

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

EFFECTIVE DATE: July 12, 2021

ISSUED TO

United States Gypsum Company, #891 Detroit Plant

State Registration Number (SRN): B3518

LOCATED AT

10090 West Jefferson Avenue, River Rouge, Wayne County, Michigan 48218

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B3518-2021

Expiration Date: July 12, 2026

Administratively Complete ROP Renewal Application Due Between
January 12, 2025 and January 12, 2026

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B3518-2021

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

Michigan Department of Environment, Great Lakes, and Energy

Dr. April Wendling, 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 Environment, Great Lakes, and Energy (EGLE) or his or her designee.

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

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

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

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

ROP No: MI-ROP-B3518-2021
Expiration Date: July 12, 2026
PTI No: MI-PTI-B3518-2021

Section 1 - Mill Plant

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

Monitoring/Recordkeeping

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

Certification & Reporting

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

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

Permit to Install (PTI)

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

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

DESCRIPTION

The following conditions apply source-wide to all process equipment including equipment covered by other permits, grandfathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

Water Sprays, Dust Suppressants, Power Sweeper, Dust Collectors

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.03 gr/dscf	Hourly	Dust Collectors	SC V.1	Act 451, Section 324.5524(3)(b)
2. PM (as Visible Emissions)	20% opacity	6-minute average	Any other fugitive dust source (not a road, lot, or storage pile)	SC VI.1	Act 451, Section 324.5524(2)
3. PM (as Visible Emissions)	5% opacity	6-minute average	Roads, lots, and storage piles, including any material handling activity at a storage pile	SC VI.1	Act 451, Section 324.5524(2)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate the facility unless the fugitive emissions control plan for all plant roadways, the plant yard, all material storage piles, and all material handling operations has been submitted, and is implemented and maintained. The permittee shall submit any amendments to the plan to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the plan, or amended plan shall be considered approved. **(R 336.1371, R 336.1372, Act 451, Section 324.5524, Consent Order SIP Number 33-1993, Exhibit A)**

See Appendix 3-1

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

- Upon request of the AQD District Supervisor, the permittee shall verify PM emission rates from any dust collector used to control fugitive dust by testing at the owner's expense, in accordance with the Department requirements.

Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform and document non-certified visible emissions observations on dust collectors, roads, lots, or storage piles on a weekly basis when operating. If during the observation there are any visible emissions detected, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions in excess of 5% observed, and any corrective actions taken shall be kept on file and made available to the Department upon request. **(R 336.1213(3))**
2. The permittee shall fully comply with the required recordkeeping for Fugitive Dust Sources Addendum specified in Appendix 4-1. **(Consent Order SIP Number 33-1993, Exhibit A)**

See Appendix 4-1

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permitted shall submit on a quarterly basis to the AQD District Supervisor, a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement, as specified in the Fugitive Dust Control Plan in Appendix 3-1, was not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected. **(Consent Order SIP Number 33-1993, Paragraph 11)**

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall fully comply with the provisions and requirements of the fugitive dust control operating program and Recordkeeping for Fugitive Dust Sources Addendum, which are attached as Appendices 3-1 and 4-1 (Consent Order SIP Number 33-1993, Exhibit A). **(Consent Order SIP Number 33-1993, Paragraph 8)**

2. The permittee may change its processes, modify the Fugitive Dust Control Plan in Appendix 3-1, or modify the particulate emission control program ("Control Programs"), in accordance with the following: **(Consent Order SIP Number 33-1993, Paragraphs 13.A and B)**
 - a. Process Change
 - i. The permittee may change its operations or processes which are sources of particulate and fugitive dust provided all of the following conditions are met:
 - A. The provisions of the Control Programs continue to apply to the subject operation or process;
 - B. The change does not result in an increase in the level of fugitive dust or particulate emissions;
 - C. The change is approved.
 - ii. The permittee shall submit to the AQD District Supervisor a written description of the proposed change and how it meets the requirements of SC IX.2.a.i.
 - iii. The Department shall approve or disapprove the proposed change, in writing, within 45 days from receiving a proposed change which meets the requirements of SC IX.2.a.i.
 - iv. Should the Department disapprove the proposed change, the disapproval must describe the specific reasons for the decision and must be forwarded to the permittee.
 - b. Control Program Revision
 - i. The permittee may revise the Control Programs provided both of the following conditions are met:
 - 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 the demonstration to the AQD District Supervisor for approval.
 - B. The revision is approved.
 - ii. The Department shall approve or disapprove the proposed revision, in writing, within 45 days from receiving a proposed revision using an applicable U.S.EPA approved method to demonstrate the proposed revision meets the requirements of SC IX.2.b.i.
 - iii. Should the Department disapprove the proposed revision, the disapproval must describe the specific reasons for the decision and must be forwarded to the permittee.
3. Upon approval of a change pursuant to SC IX.2.a or b above, the Department shall notify the U.S. EPA, in writing, of the revised provisions which are enforceable for the facility. **(Consent Order SIP Number 33-1993, Paragraph 13.C)**

Footnotes:

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

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

C. EMISSION UNIT SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-5	Landplaster System consisting of a Land Plaster Bin, Raymond Mill Feed Bin, Air Cyclone Separator, Screen and controlled by a baghouse.	04-15-1970 / 09-23-2003	FG-MILL2
EU-6	Rock Dryer including a Rock Crusher and Rock Storage Bin, and controlled by a baghouse.	11-01-1999 / 09-23-2003	FG-MILL1
EU-9	Granular System controlled by a baghouse.	10-18-1971 / 03-24-2000	FG-MILL2
EU-10	No. 1 and No. 2 Warehouse Bins controlled by a baghouse.	03-15-1964 / 03-01-2003	FG-MILL2
EU-23	Raymond Mill System controlled by a baghouse.	06-21-1979 / 09-23-2003	FG-MILL2
EU-35	HRA Landplaster Bin controlled by a baghouse.	07-29-1985 / 09-23-2003	FG-MILL1
EU-36	No. 1 Calcining Kettle controlled by a baghouse.	05-15-1987 / 03-01-2003	FG-KETTLES, FG-MILL1
EU-38	No. 3 Calcining Kettle controlled by a baghouse.	05-15-1987 / 03-01-2003	FG-KETTLES, FG-MILL1

**EU-35
EMISSION UNIT CONDITIONS**

DESCRIPTION

HRA Landplaster Bin controlled by a baghouse.

Flexible Group ID: FG-MILL1

POLLUTION CONTROL EQUIPMENT

Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.019 lbs/1,000 lbs of exhaust gas ²	As determined by the average of three 1-hour test runs	EU-35	SC V.1	R 336.1331(1)(c)
2. PM	0.04 pph ²	As determined by the average of three 1-hour test runs	EU-35	SC V.1	40 CFR 52.21(c) and (d)
3. PM	0.19 tpy ²	Annually	EU-35	SC V.1, SC VI.2, SC VI.3	40 CFR 52.21(c) and (d)
4. PM (as Visible Emissions)	7% opacity ²	6-minute average	EU-35	SC V.1	R 336.1301(1)(c), R 336.1303, 40 CFR 60.672(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. Upon request of the AQD District Supervisor, the permittee shall verify PM emission rates and visible emissions from EU-35 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
Visible Emissions	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B

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

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 complete all required records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. The permittee shall record the hours of operation of EU-35 on a monthly basis.² **(R 336.1201(3))**
3. The permittee shall calculate and record the particulate emissions of EU-35 on a monthly and annual basis.² **(R 336.1201(3))**

VII. REPORTING

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

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from EU-35 shall not be discharged to the ambient air at any time.² **(R 336.1201(3))**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Standards of Performance for Nonmetallic Mineral Processing Plants, as specified in 40 CFR Part 60, Subparts A and OOO, as they apply to EU-35.² **(40 CFR Part 60, Subparts A and OOO)**

Footnotes:

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

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-KETTLES	No. 1 Calcining Kettle and No. 3 Calcining Kettle each with baghouse control.	EU-36, EU-38
FG-MILL1	Emission Units located in the Mill Department.	EU-6, EU-35, EU-36, EU-38
FG-MILL2	Emission Units located in the Mill Department subject to 40 CFR 60, Subpart OOO.	EU-5, EU-9, EU-10, EU-23

**FG-KETTLES
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

No. 1 Calcining Kettle and No. 3 Calcining Kettle each with baghouse control.

Emission Unit: EU-36, EU-38

POLLUTION CONTROL EQUIPMENT

Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.05 grams per dscm for each calcining kettle ^{2, a}	As determined by the average of three 1-hour test runs	FG-KETTLES	SC V.1	R 336.1331(1)(c)
2. PM	6.8 pph for each calcining kettle ²	As determined by the average of three 1-hour test runs	FG-KETTLES	SC V.1	40 CFR 52.21(c) and (d)
3. PM	29.8 tpy total for all calcining kettles ²	Annually	FG-KETTLES	SC V.1, SC VI.2, SC VI.3	40 CFR 52.21(c) and (d)
4. PM (as Visible Emissions)	7% opacity for each calcining kettle ^{2, b}	6-minute average	FG-KETTLES	SC V.1	R 336.1301(1)(c), R 336.1303

^a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the emission limit established by **R 336.1331(1)(c)**; and also compliance with the emission limit established by **40 CFR 60.732(a)**, an additional applicable requirement that has been subsumed within this condition.

^b In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined opacity limit shall be considered compliance with the opacity limit established by **R 336.1301(1)(c)** and **R 336.1303**; and also compliance with the opacity limit established by **40 CFR 60.732(b)**, an additional applicable requirement that has been subsumed within this condition.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall burn only natural gas in FG-KETTLES.² (**R 336.1201(3)**)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall verify PM emission rates and visible emissions from FG-KETTLES by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
Visible Emissions	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.736)**

2. Within 180 days of permit issuance, the permittee shall verify the PM emission rates and visible emissions from at least one emission unit in FG-KETTLES. Thereafter, the permittee shall verify the PM emission rates and visible emissions from at least one emission unit in FG-KETTLES, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. The permittee shall record the hours of operation of FG-KETTLES on a monthly basis.² **(R336.1201(3))**
3. The permittee shall calculate and record the particulate emissions of FG-KETTLES on a monthly and annual basis.² **(R 336.1201(3))**

VII. REPORTING

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

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-36	24 ²	122 ²	R 336.1201(3)
2. SV-38	24 ²	122 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Standards of Performance for Calciners and Dryers in Mineral Industries, as specified in 40 CFR, Part 60, Subparts A and Subpart UUU, as they apply to FG-KETTLES.² **(40 CFR Part 60, Subparts A and UUU)**

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).

**FG-MILL1
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Emission Units located in the Mill Department.

Emission Unit: EU-6, EU-35, EU-36, EU-38

POLLUTION CONTROL EQUIPMENT

Baghouse(s)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.042 lbs per 1,000 lbs of exhaust gas ^{2, a}	Hourly	EU-6 Baghouse	SC V.1	R 336.1331(1)(c)
2. PM	4.5 pph ²	Hourly	EU-6 Baghouse	SC V.1	40 CFR 52.21(c) and (d)
3. PM	19.8 tpy ²	Annually	EU-6 Baghouse	SC V.1, SC VI.2	40 CFR 52.21(c) and (d)
4. PM (as Visible Emissions)	10% opacity ²	6-minute average	EU-6 Baghouse	SC V.1	R 336.1301, R 336.1303, 40 CFR 60.732(b)

^a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the emission limit established by **R 336.1331(1)(c)**; and also compliance with the emission limit established by **40 CFR 60.732(a)**, an additional applicable requirement that has been subsumed within this condition.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall burn only natural gas in EU-6.² (**R 336.1205, 40 CFR 52.21(c) and (d)**)
2. The permittee shall not process any asbestos tailings or asbestos-containing waste materials as defined by the National Emission Standards for Hazardous Air Pollutants (40 CFR 61.141) regulations in EU-6.² (**40 CFR 61, Subpart A and M**)
3. The permittee shall not operate FG-MILL1 unless a preventative maintenance / malfunction abatement plan (PM / MAP), or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum, the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.

- c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
- d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the PM / MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies. **(R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate the following equipment unless the associated baghouse is installed and operating properly.² **(R 336.1910)**
 - a. Rock dryer.
 - b. Rock dryer feed bins and rock crusher.
 - c. HRA landplaster receiving bin supplying airveyor system.
 - d. #1 and #3 kettles and hot pits.

V. TESTING/SAMPLING

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

- 1. Upon request of the AQD District Supervisor, the permittee shall verify PM emission rates and visible emissions from EU-6 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
Visible Emissions	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.736)**

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 complete all required records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
- 2. The permittee shall calculate and record PM emissions from EU-6 on a monthly and a 12-month time period basis as determined at the end of the calendar month. **(R 336.1213(3))**
- 3. The permittee shall keep the following process monitoring and records for FG-MILL1:² **(R 336.1201(3))**
 - a. Differential pressure across baghouse, weekly.
 - b. Visible emissions (non-certified observer), weekly, weather permitting.
 - c. Opacity (certified observer), when visible emissions are observed, and maintain record of actions taken to restore compliance.
 - d. Hours of operation for rock dryer (EU-6) - monthly record.

- e. The permittee shall keep monthly natural gas usage records, indicating the amount of gas used in cubic feet, on a calendar month basis, and a 12-month rolling time period basis.
4. The permittee shall keep the following other monitoring and records for FG-MILL1:² **(R 336.1201(3))**
- a. The permittee shall conduct regular inspections for the purpose of determining the operational condition of the baghouse, and if necessary, the reasons for malfunction or failure.
 - b. These inspections shall be conducted during scheduled outages or downtimes, and immediately after observing visible emissions, but not less frequently than every six months.
 - c. 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.
 - d. Any repairs and corrective actions needed to address the causes of malfunction or failure shall be performed immediately.
 - e. 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.

VII. REPORTING

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

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-6	36 ²	122 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all provisions of the National Standards of Performance for Calciners and Dryers in Mineral Industries, as specified in 40 CFR, Part 60, Subparts A and Subpart UUU, as they apply to EU-6. **(40 CFR Part 60, Subparts A and UUU)**

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).

**FG-MILL2
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Emission Units located in the Mill Department subject to 40 CFR 60, Subpart OOO.

Emission Unit: EU-5, EU-9, EU-10, EU-23

POLLUTION CONTROL EQUIPMENT

Baghouse(s)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.029 lbs per 1,000 lbs of exhaust gas ^{2, a}	Hourly	EU-5, EU-10, EU-23 (Each Baghouse)	SC V.1	R 336.1331(1)(c)
2. PM	0.05 grams/dscm ^{2, b}	Hourly	EU-9 Baghouse	SC V.1	40 CFR 60.672(a)
3. PM	1.60 pph ²	Hourly	EU-5 Baghouse	SC V.1	40 CFR 52.21(c) and (d)
4. PM	0.9 pph ²	Hourly	EU-10 Baghouse	SC V.1	40 CFR 52.21(c) and (d)
5. PM	0.90 pph ²	Hourly	EU-23 Baghouse	SC V.1	40 CFR 52.21(c) and (d)
6. PM	6.95 tpy ²	Annually	EU-5 Baghouse	SC V.1, SC VI.2	40 CFR 52.21(c) and (d)
7. PM	4.0 tpy ²	Annually	EU-10 Baghouse	SC V.1, SC VI.2	40 CFR 52.21(c) and (d)
8. PM	4.00 tpy ²	Annually	EU-23 Baghouse	SC V.1, SC VI.2	40 CFR 52.21(c) and (d)
9. PM (as Visible Emissions)	7% opacity ^{2, c}	6-minute average	EU-5, EU-10, EU-23 (Each Baghouse)	SC V.1	40 CFR 60.672(a)
10. PM (as Visible Emissions)	7% opacity	6-minute average	EU-9 Baghouse	SC V.1	40 CFR 60.672(a)

^a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the emission limit established by **R 336.1331(1)(c)**; and also compliance with the emission limit established by **40 CFR 60.672(a)**, an additional applicable requirement that has been subsumed within this condition.

^b In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined opacity limit shall be considered compliance with the opacity limit established by **40 CFR 60.672(a)**; and also compliance with the opacity limit established by **R 336.1331(1)(a)**, an additional applicable requirement that has been subsumed within this condition.

^c In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined opacity limit shall be considered compliance with the opacity limit established by **40 CFR 60.672(a)**; and also compliance with the opacity limit established by **R 336.1301(1)(c)** and **R 336.1303**, additional applicable requirements that have been subsumed within this condition.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The disposal of collected contaminants from the baghouse dust collector(s) shall be performed in a manner which minimizes the introduction of air contaminants to the outer air.² **(R 336.1201(3))**
2. The permittee shall not operate FG-MILL2 unless a preventative maintenance / malfunction abatement plan (PM / MAP), or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum, the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the PM / MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies. **(R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- a. The permittee shall not operate the following equipment unless the associated baghouse is installed and operating properly.² **(R 336.1910)**
 - a. Raymond mill feed bin.
 - b. East and West kettle landplaster screw conveyors
 - c. #1 and #3 landplaster feed bins.
 - d. High fines elevator and discharge screw conveyor.
 - e. East and West L.P feed screw conveyors.
 - f. JC feeder and surge bin.
 - g. Granular gypsum screener.
 - h. Bulk granular gypsum loading and bagging.
 - i. Warehouse bins feed screw conveyor.
 - j. Tubemill elevator.
 - k. East and West stucco distribution screw conveyor.
 - l. North and South feed screw conveyors.
 - e. #1 and #2 packing warehouse bins
 - m. #1 and #2 Raymond mills.

V. TESTING/SAMPLING

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

1. Upon request of the AQD District Supervisor, the permittee shall verify PM emission rates and visible emissions from EU-5, EU-9, EU-10, and EU-23 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
Visible Emissions	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.736)**

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 complete all required records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. The permittee shall calculate and record PM emissions from each emission unit in FG-MILL2 on a monthly and a 12-month time period basis as determined at the end of the calendar month. **(R 336.1213(3))**
3. The permittee shall keep the following process monitoring and records for FG-MILL2:² **(R 336.1201(3))**
 - a. Differential pressure across baghouse, weekly.
 - b. Visible emissions (non-certified observer), weekly, weather permitting.
 - c. Opacity (certified observer), when visible emissions are observed, and maintain record of actions taken to restore compliance.
4. The permittee shall keep the following other monitoring and records for FG-MILL2:² **(R 336.1201(3))**
 - a. The permittee shall conduct regular inspections for the purpose of determining the operational condition of the baghouse, and if necessary, the reasons for malfunction or failure.
 - b. These inspections shall be conducted during scheduled outages or downtimes, and immediately after observing visible emissions, but not less frequently than every six months.
 - c. 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.
 - d. Any repairs and corrective actions needed to address the causes of malfunction or failure shall be performed immediately.
 - e. 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.

VII. REPORTING

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

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-5	21 ²	73.5 ²	R 336.1201(3)
2. SV-9*	NA ²	NA ²	R 336.1201(3)
3. SV-10	18 ²	90 ²	R 336.1201(3)
4. SV-23*	NA ²	NA ²	R 336.1201(3)

* These stacks discharge inside a building.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Standards of Performance for Nonmetallic Mineral Processing Plants, as specified in 40 CFR Part 60, Subparts A and OOO, as they apply to FG-MILL2. **(40 CFR Part 60, Subparts A and OOO)**

Footnotes:

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

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

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 1-1. Acronyms and Abbreviations

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

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

Appendix 2-1. Schedule of Compliance

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

Appendix 3-1. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in the Source-Wide Conditions.

Consent Order SIP Number 33-1993, Exhibit A FUGITIVE DUST CONTROL PLAN UNITED STATES GYPSUM COMPANY

Summary of Source Descriptions and Control Measures:

A. Storage Piles:

- 1) Outside Rock Storage - Crude gypsum ore in a size range of 6" to dust is stored as an open pile. The gypsum ore is loaded onto the pile from a self-unloading ship conveyor and reclaimed by a front end pay loader. The outside raw gypsum storage pile is continually exposed to the weather. Due to the nature of gypsum (i.e. hygroscopic) and that it is received with 1% free moisture, grab sample free moistures have averaged 3.5%. This naturally occurring moisture content has the same effect as would be expected from water spraying or tarping the pile.
- 2) Outside Slag Storage - Furnace blast slag in a size range of 1/2" to dust and a moisture content of 4 - 8% is stored outside the northwest corner of the Cement Board Plant. The slag is unloaded onto the pile from a self-unloading dump truck and reclaimed by a front end loader. In addition, the outside slag storage pile is a very small pile located at the north end of the property enclosed on three (3) sides by the building proper.

B. Conveyor Loading Operations to Storage Piles:

- 1) Outside Rock storage - Self-unloading Great Lakes freighters utilizing an open belt conveyor are used to load raw gypsum ore onto the outside rock storage pile at the average rate of 1300 tons per hour and operating a maximum 38 hours per year (maximum last six years). Loading of the outside rock storage pile utilizes a water spray system. Existing water sprays at the ship's conveyor discharge point will be used to apply water to the ore stream at all times during conveyor loading of the rock storage pile. Water will be sprayed onto the discharged ore stream at a minimum of 1 gpm. Water will be sprayed onto discharged ore stream at all times that ambient temperatures are above 32 degrees Fahrenheit.
- 2) Outside slag storage - Loading of the outside slag storage pile utilizes a minimum fall from the back end of the self-unloading semi-dump truck. Slag as it pours off the end of the truck falls four (4) feet maximum forming the pile.

C Unloading Operations from Storage Piles:

- 1) Outside Rock Storage - A front end loader with a 7 1/2 cubic yard bucket is used to reclaim outside storage rock. The payloader transports single bucket loads of ore at an average rate of 110 tons per hour, a maximum 565 hours per year from the rock pile into the enclosed rock silo building. Once inside the enclosed silo, the ore is unloaded into a pile. In addition, the free moisture of the ore in the pile has been measured at 3.5%.
- 2) Outside Slag storage - A front end loader with a 2 1/2 cubic yard bucket is used to reclaim outside slag. The payloader transports single bucket loads of slag and dumps the slag into a reclaim screw which carries the slag into an enclosed storage bin. The slag is reclaimed with a minimum drop height of two (2) feet. In addition, the free moisture of the ore pile has been measured between 4 to 8%. Slag is basically received daily and used daily, and only a small pile (40 x 40 x 10 ft.) is maintained onsite. Furthermore, use of a compliance method utilizing water sprays cannot be accomplished due to the critical effect the moisture content of the slag has on the manufacturing process. Should the slag moisture exceed 8% additional equipment would be required to dry the slag. This equipment is not available at this time.

D. Storage Pile Traffic Ways:

- 1) Outside Rock Storage - The haul road is unpaved and consists of gypsum rock laid as the road bed. An asphalt emulsion, petroleum resin, or acrylic cement will be sprayed to keep the haul road damp. U.S. Gypsum proposes to utilize a chemical, Soil-Cement as our dust suppressant. The application of the dust suppressant will follow manufacturer's recommendations for heavy traffic at one gallon for every 40 sq. ft. of roadway diluted with water at a 5 to 1 ratio. The dust suppressant will be initially applied using a spreader truck with spray bar one week prior to the beginning of the reclaim season and reapplied as conditions dictate. Again, since all reclaiming is done from January through April and the roadway at this time is normally wet and muddy, the reapplication frequency cannot be accurately determined; reapplication will be completed monthly unless conditions dictate otherwise. Application of the dust suppressant will be discontinued after all reclaiming is completed as no further traffic is expected. At this time, a final application of dust suppressant will be made.
- 2) Paved Roadways/Truck Marshaling Areas - The remaining traffic ways at the U.S. Gypsum facility are all paved asphalt roads. A Clark-American 3000 industrial power sweeper has been purchased and is currently available to regularly clean all paved roadways. The roads will be cleaned a minimum of daily. As an alternative to the daily roadway sweepings, U.S. Gypsum may also elect to water wash the roadways on an every other day basis using contractor roadway sweepers equipped with water sprays or existing fire hydrant water sources. All plant parking lots and truck marshaling areas will be swept weekly.

E. Unloading and Transportation of Dust Collector Dust:

- 1) Only one (1) plant dust collectors has the collected dust transported on-site. All other plant dust collectors return the dust back into the process using screw conveyors whose dust collection equipment is operated under existing permits.
 - a. End saw Dust Collector - This dust collector is a Flex-Kleen, Model 84WRWC96 rated 4,000 SCFM with a cloth area of 1,018 sq. ft. The collected dust is dropped through a rotary valve into a 20 yard hopper for on-site disposal; an average of one hopper per day. The hopper is positioned in an existing enclosure and the hopper is tarped prior to being transported to the enclosed board waste recycling shredder equipment building.

F. Crushers, grinding mills, bucket elevators, conveyor transfer points, conveyor bagging operations, storage bins, and fine product loading.

- 1) All plant crushers, grinding mills, bucket elevators, conveyor transfer points (except as noted below), fine products truck loading (except as noted below), bagging operations, and storage bins are all vented through existing dust collectors.

The exceptions noted above are the conveyor transfer points onto and off of the rock unloading conveyor and bulk loading of Granular.

- 2) Rock Unloading Conveyor - Great Lakes freighters normally transfer crude gypsum ore onto the rock unloading belt as described under Outside Rock Storage Pile. The freighter positions its unloading belt inside an enclosed hopper where the ore is transferred onto the rock unloading belt. Transferring of ore onto the unloading belt will utilize a water spray system.

U.S. Gypsum Co. has installed a water spray station manually operated to control dust emissions from this source. Two (2) spray nozzles, one located at the hopper inlet area, and one at the discharge point will be utilized to supply a fine mist of water over the ore as it discharges; a minimum of 1 gpm will be sprayed to control any dusting.

- 3) Rock Unloading Belt - Transferring into Silo - The rock unloading belt discharges the raw gypsum ore into the enclosed rock silo. The enclosed rock silo contains the dust generated at the transfer point.
- 4) Bulk Loading of Granular - Bulk Granular is loaded into either 26 ton or 50 ton bulk transfer trucks. Trucks are loaded via a screw conveyor through a telescoping chute into the trucks. The telescoping chute is maintained under negative pressure by the plant's existing Bulk Loading Dust Collector. The dust collector is a Wheelabrator Model 70-AC rated at 1650 CFM with 547 sq. ft. of cloth area.

G. Transporting of Bulk Materials - Silt content Between 1 - 5% - Bulk waste material is collected and loaded into 20-yard waste containers for disposal by a contract carrier. The waste generated at the south end of the Board Plant is wet undried panels of gypsum wallboard with a typical moisture content of 33%. This waste is transported to the board recycling area. The waste generated at the south end of the Cement Board Plant consists of wet undried panels of Durock, plant floor sweeper collected waste and miscellaneous plant trash. These waste

containers are disposed off site. In all cases, the plant's 950, Caterpillar front end payloader with a 2 1/2 cubic yard bucket is used to fill the waste container, The silt content of this waste is estimated at between 1 and 5 percent. The waste containers are loaded so that no part of the load is within **six (6)** inches of the top of the container and all loads are tarped prior to transport.

H. All Cases - Spilled Material - In all cases where transport, unloading, or reclaiming of bulk material is carried out, the U.S. Gypsum Co. proposes to clean up any spilled material that should occur at a minimum of every other day.

Appendix 4-1. Recordkeeping

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

Recordkeeping for Fugitive Dust Sources Addendum (Consent Order SIP Number 33-1993, Exhibit A)

SOURCE TYPE	REQUIRED RECORDS
UNPAVED ROADS / LOTS	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Date of treatment 2. Control measure used 3. Responsible person's initials. 4. Road segment / Lot identification.
STORAGE PILES / MATERIAL HANDLING.	<ol style="list-style-type: none"> 1. Date of treatment 2. Control measure used. 3. Responsible person's initials. 4. Dilution ratio. 5. Amount of dust suppressant / water applied. 6. Identification of pile / material handling operation treated. 7. Equipment used.

OPTIONAL RECORDS	
WEATHER CONDITIONS	<ol style="list-style-type: none"> 1. Precipitation 2. Temperature 3. Wind Direction and Velocity

Appendix 5-1. Testing Procedures

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

Appendix 6-1. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B3518-2011. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B3518-2011 is being reissued as Source-Wide PTI No. MI-PTI-B3518-2021.

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

Appendix 7-1. Emission Calculations

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

Appendix 8-1. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

The permittee shall use the following approved formats and procedures for the reporting requirements referenced in the Source-Wide Conditions. Alternative formats must be approved by the AQD District Supervisor.

Reports Required by Consent Order SIP Number 33-1993:

Beginning with the calendar quarter starting after the effective date of this consent order, and quarterly thereafter, the company shall submit to the Department, a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement, as specified in Appendix 4-1 was not met, the duration of the event, the remedial action taken, and a description of the steps that were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar month in which the data were collected.

ROP No: MI-ROP-B3518-2021
Expiration Date: July 12, 2026
PTI No: MI-PTI-B3518-2021

SECTION 2 – Cement Board Plant

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

4. 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))**
5. 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))**
6. 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))**
9. 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.
10. 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))**

11. 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))**
12. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
13. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

10. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
11. 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

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

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

14. 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

16. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
17. 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))**
18. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

18. 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.
19. 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

22. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
23. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
24. 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))**
25. 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.

26. 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.
27. 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))**
28. 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))**
29. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

27. 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.

28. Nothing in this ROP shall alter or affect any of the following:
 - d. 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))**
 - e. 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))**
 - f. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

- e. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
29. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- f. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - g. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - h. 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))**
 - i. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - j. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
34. 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

35. 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)**
36. 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))**
37. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
38. 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

35. 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

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

Stratospheric Ozone Protection

39. 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.
40. 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

42. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
43. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
44. 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.
45. 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

4. 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)

5. 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))**
6. 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)**
7. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
8. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

DESCRIPTION

The following conditions apply source-wide to all process equipment including equipment covered by other permits, grandfathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

Water Sprays, Dust Suppressants, Power Sweeper, Dust Collectors

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.03 gr/dscf	Hourly	Dust Collectors	SC V.1	Act 451, Section 324.5524(3)(b)
2. PM (as Visible Emissions)	20% opacity	6-minute average	Any other fugitive dust source (not a road, lot, or storage pile)	SC VI.1	Act 451, Section 324.5524(2)
3. PM (as Visible Emissions)	5% opacity	6-minute average	Roads, lots, and storage piles, including any material handling activity at a storage pile	SC VI.1	Act 451, Section 324.5524(2)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate the facility unless the fugitive emissions control plan for all plant roadways, the plant yard, all material storage piles, and all material handling operations has been submitted, and is implemented and maintained. The permittee shall submit any amendments to the plan to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the plan, or amended plan shall be considered approved. **(R 336.1371, R 336.1372, Act 451, Section 324.5524, Consent Order SIP Number 33-1993, Exhibit A)**

See Appendix 3-2

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))**

- Upon request of the AQD District Supervisor, the permittee shall verify PM emission rates from any dust collector used to control fugitive dust by testing at the owner's expense, in accordance with the Department requirements.

Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform and document non-certified visible emissions observations on dust collectors, roads, lots, or storage piles on a weekly basis when operating. If during the observation there are any visible emissions detected, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions in excess of 5% observed, and any corrective actions taken shall be kept on file and made available to the Department upon request. **(R 336.1213(3))**
2. The permittee shall fully comply with the required recordkeeping for Fugitive Dust Sources Addendum specified in Appendix 4-2. **(Consent Order SIP Number 33-1993, Exhibit A)**

See Appendix 4-2

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permitted shall submit on a quarterly basis to the AQD District Supervisor, a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement, as specified in the Fugitive Dust Control Plan in Appendix 3-2, was not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected. **(Consent Order SIP Number 33-1993, Paragraph 11)**

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall fully comply with the provisions and requirements of the fugitive dust control operating program and Recordkeeping for Fugitive Dust Sources Addendum, which are attached as Appendices 3-2 and 4-2 (Consent Order SIP Number 33-1993, Exhibit A). **(Consent Order SIP Number 33-1993, Paragraph 8)**

2. The permittee may change its processes, modify the Fugitive Dust Control Plan in Appendix 3-2, or modify the particulate emission control program ("Control Programs"), in accordance with the following: **(Consent Order SIP Number 33-1993, Paragraphs 13.A and B)**
 - a. Process Change
 - i. The permittee may change its operations or processes which are sources of particulate and fugitive dust provided all of the following conditions are met:
 - A. The provisions of the Control Programs continue to apply to the subject operation or process;
 - B. The change does not result in an increase in the level of fugitive dust or particulate emissions;
 - C. The change is approved.
 - ii. The permittee shall submit to the AQD District Supervisor a written description of the proposed change and how it meets the requirements of SC IX.2.a.i.
 - iii. The Department shall approve or disapprove the proposed change, in writing, within 45 days from receiving a proposed change which meets the requirements of SC IX.2.a.i.
 - iv. Should the Department disapprove the proposed change, the disapproval must describe the specific reasons for the decision and must be forwarded to the permittee.
 - b. Control Program Revision
 - i. The permittee may revise the Control Programs provided both of the following conditions are met:
 - 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 the demonstration to the AQD District Supervisor for approval.
 - B. The revision is approved.
 - ii. The Department shall approve or disapprove the proposed revision, in writing, within 45 days from receiving a proposed revision using an applicable U.S.EPA approved method to demonstrate the proposed revision meets the requirements of SC IX.2.b.i.
 - iii. Should the Department disapprove the proposed revision, the disapproval must describe the specific reasons for the decision and must be forwarded to the permittee.
3. Upon approval of a change pursuant to SC IX.2.a or b above, the Department shall notify the U.S. EPA, in writing, of the revised provisions which are enforceable for the facility. **(Consent Order SIP Number 33-1993, Paragraph 13.C)**

Footnotes:

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

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

C. EMISSION UNIT SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-33	Bulk Portland Cement Bin controlled by a baghouse.	12-01-1985 / 09-23-2003	FG- CEMENTBOARD
EU-42	Bulk Perlite Bin controlled by a baghouse.	02-01-1990 / 02-11-2008	FG- CEMENTBOARD
EU-43	Bulk Fly Ash Bin controlled by a baghouse.	02-01-1990 / 02-11-2008	FG- CEMENTBOARD
EU-44	Cement Board Ink Jet Printer that sprays water-based black ink on the Durock cement panels to convey logo, specs, and panel production information.	01-01-2005	FGRULE287(2)(c)
EU-55	Cement Board Process consisting of a bin, Hadite/aggregate storage, elevator/conveyor taking Hadite to mixer, conveyor taking Portland cement, fly ash, perlite, and land plaster from HRA bin to mixer. This emission unit is controlled by a baghouse which is exhausted through a stack to ambient air. An additional baghouse has been added to this process per Rule 285(2)(d) which vents internally.	01-27-1995 / 04-01-1995	FG- CEMENTBOARD
EU-70	Portland Cement Silo controlled by a baghouse.	02-01-1990 / 02-11-2008	FG- CEMENTBOARD
EU-71	Perlite Silo controlled by a baghouse.	02-01-1990 / 02-11-2008	FG- CEMENTBOARD
EU-72	Fly Ash Silo controlled by a baghouse.	02-01-1990 / 02-11-2008	FG- CEMENTBOARD

**EU-33
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Bulk Portland Cement Bin controlled by a baghouse.

Flexible Group ID: FG-CEMENTBOARD

POLLUTION CONTROL EQUIPMENT

Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.019 lbs/1,000 lbs of exhaust gas ²	As determined by the average of three 1-hour test runs	EU-33	SC V.1	R 336.1331(1)(c)
2. PM	0.08 pph ²	As determined by the average of three 1-hour test runs	EU-33	SC V.1	40 CFR 52.21(c) and (d)
3. PM	0.35 tpy ²	Annually	EU-33	SC V.1, SC VI.2, SC VI.3	40 CFR 52.21(c) and (d)
4. PM (as Visible Emissions)	7% opacity ²	6-minute average	EU-33	SC V.1	R 336.1301(1)(c), R 336.1303

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. Upon request of the AQD District Supervisor, the permittee shall verify PM emission rates and visible emissions from EU-33 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
Visible Emissions	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B

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

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 complete all required records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1213(3))
2. The permittee shall record the hours of operation of EU-33 on a monthly basis.² (R 336.1201(3))
3. The permittee shall calculate and record the particulate emissions of EU-33 on a monthly and annual basis.² (R 336.1201(3))

VII. REPORTING

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

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from EU-33 shall not be discharged to the ambient air at any time.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 SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-CEMENTBOARD	Emission Units located in the Cement Board Plant.	EU-33, EU-42, EU-43, EU-55, EU-70, EU-71, EU-72
FGRULE287(2)(c)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 287(2)(c). Emission units installed/modified before December 20, 2016, may show compliance with Rule 287 in effect at the time of installation/modification.	EU-44

**FG-CEMENTBOARD
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Emission Units located in the Cement Board Plant.

Emission Unit: EU-33, EU-42, EU-43, EU-55, EU-70, EU-71, EU-72

POLLUTION CONTROL EQUIPMENT

Baghouse(s)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.019 lbs per 1,000 lbs of exhaust gas ²	Hourly	EU-42, EU-43 (Each Baghouse)	SC V.1	R 336.1331(1)(c)
2. PM	0.015 gr/dscf ^{2,a}	Hourly	EU-55 Baghouse	SC V.1	R 336.1331(1)(c)
3. PM	0.038 lbs per 1,000 lbs of exhaust gas ²	Hourly	EU-70, EU-71, EU-72 (Each Baghouse)	SC V.1	R 336.1331(1)(c)
4. PM	0.07 pph ²	Hourly	EU-42, EU-43 (Each Baghouse)	SC V.1	40 CFR 52.21(c) and (d)
5. PM	1.54 pph ²	Hourly	EU-55 Baghouse	SC V.1	40 CFR 52.21(c) and (d)
6. PM	0.22 pph ²	Hourly	EU-70, EU-71 (Each Baghouse)	SC V.1	40 CFR 52.21(c) and (d)
7. PM	0.14 pph ²	Hourly	EU-72 Baghouse	SC V.1	40 CFR 52.21(c) and (d)
8. PM	0.30 tpy ²	Annually	EU-42, EU-43 (Each Baghouse)	SC V.1, SC VI.2	40 CFR 52.21(c) and (d)
9. PM	6.76 tpy ²	Annually	EU-55 Baghouse	SC V.1, SC VI.2	40 CFR 52.21(c) and (d)
10. PM	0.97 tpy ²	Annually	EU-70, EU-71 (Each Baghouse)	SC V.1, SC VI.2	40 CFR 52.21(c) and (d)
11. PM	0.60 tpy ²	Annually	EU-72 Baghouse	SC V.1, SC VI.2	40 CFR 52.21(c) and (d)
12. PM (as Visible Emissions)	7% opacity ²	6-minute average	EU-42, EU-43, EU-55, EU-70, EU-71, EU-72 (Each Baghouse)	SC V.1	R 336.1301(1)(c), R 336.1303
13. PM (as Visible Emissions)	7% opacity	6-minute average	EU-55	SC V.1	40 CFR 60.672(a)

^a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the emission limit established by **40 CFR 60.672(a)**; and also compliance with the emission limit established by **R 336.1331(1)(c)**, an additional applicable requirement that has been subsumed within this condition.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The disposal of collected contaminants from the baghouse dust collector(s) shall be performed in a manner which minimizes the introduction of air contaminants to the outer air.² **(R 336.1201(3))**
2. The permittee shall not operate FG-CEMENTBOARD unless a preventative maintenance / malfunction abatement plan (PM / MAP), or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum, the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the PM / MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies. **(R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the following equipment unless the associated baghouse is installed and operating properly.² **(R 336.1910)**
 - a. Portland cement bulk unloading airveyor day bin.
 - b. Perlite bulk unloading airveyor day bin.
 - c. Fly ash bulk unloading airveyor day bin.
 - d. "Cements" hopper.
 - e. "Cements" screw conveyors.
 - f. "Cements" feeder.
 - g. Readco mixer.
 - h. Durock process
 - i. Cement board bulk Portland cement truck unloading airveyor system and receiving/storage silo.
 - j. Cement board bulk perlite truck unloading airveyor system and receiving/storage silo
 - k. Cement board bulk fly ash truck unloading airveyor system and receiving/storage silo

V. TESTING/SAMPLING

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

1. Upon request of the AQD District Supervisor, the permittee shall verify PM emission rates and visible emissions from any emission unit in FG-CEMENTBOARD by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
Visible Emissions	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B

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

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 complete all required records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. The permittee shall calculate and record PM emissions from each emission unit in FG-CEMENTBOARD on a monthly and a 12-month time period basis as determined at the end of the calendar month. **(R 336.1213(3))**
3. The permittee shall keep the following process monitoring and records for FG-CEMENTBOARD:²
(R 336.1201(3))
 - a. Differential pressure across baghouse, weekly.
 - b. Visible emissions (non-certified observer), weekly, weather permitting.
 - c. Opacity (certified observer), when visible emissions are observed, and maintain record of actions taken to restore compliance.
4. The permittee shall keep the following other monitoring and records for FG-CEMENTBOARD:² **(R 336.1201(3))**
 - a. The permittee shall conduct regular inspections for the purpose of determining the operational condition of the baghouse, and if necessary, the reasons for malfunction or failure.
 - b. These inspections shall be conducted during scheduled outages or downtimes, and immediately after observing visible emissions, but not less frequently than every six months.
 - c. 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.
 - d. Any repairs and corrective actions needed to address the causes of malfunction or failure shall be performed immediately.
 - e. 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.

VII. REPORTING

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

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-42*	6.3 ²	45.7 ²	R 336.1201(3)
2. SV-43*	6.3 ²	45.7 ²	R 336.1201(3)
3. SV-55	27 ²	79 ²	R 336.1201(3)
4. SV-70	8 ²	86.6 ²	R 336.1201(3)
5. SV-71	8 ²	86.6 ²	R 336.1201(3)
6. SV-72	6 ²	77.2 ²	R 336.1201(3)

* These stacks discharge inside a building.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Standards of Performance for Nonmetallic Mineral Processing Plants, as specified in 40 CFR Part 60, Subparts A and OOO, as they apply to EU-55. **(40 CFR Part 60, Subparts A and OOO)**

Footnotes:

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

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

FGRULE287(2)(c)
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 287(2)(c). Emission units installed/modified before December 20, 2016, may show compliance with Rule 287 in effect at the time of installation/modification.

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

Emission Units installed prior to December 20, 2016: EU-44

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Underlying Applicable Requirement
1. Coatings	200 Gallons/month (minus water as applied)	Calendar month	Each emission unit	R 336.1287(2)(c)(i)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

- Any exhaust system installed on or after December 20, 2016, that serves only coating spray equipment shall be equipped with a dry filter control or water wash control which is installed, maintained, and operated in accordance with the manufacturer's specifications, or the permittee develops a plan which provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions. All emission units installed before December 20, 2016, with an exhaust system that serves only coating spray equipment must have a properly installed and operated particulate control system. (R 336.1213(2), R 336.1287(2)(c)(ii), R 336.1910)

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 287(2)(c), Permit to Install Exemption Record form (EQP 3562) or in a format acceptable to the AQD District Supervisor. **(R 336.1213(3))**
 - a. Volume of coating used, as applied, minus water, in gallons. **(R 336.1287(2)(c)(iii))**
 - b. Documentation of any filter replacements or maintenance of water wash control for exhaust systems serving coating spray equipment or other documentation included in a plan developed by the owner or operator of the equipment. **(R 336.1213(3))**

VII. REPORTING

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

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that 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 1-2. Acronyms and Abbreviations

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

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

Appendix 2-2. Schedule of Compliance

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

Appendix 3-2. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in the Source-Wide Conditions.

Consent Order SIP Number 33-1993, Exhibit A FUGITIVE DUST CONTROL PLAN UNITED STATES GYPSUM COMPANY

Summary of Source Descriptions and Control Measures:

A. Storage Piles:

- 1) Outside Rock Storage - Crude gypsum ore in a size range of 6" to dust is stored as an open pile. The gypsum ore is loaded onto the pile from a self-unloading ship conveyor and reclaimed by a front end pay loader. The outside raw gypsum storage pile is continually exposed to the weather. Due to the nature of gypsum (i.e. hygroscopic) and that it is received with 1% free moisture, grab sample free moistures have averaged 3.5%. This naturally occurring moisture content has the same effect as would be expected from water spraying or tarping the pile.
- 2) Outside Slag Storage - Furnace blast slag in a size range of 1/2" to dust and a moisture content of 4 - 8% is stored outside the northwest corner of the Cement Board Plant. The slag is unloaded onto the pile from a self-unloading dump truck and reclaimed by a front end loader. In addition, the outside slag storage pile is a very small pile located at the north end of the property enclosed on three (3) sides by the building proper.

B. Conveyor Loading Operations to Storage Piles:

- 1) Outside Rock storage - Self-unloading Great Lakes freighters utilizing an open belt conveyor are used to load raw gypsum ore onto the outside rock storage pile at the average rate of 1300 tons per hour and operating a maximum 38 hours per year (maximum last six years). Loading of the outside rock storage pile utilizes a water spray system. Existing water sprays at the ship's conveyor discharge point will be used to apply water to the ore stream at all times during conveyor loading of the rock storage pile. Water will be sprayed onto the discharged ore stream at a minimum of 1 gpm. Water will be sprayed onto discharged ore stream at all times that ambient temperatures are above 32 degrees Fahrenheit.
- 2) Outside slag storage - Loading of the outside slag storage pile utilizes a minimum fall from the back end of the self-unloading semi-dump truck. Slag as it pours off the end of the truck falls four (4) feet maximum forming the pile.

C. Unloading Operations from Storage Piles:

- 1) Outside Rock Storage - A front end loader with a 7 1/2 cubic yard bucket is used to reclaim outside storage rock. The payloader transports single bucket loads of ore at an average rate of 110 tons per hour, a maximum 565 hours per year from the rock pile into the enclosed rock silo building. Once inside the enclosed silo, the ore is unloaded into a pile. In addition, the free moisture of the ore in the pile has been measured at 3.5%.
- 2) Outside Slag storage - A front end loader with a 2 1/2 cubic yard bucket is used to reclaim outside slag. The payloader transports single bucket loads of slag and dumps the slag into a reclaim screw which carries the slag into an enclosed storage bin. The slag is reclaimed with a minimum drop height of two (2) feet. In addition, the free moisture of the ore pile has been measured between 4 to 8%. Slag is basically received daily and used daily, and only a small pile (40 x 40 x 10 ft.) is maintained onsite. Furthermore, use of a compliance method utilizing water sprays cannot be accomplished due to the critical effect the moisture content of the slag has on the manufacturing process. Should the slag moisture exceed 8% additional equipment would be required to dry the slag. This equipment is not available at this time.

D. Storage Pile Traffic Ways:

- 1) Outside Rock Storage - The haul road is unpaved and consists of gypsum rock laid as the road bed. An asphalt emulsion, petroleum resin, or acrylic cement will be sprayed to keep the haul road damp. U.S. Gypsum proposes to utilize a chemical, Soil-Cement as our dust suppressant. The application of the dust suppressant will follow manufacturer's recommendations for heavy traffic at one gallon for every 40 sq. ft. of roadway diluted with water at a 5 to 1 ratio. The dust suppressant will be initially applied using a spreader truck with spray bar one week prior to the beginning of the reclaim season and reapplied as conditions dictate. Again, since all reclaiming is done from January through April and the roadway at this time is normally wet and muddy, the reapplication frequency cannot be accurately determined; reapplication will be completed monthly unless conditions dictate otherwise. Application of the dust suppressant will be discontinued after all reclaiming is completed as no further traffic is expected. At this time, a final application of dust suppressant will be made.
- 2) Paved Roadways/Truck Marshaling Areas - The remaining traffic ways at the U.S. Gypsum facility are all paved asphalt roads. A Clark-American 3000 industrial power sweeper has been purchased and is currently available to regularly clean all paved roadways. The roads will be cleaned a minimum of daily. As an alternative to the daily roadway sweepings, U.S. Gypsum may also elect to water wash the roadways on an every other day basis using contractor roadway sweepers equipped with water sprays or existing fire hydrant water sources. All plant parking lots and truck marshaling areas will be swept weekly.

E. Unloading and Transportation of Dust Collector Dust:

- 1) Only one (1) plant dust collectors has the collected dust transported on-site. All other plant dust collectors return the dust back into the process using screw conveyors whose dust collection equipment is operated under existing permits.
 - a. End saw Dust Collector - This dust collector is a Flex-Kleen, Model 84WRWC96 rated 4,000 SCFM with a cloth area of 1,018 sq. ft. The collected dust is dropped through a rotary valve into a 20 yard hopper for on-site disposal; an average of one hopper per day. The hopper is positioned in an existing enclosure and the hopper is tarped prior to being transported to the enclosed board waste recycling shredder equipment building.

F. Crushers, grinding mills, bucket elevators, conveyor transfer points, conveyor bagging operations, storage bins, and fine product loading.

- 1) All plant crushers, grinding mills, bucket elevators, conveyor transfer points (except as noted below), fine products truck loading (except as noted below), bagging operations, and storage bins are all vented through existing dust collectors.

The exceptions noted above are the conveyor transfer points onto and off of the rock unloading conveyor and bulk loading of Granular.

- 2) Rock Unloading Conveyor - Great Lakes freighters normally transfer crude gypsum ore onto the rock unloading belt as described under Outside Rock Storage Pile. The freighter positions its unloading belt inside an enclosed hopper where the ore is transferred onto the rock unloading belt. Transferring of ore onto the unloading belt will utilize a water spray system.

U.S. Gypsum Co. has installed a water spray station manually operated to control dust emissions from this source. Two (2) spray nozzles, one located at the hopper inlet area, and one at the discharge point will be utilized to supply a fine mist of water over the ore as it discharges; a minimum of 1 gpm will be sprayed to control any dusting.

- 3) Rock Unloading Belt - Transferring into Silo - The rock unloading belt discharges the raw gypsum ore into the enclosed rock silo. The enclosed rock silo contains the dust generated at the transfer point.
- 4) Bulk Loading of Granular - Bulk Granular is loaded into either 26 ton or 50 ton bulk transfer trucks. Trucks are loaded via a screw conveyor through a telescoping chute into the trucks. The telescoping chute is maintained under negative pressure by the plant's existing Bulk Loading Dust Collector. The dust collector is a Wheelabrator Model 70-AC rated at 1650 CFM with 547 sq. ft. of cloth area.

G. Transporting of Bulk Materials - Silt content Between 1 - 5% - Bulk waste material is collected and loaded into 20-yard waste containers for disposal by a contract carrier. The waste generated at the south end of the Board Plant is wet undried panels of gypsum wallboard with a typical moisture content of 33%. This waste is transported to the board recycling area. The waste generated at the south end of the Cement Board Plant consists of wet undried panels of Durock, plant floor sweeper collected waste and miscellaneous plant trash. These waste

containers are disposed off site. In all cases, the plant's 950, Caterpillar front end payloader with a 2 1/2 cubic yard bucket is used to fill the waste container, The silt content of this waste is estimated at between 1 and 5 percent. The waste containers are loaded so that no part of the load is within **six (6)** inches of the top of the container and all loads are tarped prior to transport.

H. All Cases - Spilled Material - In all cases where transport, unloading, or reclaiming of bulk material is carried out, the U.S. Gypsum Co. proposes to clean up any spilled material that should occur at a minimum of every other day.

Appendix 4-2. Recordkeeping

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

Recordkeeping for Fugitive Dust Sources Addendum (Consent Order SIP Number 33-1993, Exhibit A)

SOURCE TYPE	REQUIRED RECORDS
UNPAVED ROADS / LOTS	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Date of treatment 2. Control measure used 3. Responsible person's initials. 4. Road segment / Lot identification.
STORAGE PILES / MATERIAL HANDLING.	<ol style="list-style-type: none"> 1. Date of treatment 2. Control measure used. 3. Responsible person's initials. 4. Dilution ratio. 5. Amount of dust suppressant / water applied. 6. Identification of pile / material handling operation treated. 7. Equipment used.

OPTIONAL RECORDS	
WEATHER CONDITIONS	<ol style="list-style-type: none"> 1. Precipitation 2. Temperature 3. Wind Direction and Velocity

Appendix 5-2. Testing Procedures

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

Appendix 6-2. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B3518-2011. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B3518-2011 is being reissued as Source-Wide PTI No. MI-PTI-B3518-2021.

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

Appendix 7-2. Emission Calculations

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

Appendix 8-2. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

The permittee shall use the following approved formats and procedures for the reporting requirements referenced in the Source-Wide Conditions. Alternative formats must be approved by the AQD District Supervisor.

Reports Required by Consent Order SIP Number 33-1993:

Beginning with the calendar quarter starting after the effective date of this consent order, and quarterly thereafter, the company shall submit to the Department, a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement, as specified in Appendix 4-1 was not met, the duration of the event, the remedial action taken, and a description of the steps that were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar month in which the data were collected.