Michigan Department of Environmental Quality
Air Quality Division

EFFECTIVE DATE: January 15, 2013

ISSUED TO

Carmeuse Lime, Inc.

State Registration Number (SRN): B2169

LOCATED AT

25 Marion Ave., River Rouge, Michigan 48218

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B2169-2013

Expiration Date: January 15, 2018

Administratively Complete ROP Renewal Application Due Between July 15, 2016 and July 15, 2017

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-B2169-2013

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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Wilhemina McLemore, Detroit 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 are state-only enforceable will be noted as such.

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

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

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**

- Those conditions that are hereby incorporated in a state only enforceable Source-wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R336.1214a(5))**

- Those conditions that are hereby incorporated in federally enforceable Source-wide PTI No. MI-PTI-B2169-2013 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. Except as provided in Subrules 2, 3, and 4 of Rule 301, states in part; "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 Rule 301(1)(a) or (b) unless otherwise specified in this ROP." The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part)**:
    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.

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(4))**

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's 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's 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, or has been interrupted for 18 months, the applicable terms and conditions from that PTI 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

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20 percent[2]	Six-minute average	This limit applies to sources of fugitive dust at the facility other than material storage piles.	VI	**Act 451, Part 55 324.5524(2)**
2. Opacity	5 percent[2]	Six-minute average	This limit applies to fugitive dust from material storage piles.	VI	**Act 451, Part 55 324.5524(2)**

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 implement and comply with the Fugitive Dust Management Plan as found in Appendix 9.[2] **(Consent Order SIP No. 22-1993, Act 451 Part 55 324.5524)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform monitoring and keep records relating to the management of fugitive dust emissions at the facility in accordance with the Fugitive Dust Management Plan as found in Appendix 9. The recordkeeping shall follow guidelines in the Addendum to the Fugitive Dust Management Plan, which is found in Appendix 4.[2] **(Consent Order SIP No. 22-1993, Act 451 Part 55 324.5524)**

2. The permittee shall monitor and record the following in relation to fugitive dust management.[2]

   a. Visible emissions from roads, lots and storage piles on a weekly basis. These readings can be from a non-certified reader in relation to Method 9.
   b. Opacity observations from roads, lots and storage piles by a Method 9 certified reader when visible emissions are observed during the weekly, non-certified monitoring required in 2.a.

c. Visible emissions from fugitive dust sources other than roads, lots or storage piles on a weekly basis. These readings can be from a non-certified reader in relation to Method 9.
d. Opacity observations from fugitive dust sources other than roads, lots or storage piles by a Method 9 certified reader when visible emissions are observed during the weekly non-certified monitoring required in 2.c. **(R 336.1213(3))**

See Appendices 4 and 9

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's 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's 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 terms and conditions of Consent Order SIP No. 22-1993.[2] **(Consent Order SIP No. 22-1993)**

2. The permittee may change its operations or processes which are sources of particulate and fugitive dust provided the following conditions are met[2]:

   a. The provisions of the Control Programs in Consent Order SIP No. 22-1993 continue to apply to the subject operation or process.
   b. The change does not result in an increase in the level of fugitive dust of particulate emissions.
   c. The change is approved.
   (Consent Order SIP No. 22-1993)

3. The permittee may revise the Control Programs in Consent Order SIP No. 22-1993 provided the following conditions are met[2]:

   a. The permittee demonstrates, in writing, that the proposed revision does not result in an increase in the level of fugitive dust or particulate emissions and submits demonstration to MDEQ for approval.
   b. The revision is approved.
   (Consent Order SIP No. 22-1993)

4. Demonstrations made pursuant to S.C. IX.3 and condition 13(B)(1)(a) of Consent Order SIP No. 22-1993 involving chemical dust suppressant applications on unpaved roads shall be made using only petroleum resins,

asphalt emulsions, or acrylic cements unless otherwise explicitly provided for by the US EPA approved SIP or US EPA approved method.[2] **(Consent Order SIP No. 22-1993)**

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 (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUKILNNUMBER1	Horizontal rotary lime kiln identified as Kiln No. 1. The kiln is 300 feet long with a 10.6 foot diameter. Exhaust from the kiln is vented through a positive pressure reverse air baghouse with a monovent-type ambient discharge.	1/1/1968	FG-MACT-AAAAA-LIME MANUFACTURING PLANTS
EUKILNNUMBER2	Horizontal rotary lime kiln identified as Kiln No. 2. The kiln is 300 feet long with a 10.6 foot diameter. Exhaust from the kiln is vented through a positive pressure reverse air baghouse with a monovent-type ambient discharge.	1/1/1968	FG-MACT-AAAAA-LIME MANUFACTURING PLANTS
EUCONVEYOR/ELEV	Conveyors, elevators, and rescreening operations for finished lime product.	1/1/1968	NA
EULIMELOADOUT	Lime loadout truck/lime loadout rail	1/1/1968	NA
EUFLUEDUSTTANK	Flue dust tank	1/1/1968 / 1/1/1986	NA
EUFUGITIVE	Open storage piles and haul roads – controlled by water sprays, dust suppressant (e.g. calcium chloride), or sweeping.	1/1/1968	NA
EUNO6BINVENT	Lime fines handling #6 vent.	1/1/1968 / 1/1/1986	NA
EUFDLOADOUT	Flue dust loadout equipment and associated air pollution control device.	1/1/1968	NA
EUPSHFUGITIVE	Equipment for handling of stone after the stone bin and prior to introduction to the lime kilns. The processed stone handling (PSH) equipment includes all conveyors prior to the lime kilns for which the only emissions are fugitive dust emissions.	1/1/1968	FG-MACT-AAAAA-LIME MANUFACTURING PLANTS

EUCONVEYOR/ELEV
EMISSION UNIT CONDITIONS

DESCRIPTION
Lime conveyors, elevators, and rescreening equipment.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT
Three baghouse units.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter	0.10 pounds particulate matter per 1,000 pounds of exhaust gas[2]	Test Protocol	EUCONVEYOR/ELEV	V.1, VI	**R 336.1331(3)**

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))**

1. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001, to determine the particulate matter emission rate from the baghouse vents associated with EUCONVEYOR/ELEV.[2] (**R336.2001)**

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 conduct regular inspections for the purpose of determining the operating condition of the baghouse and, if necessary, the reasons for the malfunction or failure, using monitoring and recordkeeping procedures outlined in Appendix 3 and 4.[2]

2. Permittee shall monitor and record weekly the pressure drop across the dust collector baghouse serving the conveyors and elevators.[2]

3. Permittee shall perform daily a visible emissions observation to determine the presence or absence of visible emissions associated with the equipment included as part of EUCONVEYOR/ELEV. This may be performed by either a certified or non-certified reader.[2]

See Appendices 3 and 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's 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's 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, to the ambient air:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVALG126	13.9 x 13.9[2]	110.6 [2]	**R 336.1201(3)**
2. SVALG200	19.8 [2]	108.9 [2]	**R 336.1201(3)**
3. SVALG716	21.8 [2]	76.4 [2]	**R 336.1201(3)**

IX. OTHER REQUIREMENT(S)

NA

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

EULIMELOADOUT
EMISSION UNIT CONDITIONS

DESCRIPTION
Lime loadout via truck and rail.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT
Two baghouse units.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter	0.10 pounds particulate matter per 1,000 pounds of exhaust gas[2]	Test Protocol	EULIMELOADOUT	V.1, VI	**R 336.1331(3)**

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))**

1. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001, to determine the particulate matter emission rate from the baghouse vents associated with EULIMELOADOUT.[2] (**R336.2001)**

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 conduct regular inspections for the purpose of determining the operating condition of the baghouse and, if necessary, the reasons for the malfunction or failure, using monitoring and recordkeeping procedures outlined in Appendix 3 and 4.[2]

2. Permittee shall monitor and record weekly the pressure drop across the dust collector baghouse serving the lime loadout truck and rail.[2]

3. Permittee shall perform daily a visible emissions observation to determine the presence or absence of visible emissions associated with the equipment included as part of EULIMELOADOUT. This may be performed by either a certified or non-certified reader.[2]

See Appendices 3 and 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's 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's 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, to the ambient air:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVALG727	11.9 [2]	46 [2]	**R 336.1201(3)**
2. SVALG200	9.1 x 9.1 [2]	46.3 [2]	**R 336.1201(3)**

IX. OTHER REQUIREMENT(S)

NA

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

EUFLUEDUSTTANK
EMISSION UNIT CONDITIONS

DESCRIPTION
Flue dust tank.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT
Baghouse unit.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter	0.10 pounds per hour. [2]	Test Protocol	EUFLUEDUSTTANK	V.1, VI	**R 336.1331(1)(c)**
2. Particulate Matter	0.45 tons per year. [2]	Test Protocol	EUFLUEDUSTTANK	V.1, VI	**R 336.1331(1)(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)

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))**

1. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001, to determine the particulate matter emission rate from the baghouse vents associated with EUFLUEDUSTTANK.[2] (**R 336.2001)**

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 conduct regular inspections for the purpose of determining the operating condition of the baghouse and, if necessary, the reasons for the malfunction or failure, using monitoring and recordkeeping procedures outlined in Appendices 3 and 4.[2]

2. Permittee shall monitor and record weekly the pressure drop across the dust collector baghouse serving the flue dust tank.[2]

3. Permittee shall perform daily a visible emissions observation to determine the presence or absence of visible emissions associated with the equipment included as part of EUFLUEDUSTTANK. This may be performed by either a certified or non-certified reader.[2]

See Appendices 3 and 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's 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's 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, to the ambient air:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVAKG141	12.9 x 12.9[2]	68.5[2]	**R 336.1201(3)**

IX. OTHER REQUIREMENT(S)

NA

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

EUNO6BINVENT
EMISSION UNIT CONDITIONS

DESCRIPTION
Bin vent (identified as #6) for handling lime fines.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT
Baghouse unit.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter	0.10 pounds of particulate per 1,000 pounds of exhaust gas [2]	Test Protocol	EUNO6BINVENT	V.1, VI	**R 336.1331(3)**

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))**

1. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001, to determine the particulate matter emission rate from the baghouse vents associated with EUNO6BINVENT.[2] (**R 336.2001)**

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 conduct regular inspections for the purpose of determining the operating condition of the baghouse and, if necessary, the reasons for the malfunction or failure, using monitoring and recordkeeping procedures outlined in Appendix 3 and 4.[2]

2. Permittee shall monitor and record weekly the pressure drop across the dust collector baghouse serving the Lime Fines Handling Number 6 Bin Vent.[2]

3. Permittee shall perform daily a visible emissions observation to determine the presence or absence of visible emissions associated with the equipment included as part of EUNO6BINVENT. This may be performed by either a certified or non-certified reader.[2]

See Appendices 3 and 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's 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's 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
1. SVALG200	19.8 [2]	108.9 [2]	**R 336.1201(3)**

IX. OTHER REQUIREMENT(S)

NA

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

EUFDLOADOUT
EMISSION UNIT CONDITIONS

DESCRIPTION
Flue dust loadout equipment and associated air pollution control device.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT
Baghouse unit (the same one that EUFLUEDUSTTANK vents through).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter	0.10 pounds of particulate per 1,000 pounds of exhaust gas [2]	Test Protocol	EUFDLOADOUT	V.1, VI	**R 336.1331(3)**

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))**

1. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001, to determine the particulate matter emission rate from the baghouse vents associated with EUFDLOADOUT.[2] (**R 336.2001)**

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 conduct regular inspections for the purpose of determining the operating condition of the baghouse and, if necessary, the reasons for the malfunction or failure, using monitoring and recordkeeping procedures outlined in Appendix 3 and 4.[2]

2. Permittee shall monitor and record weekly the pressure drop across the dust collector baghouse serving the flue dust loadout.[2]

3. Permittee shall perform daily a visible emissions observation to determine the presence or absence of visible emissions associated with the equipment included as part of EUFDLOADOUT. This may be performed by either a certified or non-certified reader.[2]

See Appendices 3 and 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's 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's 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
1. SVALG200	19.8 [2]	108.9 [2]	**R 336.1201(3)**

IX. OTHER REQUIREMENT(S)

NA

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

D. FLEXIBLE GROUP CONDITIONS

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

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

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
FG-MACT-AAAAA-LIME MANUFACTURING PLANTS	The affected source is an existing lime manufacturing plant (LMP), that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. An existing affected source is a source that commences construction or reconstruction before December 23, 2002. A new affected source includes a new lime kiln (and, if applicable, its associated lime cooler), and a processed stone handling (PSH) operations system for which construction or reconstruction began after December 20, 2002. An existing lime kiln (and, if applicable, its associated lime cooler) and an existing PSH operations system are those that do not meet the definition of a new kiln or a new PSH operations system. The regulations cover the existing lime kilns and their associated coolers, and PSH operations located at a LMP that is a major source.	EUKILNNUMBER1, EUKILNNUMBER2, EUPSHFUGITIVE

FG-MACT AAAAA-LIME MANUFACTURING PLANTS
FLEXIBLE UNIT CONDITIONS

DESCRIPTION

The affected source is an existing lime manufacturing plant (LMP), that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. An existing affected source is a source that commences construction or reconstruction before December 23, 2002. A new affected source includes a new lime kiln (and, if applicable, its associated lime cooler), and a processed stone handling (PSH) operations system for which construction or reconstruction began after December 20, 2002. An existing lime kiln (and, if applicable, its associated lime cooler) and an existing PSH operations system are those that do not meet the definition of a new kiln or a new PSH operations system. The regulations cover the existing lime kilns and their associated coolers, and PSH operations located at a LMP that is a major source.

The kilns have historically been fired using pulverized coal and natural gas. Permit to Install 330-07D was issued on February 17, 2012, which allowed the additions of syngas and glycerin as fuels. The syngas can be a substitute fuel for a portion of the coal currently used substituting coal at a rate of up to 24.9 MMBtu/hour total. Syngas fuel will be introduced to the kilns through an existing startup natural gas-fired removable lance or integrated into a multi-channel burner. High-Btu-glycerin and low-Btu-glycerin, with a combined rate of 2.5 tons per hour total, can also be substituted for a portion of the coal currently used, and will be introduced through a new separate removable lance or integrated into a multi-channel burner. There will also be a glycerin tank.

Emission Units: EUKILNNUMBER1, EUKILNNUMBER2, EUPSHFUGITIVE

POLLUTION CONTROL EQUIPMENT

Emissions from EUKILNNUMBER1 and EUKILNNUMBER2 are controlled by a positive pressure reverse air baghouse with a monovent-type ambient discharge.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.12 pounds per ton of stone feed (lb/tsf)*[2]	Three 1 hour test runs	EUKILNNUMBER1, EUKILNNUMBER2	SC V.1	**40 CFR 63.7090(a)**
2. PM	0.05 grams per dry standard cubic meter[2]	Three 1 hour test runs	Stack or building vent emissions from EUPSHFUGITIVE	SC V.I	**40 CFR 63.7090(a)**
3. Opacity	7 percent[2]	Six-minute average	Stack or building vent emissions from EUPSHFUGITIVE	SC VI.6	**40 CFR 63.7090(a)**
4. Opacity	10 percent[2]	Six-minute average	Fugitive emissions from operations associated with EUPSHFUGITIVE that are not enclosed in a building.	SC VI.6	**40 CFR 63.7090(a)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
5. Opacity	No visible emissions, or zero percent opacity[2]	Instantaneous	Fugitive emissions from the building containing operations associated with EUPSHFUGITIVE, except for emissions from a vent.	SC VI.6	**40 CFR 63.7090(a)**
6. Sulfur Dioxide	300 ppm in exhaust gas corrected to 50% excess oxygen**[2]	Three 1 hour test runs	EUKILNNUMBER1, EUKILNNUMBER2	SC V.2	**R 336.1402(1)**
7. Sulfur Dioxide	2.4 pounds per million BTU of heat input when coal is used as a fuel[2]	Three 1 hour test runs	EUKILNNUMBER1, EUKILNNUMBER2	SC V.2	**R 336.1402(1)**

* Compliance with this particulate matter limit shall be considered compliance with the limits of R 336.1331(1)(a) using coal and also the limits of Consent Order SIP No. 22-1993, Exhibit B specifying 0.5 lb/tsf, both of which have been subsumed under this streamlined requirement.

** Compliance with this limit shall be considered compliance with the limits of R 336.1402(3) using coal, which has been subsumed under this streamlined requirement.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Glycerin	2.5 tons per hour	Calendar day	EUKILNNUMBER1, EUKILNNUMBER2	SC VI.10	**R 336.1205(1)(a)(ii)**
2. Glycerin	21,900 tons per year	12-month rolling time period as determined at the end of each calendar month	EUKILNNUMBER1, EUKILNNUMBER2	SC VI.10	**R 336.1205(1)(a)(ii), R 336.1205(3)**
3. Glycerin	0.24% sulfur, by weight, on a dry basis	Instantaneous	EUKILNNUMBER1, EUKILNNUMBER2	SC VI.11	**R 336.1205(1)(a)(ii), R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)**
4. Glycerin	4.25% ash content, on a dry basis	Instantaneous	EUKILNNUMBER1, EUKILNNUMBER2	SC VI.11	**R 336.1205(1)(a)(ii), R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)**
5. Syngas	24.9 MMBTU per hour	Calendar day	EUKILNNUMBER1, EUKILNNUMBER2	SC VI.12	**R 336.1205(1)(a)(ii)**
6. Syngas	218,124 MMBTU per year	12-month rolling time period as determined at the end of each calendar month	EUKILNNUMBER1, EUKILNNUMBER2	SC VI.12	**R 336.1205(1)(a)(ii), R 336.1205(3)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
7. Syngas	0.14% sulfur, by weight	Instantaneous	EUKILNNUMBER1, EUKILNNUMBER2	SC VI.13	**R 336.1205(1)(a)(ii), R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with the emission limits above, and any other emission and operating limits put forth in 40 CFR Part 63 Subpart AAAAA, at all times, except during periods of startup, shutdown, or malfunction.[2] **(40 CFR 63.7100(a))**

2. The permittee shall not operate EUKILNNUMBER1 and EUKILNNUMBER2 unless the baghouses are installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d), 40 CFR Part 63, Act 451, Part 55 324.5524, Consent Order SIP No.22-1993, Exhibit B)**

3. In lieu of using a bag leak detection system (BLDS) or particulate matter (PM) detector, the permittee shall maintain the positive pressure reverse air baghouse such that the 6 minute average opacity for any 6 minute block period does not exceed 15 percent, and comply with the requirements in 40 CFR 63.7113(f) and SC VI.1.[2] **(40 CFR 63.7090(b))**

4. The permittee shall be in compliance with the opacity and visible emission limits in 40 CFR Part 63 Subpart AAAAA during the times specified in 40 CFR Part 63.6(h)(1).[2] **(40 CFR 63.6(h)(1), 40 CFR 63.7100(b))**

5. The permittee shall submit to the AQD District Supervisor, for review and approval, a written operations, maintenance and monitoring (OM&M) plan for the facility. Any subsequent changes to the plan must be submitted to the AQD District Supervisor for review and approval. The plan shall contain the following information[2]:

   a. Process and control device parameters to be monitored to determine compliance, along with established operating limits or ranges, as applicable, for each emission unit. **(40 CFR 63.7100(d)(1))**

   b. A monitoring schedule for each emission unit. **(40 CFR 63.7100(d)(2))**

   c. Procedures for the proper operation and maintenance of each emission unit and each air pollution control device used to meet the applicable emission limitations and operating limits in Tables 1 and 2 of 40 CFR, Part 63 Subpart AAAAA, respectively. **(40 CFR 63.7100(d)(3))**

   d. Procedures for the proper installation, operation and maintenance of monitoring devices or systems used to determine compliance, including:

      1. Calibration and certification of accuracy of each measuring device.

      2. Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems.

      3. Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3) and (4)(ii).

      4. Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d) **(40 CFR 63.7100(d)(4))**

   e. Procedures for monitoring process and control device parameters. **(40 CFR 63.7100(d)(5))**

   f. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the operating limits specified in Table 2 of 40 CFR, Part 63 Subpart AAAAA, including:

1. Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended.

2. Procedures for recording the corrective action taken, the time corrective action was initiated, and the time and date the corrective action was completed.
(40 CFR 63.7100(d)(6))

g. A maintenance schedule for each emission unit and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
(40 CFR 63.7100(d)(7))

6. The permittee shall develop and implement a written startup, shutdown and malfunction plan (SSMP) in accordance with 40 CFR 63.6(e)(3).[2] **(40 CFR 63.7100(e), 40 CFR 63.6(e)(3))**

7. For each emission unit equipped with an add-on air pollution control device, such as the positive pressure reverse air baghouses associated with EUKILNNUMBER1 and EUKILNNUMBER2, the permittee shall do the following[2]:
   a. Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to the baghouses.
   b. Operate each capture/collection system according to the procedures and requirements in the OM&M plan in Special Condition III.5.
   (40 FR 63.7090(b))

8. The permittee shall only fire coal, natural gas, syngas and/or glycerin fuels in EUKILNNUMBER1 and EUKILNNUMBER2.[2] **(R 336.1205(1)(a)(ii) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

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), 40 CFR 63.7753)**

1. The permittee shall conduct a performance test within five (5) years of the date of the last performance test to demonstrate compliance with the particulate matter emissions limit in 40 CFR 63.7090(a), following the test methods and procedures in 40 CFR 63.7112. Subsequent compliance testing shall be conducted no less frequently than every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and the District Office. The AQD must approve the final plan prior to testing.[2] **(40 CFR 63.7111, 40 CFR 63.7130(d))**

2. The permittee shall conduct a performance test within five (5) years of the date of the last performance test to demonstrate compliance with the sulfur dioxide emissions limit, following the test methods and procedures in Federal Reference Test Method 6, or any other test method approved by AQD. Subsequent compliance testing shall be conducted no less frequently than every five years.[2] **(R 336.1402(1))**

3. Within 180 days after the initial use of the glycerin fuel, the permittee shall confirm the CO emission factor in pounds per ton of lime for glycerin [high Btu] fuel from either EUKILNNUMBER1 or EUKILNNUMBER2 when burning coal and glycerin [high Btu] fuels used at the rate proposed during the review of Permit to Install 330-07D, by testing, at owner's expense, in accordance with Department requirements. The permittee shall also determine CO emissions from the same kiln tested above when firing only coal fuel, by testing, at owner's expense, in accordance with Department requirements. The results of the stack test shall be used in the determination of the CO emission factor in pounds per ton of lime for glycerin [high Btu] fuel. In the event that the supply of the glycerin [high Btu] fuel as allowed per this permit is not available within 180 days the permittee shall be limited to the level under which the test was performed until adequate supplies become available and retesting within 180 days of the higher level of use is performed. Subsequent compliance testing of the alternate kiln shall be conducted no less frequently than every five (5) years; thereafter, the permittee shall

alternate testing between EUKILNNUMBER1 and EUKILNNUMBER2. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.[2] **(R 336.1205, R 336.2001, R 336.2003, R 336.2004)**

4. Within 180 days after the initial use of the syngas fuel, the permittee shall confirm the CO emission factor in pounds per ton of lime for syngas fuel from either EUKILNNUMBER1 or EUKILNNUMBER2 when burning coal and syngas fuels used at the rate proposed during the review of Permit to Install 330-07D, by testing, at owner's expense, in accordance with Department requirements. The permittee shall also determine CO emissions from the same kiln tested above when firing only coal fuel, by testing, at owner's expense, in accordance with Department requirements. The results of the stack test shall be used in the determination of the CO emission factor in pound, per ton of lime for syngas fuel. In the event that the supply of the syngas fuel as allowed per this permit is not available within 180 days permittee shall be limited to the level under which the test was performed until adequate supplies become available and retesting within 180 days of the higher level of use is performed. Subsequent compliance testing of the alternate kiln shall be conducted no less frequently than every five (5) years; thereafter, the permittee shall alternate testing between EUKILNNUMBER1 and EUKILNNUMBER2. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.[2] **(R 336.1205, R 336.2001, R 336.2003, R 336.2004)**

5. The permittee shall analyze glycerin and syngas fuels annually, when in use for a given year, for carbon content. This analysis shall be used to determine CO_2e emissions as prescribed by USEPA in the Green House Gas Monitoring Rule Subpart C in 40 CFR Part 98.30. The permittee shall verify the CO_2e emission factors in pounds per ton of lime for glycerin and syngas fuels at the rates proposed during the review of Permit to Install 330-07D. All records shall be kept on file for a period of at least five years and made available to the Department upon request.[2] **(R 336.1205, 40 CFR Part 98.30)**

6. The permittee shall determine the BTU content of the coal fuel for EUKILNNUMBER1 and EUKILNNUMBER2 whenever a coal shipment is received. The method of calculation shall be in accordance with the ASTM Standard D5865.[2] **(R 336.1402(1), R 336.1402(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.7133)**

1. For each emission unit equipped with an add-on air pollution control device, the permittee shall inspect each capture/collection and closed vent system, at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Special Condition III.6 and record the results of each inspection.[2] **(40 CFR 63.7113(f))**

2. The permittee shall keep the following records[2]:

   a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63 Subpart AAAAA, including all documentation supporting and Initial Notification or Notification of Compliance Status that was submitted in accordance with the requirements of 40 CFR 63.10(b)(2)(xiv).
   b. Records in accordance with 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown and malfunction.
   c. Records of performance tests, performance evaluations, and opacity and visible emission observations as required in 40 CFR 63.10(b)(2)(viii).
   d. Records of visible emission observations as required by 40 CFR 63.6(h)(6).
   e. Records required by Tables 5 and 6 of 40 CFR Part 63 Subpart AAAAA that demonstrate continuous compliance of FG-MACT AAAAA-LIMEMANUFACTURING PLANTS with each applicable emission limitation in Subpart AAAAA.
   f. Records which document the basis for the initial applicability determination as required by 40 CFR 63.7081.

All of these records shall be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record, and each record must be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report or record in accordance with 40 CFR 63.10(b)(1).[2] **(40 CFR 63.7132, 40 CFR 63.7133)**

3. The permittee must install, operate and maintain each continuous parameter monitoring system (CPMS) according to the OM&M plan required by 40 CFR 63.7100(d) and 40 CFR 63.7113(a).[2] **(40 CFR 63.7113(a))**

4. For each flow measurement device, the permittee must meet the requirements in paragraphs (a)(1) through (5) and (b)(1) through (4) of 40 CFR 63.7113.[2] **(40 CFR 63.7113(b))**

5. For each pressure measurement device, the permittee must meet the requirements in paragraphs (a)(1) through (5) and (c)(1) through (7) of 40 CFR 63.7113.[2] **(40 CFR 63.7113(c))**

6. For each processed stone handling (PSH) operation subject to an opacity limit as specified in 40 CFR Part 63 Subpart AAAAA, and any vents from buildings at the facility subject to an opacity limit, the permittee must conduct a visible emissions check according to Item 1 of Table 6 of Subpart AAAAA, and as follows[2] :

   a. Conduct visible inspections that consist of a visual survey of each stack or process emission point over the test period to identify if there are visible emissions, other than condensed water vapor.
   b. Select a position at least 15 but not more than 1,320 feet from the affected emission point with the sun or other light source generally at your back.
   c. The observer conducting the visible emission checks need not be certified to conduct EPA Method 9 in appendix A to Part 60 of this chapter, but must meet the training requirements as described in EPA Method 22 of appendix A to 40 CFR Part 60.
   (40 CFR 63.7121(e))

7. The permittee shall continuously monitor and record, in a satisfactory manner, the daily limestone feed rate to EUKILNNUMBER1 and EUKILNNUMBER2.[2] **(R 336.1331(1)(a), Consent Order SIP No. 22-1993, Exhibit B)**

8. The permittee shall keep records of the determinations of the BTU/hr heat input rates of coal to EUKILNNUMBER1 and EUKILNNUMBER2. The permittee shall keep all records on file at the facility and make them available to the Department upon request.[2] **(R 336.1205, 40 CFR Part 63 Subpart AAAAA, R 336.1402(1))**

9. The permittee shall keep records of monthly coal consumption rates by EUKILNNUMBER1 and EUKILNNUMBER2. The permittee shall keep all records on file at the facility and make them available to the Department upon request.[2] **(R 336.1331(3))**

10. The permittee shall continuously monitor, in a satisfactory manner, the glycerin fuel usage rates for EUKILNNUMBER1 and EUKILNNUMBER2 using respective fuel flow meters on a daily, monthly and 12-month rolling time period basis. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [2] **(R 336.1205 (1)(a)(ii) & (3); R 336.1224; R 336.1225; R 336.1702(a); R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

11. The permittee shall keep records of the ash content and sulfur content, in percent by weight, of the glycerin fuels determined based on composite samples of all received glycerin fuels with such composite samples analyzed no less frequent than monthly in months where glycerin fuels is used. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [2] **(R 336.1205(1)(a)(ii) & (3); R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

12. The permittee shall continuously monitor, in a satisfactory manner, the syngas fuel usage rates for for EUKILNNUMBER1 and EUKILNNUMBER2 using respective fuel flow meters on a daily, monthly and 12-month rolling time period basis. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [2] **(R 336.1205 (1)(a)(ii) & (3); R 336.1224; R 336.1225; R 336.1702(a); R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

13. The permittee shall keep records of the sulfur content, in percent by weight, of the syngas fuel. The permittee shall keep a separate record of the sulfur content of syngas fuel received no less frequent than monthly in months where syngas fuel is used. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [2] **(R336.1205 (1)(a)(ii) & (3); R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

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))**

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. If a startup, shutdown, or malfunction occurs during the semiannual reporting period, that is not consistent with the SSMP, the permittee shall submit an immediate SSM report according to the requirements of 40 CFR 63.10(d)(5)(ii).[2] **(40 CFR 63.10(d)(5)(ii), 40 CFR 63.7131(a))**

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
SVAKG120	696 x 92.3 [2]	70.9 [2]	**R 336.1201(3)**
SVAKG220	696 x 92.3 [2]	70.9 [2]	**R 336.1201(3)**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart AAAAA for Lime Manufacturing Plants by the compliance date.[2] **(40 CFR Part 63, Subparts A and AAAAA)**

2. Visible emissions from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal associated with the equipment addressed by this Flexible Group shall not exceed 20 percent opacity, per the requirements specified in 40 CFR Part 60, Subpart Y (Standards of Performance for Coal Preparation and Processing Plants).[2]
(40 CFR 60.254)

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

E. NON-APPLICABLE REQUIREMENTS

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

APPENDICES

Appendix 1. 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
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H_2S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO_2	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

*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

A. The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in EUCONVEYOR/ELEV, EULIMELOADOUT, EUFLUEDUSTTANK, EUNO6BINVENT.

BAGHOUSE INSPECTIONS

1. Inspections shall be conducted during scheduled outages or downtimes, and immediately after observing visible emissions or pressure drops outside the normal range, but not less frequently than every six months.

2. The operational condition, and if necessary, reasons for failure or malfunction of the bags, metal housings, fans, blowers, hopper bottom discharge valve, reverse air dampers or pulse jets (whichever is applicable), access doors and gaskets shall be determined during the inspection.

3. Any repairs and corrective actions needed to address the causes of malfunction or failure shall be performed immediately.

B. The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified for processed stone handling (PSH operations), and referenced in FG-MACT AAAAA-LIME MANUFACTURING PLANTS and Item 1 of Table 6 of 40 CFR Part 63, Subpart AAAAA.

To demonstrate ongoing compliance with the opacity limits for PSH operations in 63.7090(a), the permittee must do the following:

1. Conduct a monthly 1-minute visible emission (VE) check of each emission unit in accordance with the requirements of 40 CFR 63.7121(e) while the affected source is in operation.

2. If no VE are observed in 6 consecutive monthly checks for any emission unit, the permittee may decrease the frequency of VE checking from monthly to semi-annually for that emission unit. If VE are observed during any semi-annual check, then the permittee must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks.

3. If no VE are observed during the semi-annual check for any emission unit, the permittee may decrease the frequency of VE checking from semi-annually to annually for that emission unit. If VE are observed during any annual check, then the permittee must resume VE checking of that emission unit on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly checks.

4. If VE are observed during any VE check, the permittee must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to Part 60. The permittee must begin the Method 9 test within I hour of any observation of VE and the 6-minute opacity reading must not exceed the applicable opacity limit.

Appendix 4. Recordkeeping

A. BAGHOUSE INSPECTIONS

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in EUCONVEYOR/ELEV, EULIMELOADOUT, EUFLUEDUSTTANK, EUNO6BINVENT. Alternative formats must be approved by the AQD's District Supervisor.

A log of the inspection, cause(s) of malfunction or failure, repairs made and corrective actions taken shall be maintained on file for a period of at least five years.

B. FUGITIVE DUST MANAGEMENT PLAN RECORDS

These records shall be kept on file for the most recent five-year period and be made available to the Air Quality Management Division upon request. The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in the Source-Wide Conditions. Alternative formats or procedures must be approved by the AQD District Supervisor.

ADDENDUM

RECORDKEEPING FOR FUGITIVE DUST SOURCES

REQUIRED RECORDS

UNPAVED ROADS/LOTS

1. DATE OF TREATMENT
2. CONTROL MEASURE USED
3. RESPONSIBLE PERSON'S INITIALS
4. NAME OF PRODUCT APPLIED
5. AMOUNT OF SOLUTION/WATER APPLIED
6. DILUTION RATIO
7. ROAD SEGMENT/LOT IDENTIFICATION

PAVED ROADS/LOTS

1. DATE OF TREATMENT
2. CONTROL MEASURE USED
3. RESPONSIBLE PERSON'S INITIALS
4. ROAD SEGMENT/LOT IDENTIFICATION

STORAGE PILES/MATERIAL HANDLING

1. DATE OF TREATMENT
2. CONTROL MEASURE USED
3. RESPONSIBLE PERSON'S INITIALS
4. DILUTION RATIO (IF APPLICABLE)
5. AMOUNT OF DUST SUPPRESSANT/WATER APPLIED
6. IDENTIFICATION OF PILE/MATERIAL HANDLING OPERATION TREATED
7. EQUIPMENT USED

OPTIONAL RECORDS

WEATHER CONDITIONS

1. PRECIPITATION
2. TEMPERATURE
3. WIND DIRECTION AND VELOCITY

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued since the effective date of previously issued ROP No. 199700102:

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
330-07D	The PTI addresses the use of two additional fuels to fire the lime kilns – syngas and glycerin (high and low BTU).	EUKILNNUMBER1, EUKILNNUMBER2

Appendix 7. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ 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's District Supervisor.

B. Other Reporting

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

Appendix 9. Fugitive Dust Management Plan

The following is the Fugitive Dust Control Plan associated with State and Federal SIP No. 22-1993:

EXHIBIT A
FUGITIVE DUST CONTROL PLAN
MARBLEHEAD LIME COMPANY - RIVER ROUGE PLANT

1. Facility Name and Address:

Marblehead Lime Company
River Rouge Plant
25 Marion Avenue
P.O. Box 18118
River Rouge, Michigan 48218

2. Name and Address of Responsible Person:

Frank M. Werderitsch
Director, Environmental Services
Marblehead Lime Company
4226 Lawndale Avenue
Lyons, Illinois 60534

3. Summary of Source Descriptions and Control Measures:

A. Loading or Unloading of Open Storage Piles:

1) Limestone - Limestone is crushed, sized and washed prior to shipment to the River Rouge facility. Consequently, the amount of material less than 200 mesh is less than 1%. This factor in addition to the fact that the material is wet when it is received eliminates fugitive emissions during the unloading sequence. The limestone is received in lake boats. The lake boats unload using adjustable height conveyors to minimize the drop distance of the material. Normal pile weathering further reduces the potential for fugitive emissions. Moisture causes aggregation of larger particles. Any significant rainfall soaks the interior of the stockpile, and the drying process is very slow. The material is moved by front-end loaders to a smaller pile which has underground feeders as described in outdoor conveying. During movement by the front-end loaders the material is wet. The limestone pile is inactive for only a small percentage of the time.

(Note: Limestone moisture content 3%. Water applied to pile at 30 gallons per minute.)

2) Coal - The inactive coal storage pile is treated with Rezosol 5411-B crusting agent. The crusting agent is applied at such a frequency (quarterly for inactive area and within two weeks for disturbed area) so as to maintain a crust over the inactive area of the pile. The dilution ratio is 30:1. The coal storage pile is small in size, with a maximum of 28,000 tons at any one time and an average height of 18-20 feet.

(Note: Coal moisture 8%.)

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B. Transporting of Bulk Materials:

Lime and Kiln By-Product - Both of these materials are transported from our facility in open bed haul trucks which are not the property of Marblehead Lime Company. These trucks are required to be equipped with tarpaulins to cover the bed of the truck. Covering of the truck is performed either prior to, during, or after weighing on the plant scales. The trucks are loaded in our loadout area which is equipped with telescoping hoods that are lowered over the truck bed. These devices have negative pressure pick-up ports vented to a dust collector which removes displaced air from the truck as material is loaded. The method used for cleaning the wheels and bodies of the trucks is water washing. The responsibility for this cleaning is the individual driver of the truck. It is also his responsibility to maintain the truck bodies in good condition to assure no leakage occurs during shipment. Truck wheel and body clean-up takes place in the truck wash area.

The loadout area housekeeping and maintenance is the responsibility of the individual operator for each shift. Spillage that occurs during loadout will be cleaned immediately. A sweeper/vacuum vehicle is located permanently at the plant for use in cleaning plant roadways. The supervisors of each department will assure the housekeeping procedures are followed. In addition to the open bodied trucks, there are some blower type trucks hauling lime and kiln by-product from the Brennan Avenue facility. These trucks are loaded using a telescoping hood vented to a dust collector which controls the dust laden displaced air. Since these trucks are completely enclosed, no tarpaulin covers are required, otherwise the same clean-up procedures are performed. The plant roadway speed limit is 5 mph. Stop signs have been installed at various locations in the plant to assure that the speed limit is not exceeded.

C. Outdoor Conveying - Enclosures:

1) Limestone - This material originates from a conveyor with feeders located underneath the storage pile. The material has a high moisture content during conveying from the storage pile to the large bins in the plant area. The conveyor is underground and completely enclosed from the storage pile to a transfer point also located underground. From this transfer point to the plant storage bins the conveyor is covered with a 210 degree enclosure. Venting of the transfer points to a dust collector is not necessary due to the moisture content of the limestone.

2) Lime - All conveying of the lime product is completely enclosed. Transfer points are under negative pressure and vented to fabric filter dust collectors.

3) Material Collected by Kiln Gas Filter - This material is pneumatically conveyed to a storage bin. From the collection point to the storage bin this conveying system is completely enclosed. The displaced air in the storage bin is vented to a fabric filter dust collector.

D. Roads and Lots:

1) Paved areas - The 0.3 mile plant roadway loop that is used by all vehicles coming into the property is completely paved. An Elgin Pelican regenerative air with one gutter broom street sweeper/vacuum vehicle is located at the River Rouge plant and is used at least two (2) days per week to clean the plant roadway loop. In addition, the plant roadway loop is flushed with a high pressure water hose at least three (3) days per week. The parking lots on the premises which are used by plant employees are smaller in total size than the 500 square meter limitation requiring paving. Nevertheless the employee parking lots are paved and vacuum swept once per two (2) weeks.

2) Unpaved Roadways - The front-end loader is generally the only vehicle using the unpaved roadways in the stockpile area. They will be treated with a 38% solution of calcium chloride once every six (6) weeks.

E. Housekeeping Procedures:

1) High pressure water clean-up - A clean-up program will be instituted where water under high pressure is used to clean inside walls and other appropriate areas. Points of accumulation of dust on the outside of the firing building will be cleaned using this method.

2) Product conveyors, transfer points, etc. - A daily inspection will be performed with points of accumulation of dust cleaned immediately.

3) Screening and storage area - The screening and storage area will be inspected daily with points of accumulation of dust cleaned immediately.

4) Rotary kiln gas filter - The kiln gas filter will be inspected daily. Points of accumulation of dust will be cleaned immediately. A clean-up program will be instituted where water under high pressure is used to clean inside walls and other appropriate inside areas. Points of accumulation of dust on the outside of the building will be cleaned using this method.

5) Plant grounds - The roadways, scale area, and general grounds will be inspected daily. Points of accumulation of dust will be cleaned immediately.

(Note: See attached DNR required Recordkeeping for Fugitive Dust Sources Addendum for further information.)

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