant to Consent Decree Case No. 1:06-cv-607 shall be signed by the responsible official of the submitting party and include the following certification: I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gathered and presented the information contained therein. I further certify, based on my personal knowledge or on my inquiry of these individuals immediately responsible for obtaining the information, that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing and willful submission of a materially false statement. **(Consent Decree Case No. 1:06-cv-607, Paragraph VII.24)**

13. Prior to emissions testing, the permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.12001(3))**

14. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated emissions test date. **(R 336.2001(4))**

15. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the emissions test. **(R 336.2001(5))**

16. No less than 60 days prior to the performance evaluation of the COM system, a complete test plan must be submitted to the AQD. The final test plan must have approval prior to the testing. The permittee shall submit to the AQD, within 60 days of completion, two copies of the final report demonstrating the COM system complies with the requirements of PS 1.[2] **(40 CFR 60.7, R 336.2170)**

17. No less than 30 days prior to the SO_2 performance evaluation of the CEMS system, a complete test plan must be submitted to the AQD. The final test plan must have approval prior to the testing. The permittee shall submit to the AQD, within 60 days of completion, two copies of the final report demonstrating the CEMS system complies with the requirements of PS 6.[2] **(40 CFR 60.13, 40 CFR, Part 60, Appendix B)**

18. No less than 30 days prior to the performance evaluation of the NOx CEMS, a complete test plan must be submitted to the AQD. The final test plan must have approval prior to the testing. The permittee shall submit to the AQD, within 60 days of completion, two copies of the final report demonstrating the CEMS complies with the requirements of PS 6.[1] **(40 CFR, Part 60, Appendix B, R 336.1801(11), 40 CFR 60.13)**

19. The daily clinker production rate shall be submitted to the AQD District Supervisor within one month after the end of the calendar quarter. All records, including data generated during reviews and audits of clinker production as referred to in Appendix 3, shall be made available to the Department upon request.[2] **(R 336.1205, R 336.1213(b))**

20. Within 30 days of written request by the AQD District Supervisor, the permittee shall submit to the District Supervisor a written summary of the results of any review or audit of clinker production. The summary shall compare the tons of clinker produced as determined in the review or audit to the tons of clinker produced as calculated using Appendix 3.[2] **(R 336.1201(3), R 336.1205)**

21. Within 30 days following the end of each calendar quarter, the permittee shall submit the results of the SO_2 Quality Assurance Procedures to the AQD in the format of the data assessment report (Figure 1, Appendix F of 40 CFR, Part 60).[2] **(40 CFR 60.13, Appendix F)**

22. The permittee shall notify the AQD District Supervisor, when receiving asphalt flake or plastic fuel from a new supplier and/or new source (as defined in Appendix 5), or a supplier and/or source that has not been used in the last two years. The notification shall include the following information within the timeframe listed:[1] **(R 336.1225)**
    a. Name of the new material supplier and/or source – 30 days before delivery.
    b. Description of what the material was generated for or from – 30 days before delivery.
    c. A sampling analysis summary of the material identifying the constituents as described in Appendix 5 – upon delivery.

23. 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))**

24. 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, thane this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2(ii))**

See Appendices 3 and 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVMAIN	132[2]	323[2]	**40 CFR 52.21 (c) and (d), R 336.1225, R 336.2803, R 336.2804**
2. SVBYPASS	78[2]	225[2]	**40 CFR 52.21 (c) and (d), R 336.1225, R 336.2803, R 336.2804**

IX. OTHER REQUIREMENT(S)

1. Upon the February 7, 2018 compliance date, the stationary source will be subject to all future applicable requirements of a State or Federal plan to be promulgated implementing the emission guidelines of 40 CFR, Part 60, Subpart DDDD, Commercial and Industrial Solid Waste Incineration (CISWI) units that commenced construction on or before November 30, 1999. **(This condition is provided for informational purposes, there is no current underlying applicable requirement)**

2. The permittee shall promptly notify the AQD for the need to modify the CAM Plan if the existing plan is found to be inadequate and shall submit a proposed modification to the ROP if necessary. **(40 CFR 64.7(e))**

3. The permittee shall comply with all applicable requirements of 40 CFR, Part 64. **(40 CFR, Part 64)**

4. The permittee shall comply with all applicable requirements of the Regional Haze Regulations requiring Best Available Retrofit Technology (BART) effective January 1, 2017. **(40 CFR 52.1183(h))**

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).

FGFINISHMILLS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This Flexible Group deals with pulverizing the cooled clinker after it has left the kiln and cooling areas. The clinker is ground in the mills-which are horizontal steel tubes filled with steel balls. As the tubes rotate, the steel balls tumble and crush the clinker into a superfine gray powder known as Portland Cement. A small amount of gypsum is added during the final grinding to control the set.

Emission Units: EUFINISHMILL1, EUFINISHMILL2, EUFINISHMILL3

POLLUTION CONTROL EQUIPMENT

Baghouses

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible emissions	10 percent opacity[2]	NA	FGFINISHMILLS	SC V.1, VI.1	**R 336.1201(3) 40 CFR 63.1343(b)(1) Table 1(16) 40 CFR 63.1345 40 CFR 60.62(c)**

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGFINISHMILLS unless the Operations and Maintenance Plan (OMP) is implemented and maintained.[2] **(R 336.1205, R 336.1901, 40 CFR 63.1347)**

2. The permittee shall not operate FGFINISHMILLS unless a Start-up, Shut-down, and Malfunction plan that describes how emissions will be minimized during all startups, shutdowns, and malfunctions, is implemented and maintained.[2] **(R 336.1911, 40 CFR 63.6(e)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall perform a 3-hour (thirty 6-minute averages) Method 9 performance test for FGFINISHMILLS every 12 months. The Method 9 performance test may be reduced to 1 hour if there are no individual readings greater than ten percent opacity and there are no more than three readings of ten percent for the first 1 hour period. **(40 CFR 63.1349(b)(2))**

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 visible emissions from FGFINISHMILLS. The permittee shall conduct a daily 6-minute visible emissions test of each emission unit in FGFINISHMILLS in accordance with Method 22 of 40 CFR, Part 60, Appendix A while the affected source is in operation at the representative performance condition. If visible emissions are observed, the permittee shall conduct a follow up Method 22 performance test within 24 hours. If visible emissions are observed during the follow up Method 22 performance test, the permittee shall conduct an opacity test of each stack from which emissions were observed in accordance with Method 9. The duration of the Method 9 test must be 30 minutes.[2] **(40 CFR 63.1350(f)(2))**

2. If visible emissions are observed during any Method 22 visible emissions test conducted under SC VI.1, the permittee must initiate, within one hour, the corrective actions specified in your OMP. **(40 CFR 63.1350(f)(3))**

3. The permittee shall keep, in a satisfactory manner, visible emission records for FGFINISHMILLS. All records shall be made available to the Department upon request.[2] **(40 CFR 63.1355, 63.10(b)(2)(viii))**

4. The permittee shall keep records as required in the OMP. All records shall be made available to the Department upon request.[2] **(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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry as specified in 40 CFR, Part 63, Subparts A and LLL.[2] **(40 CFR, Part 63, Subparts A & LLL)**

2. The permittee shall comply with the approved OMP, or an alternate plan approved by the AQD District Supervisor. If the plan is not adequate the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor. **(40 CFR 63.1347)**

3. The permittee shall comply with the approved SSM, or an alternate plan approved by the AQD District Supervisor. If the plan is not adequate the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor. **(R 336.1911)**

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).

FGNONKILNFACILITY
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This Flexible Group deals with handling the non-kiln materials, non-kiln gasses, non-kiln fuels, and non-kiln dust associated with the production of cement. Included are limestone, bottom ash, fly ash, sand; clinker cooler gasses; coal and petroleum coke; and the finished cement product that is shipped for sale.

Emission Units: EURAWMATHANDSTOR, EUCLINKERHAND, EUCEMENTHAND&STO, EUCOALSYSTEM, EUCKDHANDSTOR

POLLUTION CONTROL EQUIPMENT

Baghouses

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible emissions	10 percent opacity[2]	NA	EURAWMATHANDSTOR, EUCLINKERHAND, EUCEMENTHAND&STO, EUCOALSYSTEM, EUCKDHANDSTOR	SC VI.1	**R 336.1201(3) 40 CFR 63.1345 40 CFR 60.62(c)**
2. Particulate emissions	0.15 pounds per thousand pounds of exhaust gas[2]	NA	EURAWMATHANDSTOR	SC VI.1	**R 336.1331(1)(a)**

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The requirement to conduct Method 22 visible emissions monitoring pursuant to SC VI.1 and 40 CFR 63.1350(f)(1) do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" means a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. **(40 CFR 63.1350(f)(1)(v))**

2. The permittee shall not operate FGNONKILNFACILITY unless the Operations and Maintenance Plan (OMP) is implemented and maintained.[2] **(R 336.1205, R 336.1901, 40 CFR 63.1347)**

3. The permittee shall not operate FGNONKILNFACILITY unless a Start-up, Shut-down, and Malfunction plan that describes how emissions will be minimized during all startups, shutdowns, and malfunctions, is implemented and maintained.[2] **(R 336.1911, 40 CFR 63.6(e)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The belt conveyor installed to convey refractory to the kiln system shall be covered or located in an enclosed structure.[2] **(R 336.1301)**

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. Monthly 10-minute visible emissions observations using USEPA Method 22 shall be conducted on each emission point of FGNONKILNFACILITY while operating. If visible emissions are observed, 30 minutes of opacity observations, recorded at 15-second intervals must be conducted in accordance with USEPA Method 9. The USEPA Method 9 test shall begin within one hour of any observation of VE. The test frequency shall be semiannual for each emission point for which there are no visible emissions observed over six consecutive monthly tests. The test frequency shall be annually if there are no visible emissions observed for an emission point during the semiannual test for the emission point. If any visible emissions are observed in the semiannual or annual visible emissions observations for an emission point, the facility shall resume monthly testing until the emission point again meets the requirements for semiannual or annual testing. **(R 336.1213(3), 40 CFR 63.1350(f)(1))**

2. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permittee must conduct a Method 22 performance test according to the requirements of SC VI.1 above for each such conveying system transfer point located within the building, or for the building itself, according to SC VI.3 and 40 CFR 63.1350(f)(1)(vii). **(40 CFR 63.1350(f)(1)(vi))**

3. If monitored emission points include visible emissions from a building, the requirements of SC VI.1 apply to the monitoring of the building. The permittee must test visible emissions from each side, roof, and vent of the building for at least 10 minutes using USEPA Method 22. **(40 CFR 63.1350(f)(1)(vii))**

4. The permittee shall keep, in a satisfactory manner, visible emission records for FGNONKILNFACILITY. All records shall be made available to the Department upon request.[2] **(40 CFR 63.1355, R 336.1213(3))**

5. The permittee shall keep records as required in the OMP. All records shall be made available to the Department upon request.[2] **(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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry as specified in 40 CFR, Part 63, Subparts A and LLL.[2] **(40 CFR, Part 63, Subparts A & LLL)**

2. The permittee shall comply with the approved OMP, or an alternate plan approved by the AQD District Supervisor. If the plan is not adequate, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor. **(40 CFR 63.1347)**

3. The permittee shall comply with the approved SSM, or an alternate plan approved by the AQD District Supervisor. If the plan is not adequate, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor. **(R 336.1911)**

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).

FGALTSAND/SOIL
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group covers the extraction and screening of alternative sand/soils from the former City of Charlevoix landfill located in the Quarry (alternative sand/soils) and the use of the alternative sand/soils as raw feed to the kiln.

Emission Units: EUQUARRYFUGITIVE, EUPRIMARYCRUSH, EUSECONDARYCRUSH, EURAWMILLS, EUKILN

POLLUTION CONTROL EQUIPMENT

Fabric filter on rock drill included in EUQUARRYFUGITIVE, baghouse on EUSECONDARYCRUSH. main stack baghouse, bypass stack baghouse.

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

1. The alternative sand/soils shall not contain more than 1,573 pounds of lead per 12-month rolling time period, as determined at the end of each calendar month.[2] **(R 336.1205(3))**

2. The alternative sand/soils shall not contain more than 1,573 pounds of cadmium per 12-month rolling time period, as determined at the end of each calendar month.[2] **(R 336.1205(3))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not extract alternative sand/soils from the landfill unless a Material Screening Plan is implemented and maintained.[2] **(R 336.1205(3))**

2. The permittee shall not feed alternative sand/soils from the landfill to EUKILN until the alternative sand/soils have been analyzed, as required by SC V.1.[2] **(R 336.1205(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the lead and cadmium content of the extracted alternative sand/soils from the landfill by testing at owner's expense, in accordance with USEPA 6000/7000 series test methods for total metals or alternative test methods as approved by the AQD District Supervisor. The permittee shall analyze at least one sample for every 600 cubic yards of alternative sand/soils extracted from the Quarry. After 10 valid sampling events, the permittee may submit a request for a change in the testing frequency to the AQD District Supervisor for review and approval.[2] **(R 336.1205(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 keep, in a satisfactory manner, records of the amount of alternative sand/soils extracted from the Quarry each week and a description of, and the amount of, material sent off-site for disposal or recycling.[2] **(R 336.1205(3))**

2. The permittee shall keep, in a satisfactory manner, records of the results of the analyses of the alternative sand/soils from the landfill carried out as required by SC V.1.[2] **(R 336.1205(3))**

3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the amount of lead consumed as part of the alternative sand/soils extracted from the Quarry.[2] **(R 336.1205(3))**

4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period, as determined at the end of each calendar month, records of the amount of cadmium consumed as part of the alternative sand/soils extracted from the Quarry.[2] **(R 336.1205(3))**

See Appendix 4

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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

IX. OTHER REQUIREMENT(S)

1. The Material Screening Plan shall include provisions for removing and properly disposing of or recycling of deleterious material, including large woody debris, large metallic materials, batteries, barrels and drums, and similar materials. The permittee shall amend the plan within 45 days upon request from the AQD District Supervisor. The permittee shall submit any amendments to the plan to the AQD District Supervisor for review and approval.[2] **(R 336.1205(3))**

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).

FGMACTZZZZEMERGENCY
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group includes two compression ignition (CI) existing emergency stationary reciprocating internal combustion engines (RICE) that have a maximum site rating of 500 brake horsepower (HP) (238HP and 68HP)at a major source of hazardous air pollutants (HAPs) and that are subject to 40 CFR, Part 63, Subpart ZZZZ (40 CFR 63.6580-6675), the "RICE MACT".

Emission Units: EUKILNDONKEY, EUEMERGENCYGEN

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate EUKILNDONKEY and EUEMERGENCYGEN in accordance with the following limits: **(40 CFR 63.6640(f))**
   a. There is no time limit on the use of emergency stationary RICE in emergency situations.
   b. Emergency stationary RICE may be operated for the purposes of maintenance checks and readiness testing up to 100 hours per year.
   c. Emergency stationary RICE may be operated up 50 hours per year in non-emergency situations, but those hours are to be counted towards the 100 hours per year for maintenance and readiness testing.

2. The permittee shall operate and maintain EUKILNDONKEY and EUEMERGENCYGEN according to the manufacturer's emission-related operation and maintenance instructions or a plan developed by the facility that provides for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e) and 40 CFR 63.6640(a), Table 6(9)(a))**

3. The permittee shall maintain EUKILNDONKEY and EUEMERGENCYGEN in accordance with the operational limits in Table 2c to Subpart ZZZZ of 40 CFR, Part 63 which includes: **(40 CFR 63.6602, and Tables 2c(1), 40 CFR 63.6625(h))**
   a. The oil and filter must be changed every 500 hours of operation or annually, whichever comes first. Optionally, if the oil is analyzed as described in SC VI.2 and found to be good, no oil change is needed.
   b. The air cleaner must be inspected every 1000 hours of operation or annually, whichever comes first.

c. All hoses and belts must be inspected every 500 hours of operation or annually, whichever comes first, and replaced as necessary.

d. During periods of startup minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

4. The permittee shall comply with the following general duty requirements:
   a. Compliance with applicable emission limits and operating requirements is required at all times. **(40 CFR 63.6605(a))**
   b. At all times, the emergency stationary RICE, including any monitoring equipment, must be operated in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. **(40 CFR 63.6605(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip EUKILNDONKEY and EUEMERGENCYGEN each 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 maintain the following records for EUKILNDONKEY and EUEMERGENCYGEN:
   a. A copy of each notification and report submitted, including supporting documentation must be kept. **(40 CFR 63.6655(a)(1) and 40 CFR 60.4245(a)(1))**
   b. Records of the occurrence and duration of each malfunction of EUKILNDONKEY and EUEMERGENCYGEN. **(40 CFR 63.6655(a)(2))**
   c. Records of all required maintenance performed on the monitoring equipment. **(40 CFR 63.6655(a)(4))**
   d. Records to demonstrate continuous compliance with the operating limitations in condition III.1. **(40 CFR 63.6655(d))**
   e. Records of the maintenance conducted on EUKILNDONKEY and EUMERGENCYGEN in order to demonstrate that the stationary RICE was operated and maintained according to the facility maintenance plan. **(40 CFR 63.6655(e)(2))**
   f. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The records must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non- emergency operation. **(40 CFR 63.6655(f))**

2. The permittee shall meet the following monitoring and recordkeeping requirements when utilizing an oil analysis program in order in order to extend the oil change frequency specified in SC III.3. **(40 CFR 63.6625(i))**
   a. The analysis program for emergency stationary CI engines must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later.

b. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

VII. REPORTING

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

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i)), 40 CFR 63.6640(b), 40 CFR 63.6650)**

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

4. The permittee shall submit a semiannual compliance report that includes each instance in which the operating limitations in SC III.3 were not met. If there were no deviations from the operating limits, the report shall include a statement that there were no deviations from the operating limits during the reporting period. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(40 CFR 63.6640(b), 40 CFR 63.6650, Table 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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

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

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).

FGCOLDCLEANERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EUCOLDCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent 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(h))**
   b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(r)(iv))**

2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**

3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**

4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**

5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
   a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**

b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**

2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
   a. A serial number, model number, or other unique identifier for each cold cleaner.
   b. The date the unit was installed, manufactured or that it commenced operation.
   c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(h).
   d. The applicable Rule 201 exemption.
   e. The Reid vapor pressure of each solvent used.
   f. If applicable, the option chosen to comply with Rule 707(2).

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 percent, 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

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
FGQUARRY	40 CFR, Part 63, Subpart LLL	40 CFR 63.1340(c) states that the equipment is not subject to 40 CFR, Part 63, Subpart LLL.

APPENDICES

Appendix 1. Abbreviations and Acronyms

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

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
GC	General Condition	psig	Pounds per square inch gauge
gr	Grains	PeTE	Permanent Total Enclosure
HAP	Hazardous Air Pollutant	PTI	Permit to Install
Hg	Mercury	RACT	Reasonable Available Control Technology
hr	Hour	ROP	Renewable Operating Permit
HP	Horsepower	SC	Special Condition
H_2S	Hydrogen Sulfide	scf	Standard cubic feet
HVLP	High Volume Low Pressure *	sec	Seconds
ID	Identification (Number)	SCR	Selective Catalytic Reduction
IRSL	Initial Risk Screening Level	SO_2	Sulfur Dioxide
ITSL	Initial Threshold Screening Level	SRN	State Registration Number
LAER	Lowest Achievable Emission Rate	TAC	Toxic Air Contaminant
lb	Pound	Temp	Temperature
m	Meter	THC	Total Hydrocarbons
MACT	Maximum Achievable Control Technology	tpy	Tons per year
MAERS	Michigan Air Emissions Reporting System	µg	Microgram
MAP	Malfunction Abatement Plan	VE	Visible Emissions
MDEQ	Michigan Department of Environmental Quality	VOC	Volatile Organic Compounds
mg	Milligram	yr	Year
mm	Millimeter		

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FGKILNRAWMILLS.

Method for Determining Clinker Production from Raw Feed Input

The formula for determining clinker production (CP) is:

CP = KF x CCF

Where:
CP = hourly clinker production.

KF = the hourly in-line kiln raw material feed rate, this number is derived from the 557 scale.

CCF = the clinker conversion factor (clinker production rate divided by the kiln raw feed rate), this number is a variable derived from historical periodic checks.

Clinker production determined from raw feed input is dependent on various parameters. The amount of clinker produced from raw feed is site specific based on fuels used and their ash content at the time of use, raw material characteristics such as amount of organic that can be driven off in the process such as shale that would have a higher loss on ignition than slag or bottom ash, and other parameters involved in determining the amount of clinker generated from a given volume of raw materials.

The process of determining the CCF number is as follows:

1. A macro change to raw materials being fed to the kiln could trigger a CCF review or audit.

2. Clinker production during a given time period would be diverted from the clinker cooler and be sent to outside storage location.

3. After the clinker has cooled, it would be sent to an onsite scale to determine the tonnage of clinker produced in a given time period.

4. This tonnage of clinker would be compared to the KF for the same period of time to generate the CCF.

The CCF is multiplied by the raw feed rate, on a continuous basis, to determine clinker production for the same time period. This calculation is done by the Kiln controls system and automatically stored therein. The historic site-specific CCF ranges from 0.45 to 0.75. All plant scales are calibrated periodically to assure accuracy.

If any review or audit determines more clinker was produced than was calculated using the above method, this information shall be used to determine CCF in the future. However, previously-recorded and previously-reported hourly clinker production shall not be adjusted based on review or audit results.

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

The permittee shall use the following approved test plans, procedures, and averaging to measure the pollutant emissions for the applicable requirements referenced in FGKILNRAWMILLS.

SAMPLING PLAN FOR
Alternate Fuels

I. Definitions

A. Fuels

1. Asphalt Flake is defined as asphalt shingles with aggregate material removed, in any form that contains no asbestos and has no appreciable amount of paint, stain, or other types of coatings.

2. Recyclable Plastic is defined as resin code numbers 1, 2, 4, 5, 6, and 7; which contains no polyvinyl chloride (PVC) and contains no more than 15,000 ppmw of chlorine.

B. Batch

1. A quantity of material contained in one storage unit (i.e., stockpile, barge, etc.) or production run with a maximum volume of 5000 tons (or other volume as approved by the District Supervisor).

C. Source

1. A process that generates material which can be used as alternate fuels.

D. Supplier

1. An entity with different ownership and/or address.

E. Independent Laboratory

1. Any independent laboratory used by the facility for sampling analyses shall develop a Quality Assurance Plan (QAP). Detailed in the QAP shall be the Quality Assurance/Quality Control (QA/QC) procedures, sample handling, storage, chain of custody procedures, analytical methods for all analyses, a description of the laboratory instrumentation, and the instrumental detection limits. The analytical methods used by the independent laboratory should be consistent with the methods used by the Department. The facility shall maintain a copy of the approved QAP on site or at the corporate offices and be available for AQD inspection.

II. Permittee requirements for alternate materials for use as a fuel under federal and state regulations.

A. Pre-delivery Sampling Plan - Asphalt Flakes

1. When the supplier creates a new batch of asphalt flakes, a sample of the asphalt flakes shall be collected during the batch creation and labeled with the unique batch identification number. The sample shall be sent to an independent laboratory to verify the maximum levels of Chromium, Lead, Manganese, and Mercury. The maximum allowable levels are as follows:

Contaminant	Maximum Allowable Level
Chromium	1000 ppmw
Lead	1000 ppmw
Manganese	2000 ppmw
Mercury	121 ppbw

B. Delivery Documentation:

1. **Asphalt Flakes**

The following documentation shall be included with each delivery of asphalt flakes and kept on file and made available to the AQD upon request:

a. **Certification of Quality**
Certification from the supplier stating the asphalt flakes contain no asbestos and no appreciable amount of paint, stain, or other types of coatings.

b. **Sampling Analysis Report**
Results of the approved sampling analysis with all associated analytical data from an approved laboratory. The results shall correspond to the unique batch identification number given at the time the batch was sampled.

c. **Manifest**
Supplier name, source, unique batch identification number, date of delivery, and approximate deliverable weight of the asphalt flakes.

2. **Recyclable Plastic**

The following documentation shall be included with each delivery of recyclable plastic and kept on file and made available to the AQD upon request:

a. **Certification of Quality**
Certification from the supplier stating the recyclable plastic is numbers 1, 2, 4, 5, 6 or 7, which contains no PVC.

b. **Sampling Analysis Report**
Not required upon delivery. However, if the supplier certification does not adequately provide that the recyclable plastic contains no PVC then the permittee shall be required to provide a sampling analysis as required in II.C.2 of this sampling plan.

c. **Manifest**
Supplier name, source, unique batch identification number, date of delivery, and approximate deliverable weight of the recyclable plastic.

C. Batch Delivery Sampling Plan:

1. **Asphalt Flakes**
   a. Each batch of asphalt flakes shall contain a unique batch identification number. A sufficient amount of material shall be collected to provide three (3) samples, from the delivery vessel, prior to mixing with material in on-site storage, and labeled with the unique batch identification number. If required by the AQD District Supervisor, the sample shall be sent to an independent laboratory to verify the maximum allowable levels of Chromium, Lead, Manganese, and Mercury, as described in II.A.1 of this sampling plan. The remaining material shall be maintained by the facility until the end of the calendar year.
   b. A record of all batches received including the sampling analysis report with any associated analytical data from the independent laboratory, shall be kept on file and made available to the AQD upon request.

2. **Recyclable Plastic**
   a. Each batch of recyclable plastic shall contain a unique batch identification number. A sufficient amount of material shall be collected to provide three (3) samples, from the delivery vessel, prior to mixing with material in on-site storage, and labeled with the unique batch identification number. If required by the AQD District Supervisor, a sample shall be sent to an independent laboratory to verify the maximum allowable level of Chlorine is no more than 15,000 ppmw. The material shall be maintained by the facility until the end of the calendar year.
   b. A record of all batches received including any sampling analysis report with any associated analytical data from the independent laboratory, shall be kept on file and made available to the AQD upon request.

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-B1559-2008, 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-B1559-2008 is being reissued as Source-Wide PTI No. MI-PTI-B1559-2014.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
129-09	201200089*	Extraction, screening and re-use of alternative sand/soils from City of Charlevoix landfill within the quarry.	FGQUARRY; FGNONKILNFACILITY; FGKILNRAWMILLS; FGALTSAND/SOIL
204-09	201200089*	Use of alternative raw materials including aluminum pot furnace refractory and clear, brown and green glass.	FGNONKILNFACILITY; FGKILNRAWMILLS
248-10A	201200089*	Use of asphalt flake and recyclable plastic as a supplemental fuel in the in-line calciner.	FGKILNRAWMILLS
700-77K	NA	New baghouse for kiln bypass stack.	FGKILNRAWMILLS

Appendix 7. Emission Calculations

Specific emission calculation requirement procedures or methods 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 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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