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

EFFECTIVE DATE: December 28, 2021

ISSUED TO

Warren Waste Water Treatment Plant (WWTP)

State Registration Number (SRN): B1792

LOCATED AT

32360 Warkop, Warren, Macomb County, Michigan 48093

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B1792-2021

Expiration Date: December 28, 2026

Administratively Complete ROP Renewal Application Due Between June 28, 2025 and June 28, 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-B1792-2021

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

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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.

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A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

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6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. (R 336.1213(1)(f))

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

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Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. (R 336.1213(3)(b))

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

Certification & Reporting

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

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22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

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Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

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Permit to Install (PTI)

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

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

Footnotes:

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

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

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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.

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C. EMISSION UNIT CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-Incinerator	Nichols Herreshoff multiple hearth sludge incinerator with ten hearths and an outside diameter of 25' 9". Processed sewage sludge solids are dried and combusted with natural gas as a supplemental fuel during the incineration process. Particulate emissions from the incinerator are controlled by a VenturiPak wet scrubber consisting of three stages including: 1) Quench stage, 2) Subcooling Stage (Impingement Type Wet Scrubber), and 3) Venturi Stage followed by a mist eliminator.	06-15-1972	NA
EU-BeltPress	Three 2.2 meter sewage sludge belt filter presses with attached gravity belt thickeners used to de-water the liquid sludge to form a sludge cake that is approximately 80% water and 20% solid material. The exhaust from the filter press room is vented to an activated carbon adsorption unit to assure worker safety by controlling possible H2S emissions from the sludge.	06-01-1982	NA
EU-WetWell	Raw sewage (influent) flows into the Wet Well and from there it is pumped to the Grit Chamber where the wastewater treatment process begins. Exhaust from the wet well is treated using a chemical scrubber odor control system. The odor control system includes a reaction chamber, air compressors, and a chemical feed system with pH monitoring.	12-01-1987	NA

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-GritBox	Grit chamber and Primary Splitting Box-The exhaust air from enclosure around the Grit Chamber and Primary Splitting Box is captured and treated through a carbon adsorption treatment unit during times when wastewater temperature is above 60°F. The carbon adsorption unit has three sampling points (25%, 50% and 75%).	06-01-1996	NA
EU-Generator	2.1 MW, 2,855 HP, diesel fuel-fired, compression ignition, emergency generator for backup electrical supply.	NA	
EU-HouseGenerator	Less than 10 MMBTU/hr, (60 KW, 82 hp), 4 cylinders with a total displacement of 3.92 liters (0.98 liter/cylinder), diesel-fired emergency generator (black start) needed to start the backup power generator (EU-Generator) after total loss of Edison power and a total blackout in the area.	10-23-2006	NA
EU-ColdCleaner			FG-COLDCLEANERS
EU-HWBoiler1	2.0 MMBTU/hr natural gas fired boiler for 09-21-2012 FG-BOIL building heating.		
EU-HWBoiler2	2.0 MMBTU/hr natural gas fired boiler for building heating.	09-21-2012	FG-BOILERS

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EU-Incinerator EMISSION UNIT CONDITIONS

DESCRIPTION

Nichols Herreshoff multiple hearth sludge incinerator with ten hearths and an outside diameter of 25' 9". Processed sewage sludge solids are dried and combusted with natural gas as a supplemental fuel during the incineration process. Particulate emissions from the incinerator are controlled by a VenturiPak wet scrubber consisting of three stages including: 1) Quench stage, 2) Subcooling Stage (Impingement Type Wet Scrubber), and 3) Venturi Stage with a Venturi style wet scrubber followed by a mist eliminator.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

VenturiPak wet scrubber consisting of three stages including: 1) Quench stage, 2) Subcooling Stage (Impingement Type Wet Scrubber), and 3) Venturi Stage with a Venturi style wet scrubber followed by a mist eliminator.

I. EMISSION LIMITS

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Particulate Matter (PM)	0.2 pounds per 1,000 pounds of exhaust air, corrected to 50% excess air ²	Hourly	EU-Incinerator	SC V.1	R 336.1331(1)(a)
2.	Mercury (Hg)	3200 grams per 24 hours²	24-hour period	EU-Incinerator	SC V.2, SC V.3, & SC VI.6	40 CFR 61.52(b)
3.	Beryllium (Be)	10 grams per 24-hour period	24-hour period	EU-Incinerator	SC V.5, SC V.6, SC VI.9, SC VI.10	40 CFR 61.32(a)
4.	Particulate Matter (PM)		3-run average (collect a minimum volume of 1 dry standard cubic meters sample per run)	EU-Incinerator	SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM
5.	Hydrogen chloride	1.2 ppmv dry ^a	3-run average	EU-Incinerator	SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM
6.	Carbon monoxide	3,800 ppmv dry ^a	3-run average (collect sample for a minimum duration of one hour per run)	EU-Incinerator	SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM

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Pollu	ıtant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
7. Dioxins (total m basis) ^b	nass	per dry standard cubic meter ^a	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)		SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM
8. Dioxins (toxic equival basis) ^b	ency	per dry standard cubic meter ^{ab}	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)		SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165 40 CFR 60.5185(c), Table 3 of 40 CFR Part 60, Subpart MMMM
9. Mercur	y	0.28 milligrams per dry standard cubic meter ^a	3-run average (For Method 29 and ASTM D6784-02 (Reapproved 2008), ^c collect a minimum volume of 1 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A-8)	EU-Incinerator	SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM
10. Oxide nitrogo		220 ppmv dry ^a	3-run average (Collect sample for a minimum duration of one hour per run)	EU-Incinerator	SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM
11. Sulfur	Dioxide	26 ppmv dry ^a	3-run average (For Method 6, collect a minimum volume of 200 liters per run. For Method 6C, collect sample for a minimum duration of one hour per run)	EU-Incinerator	SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM
12. Cadm	ium	0.095 milligrams per dry standard cubic meter ^a	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)		SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM
13. Lead		0.30 milligrams per dry standard cubic meter ^a	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)	EU-Incinerator	SC V.7- SC V.12, SC VI.30	R 336.1972, 40 CFR 60.5165. Table 3 of 40 CFR Part 60, Subpart MMMM

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	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
14.	Fugitive	Visible	Three 1-hour observation	Ash Handling	SC V.14, SC VI.30	R 336.1972,
	Emissions from	emissions of	periods	(ash conveying		40 CFR 60.5165.
	ash handling	combustion		system		Table 3 of 40 CFR
	_	ash shall be		including		Part 60, Subpart
		no more than		conveyor		MMMM
		5 percent for		transfer points)		
		the hourly		,		
		observation				
		period				

^a All emission limits are measured at 7 percent oxygen, dry basis at standard conditions.

15. The emission limits and standards of 40 CFR Part 60, Subparts A and MMMM (EU-Incinerator SC I.4 – I.14) apply to EU-Incinerator at all times the emission unit is operating and during periods of malfunction. The emission limits and standards apply to emissions from a bypass stack or vent while sewage sludge is in the combustion chamber (i.e., until the sewage sludge feed to the combustor has been cut off for a period of time not less than the sewage sludge incineration residence time). (R 336.1972, 40 CFR 60.5165)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EU-Incinerator unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 60 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1331, R 336.1911)

2. The permittee shall not operate EU-Incinerator unless a fully trained and qualified SSI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The operator shall complete training by the date specified in 40 CFR 60.5135 and maintain and renew qualification according to 40 CFR 60.5145 and 40 CFR 60.5150

^bYou have the option to comply with either the dioxin/furan emission limit on a total mass basis or the dioxin/furan emission limit on a toxic equivalency basis.

^c Incorporated by reference, see 40 CFR 60.17.

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respectively. Operator training and qualification must be obtained through a state-approved program or by completing the requirements included in 40 CFR 60.5130(c). The trained and qualified SSI unit operator may operate the SSI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified SSI unit operators are temporarily not accessible, you must follow the procedures in 40 CFR 60.5155. (R 336.1972, 40 CFR 60.5130, 40 CFR 60.5135, 40 CFR 60.5140, 40 CFR 60.5145, 40 CFR 60.5150)

- 3. The permittee shall meet the following operating limits, established in accordance with 40 CFR 60.5190 (SC V.12), at all times that sewage sludge is in the combustion chamber: **(R 336.1972, 40 CFR 60.5170)**
 - a. The minimum combustion chamber operating temperature (or minimum afterburner temperature) for the incinerator
 - b. The minimum pressure drop across the wet scrubber
 - c. The minimum scrubber liquid flow rate
 - d. The minimum scrubber liquid pH for the wet scrubber
- 4. Use of the bypass stack associated with EU-Incinerator at any time that sewage sludge is being charged to that incinerator is an emissions standards deviation for all of the pollutants listed in SC I.4 through I.13. (R 336.1972, 40 CFR 60.5220(d))
- 5. The permittee shall submit and maintain a monitoring plan specifying the ash handling system operating procedures that will be followed to ensure that the facility meets the fugitive emissions limit specified in SC I.14. (R 336.1972, 40 CFR 60.5200(d))
- 6. The permittee shall meet the operating requirements in the site-specific fugitive emission monitoring plan, submitted as specified in 40 CFR 60.5200(d) to ensure that the ash handling system will meet the emission standard for fugitive emissions from ash handling. (R 336.1972, 40 CFR 60.5170(d))
- 7. The permittee shall conduct air pollution control device inspections that include, at a minimum, the following: (R336.1972, 40 CFR 60.5200, 40 CFR 60.5220(c)
 - a. Inspect air pollution control device(s) for proper operation.
 - b. Generally, observe that the equipment is maintained in good operating condition.
 - c. Develop and submit to the AQD District Supervisor a site-specific monitoring plan that addresses the applicable elements and requirements in 40 CFR 60.5200(a)(1) for each continuous monitoring system required by 40 CFR Part 60, Subpart MMMM.
- 8. The permittee shall conduct annual air pollution control device inspections and make any necessary repairs as follows: (R 336.1972, 40 CFR 60.5215)
 - a. Conduct an annual inspection of each air pollution control device used to comply with the emission limits, according to 40 CFR 60.5220(c) (SC III.7), no later than 12 months following the previous annual air pollution control device inspection.
 - b. Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless the permittee obtains written approval from the AQD District Supervisor establishing a date whereby all necessary repairs of the affected SSI unit must be completed.
- 9. The permittee shall determine the operational condition, and if necessary, reasons for failure or malfunction of the pumps, spray nozzles, venturi throats, plates, baffles, packing, orifices, tangential openings, mechanically driven rotors, entrainment separators (mist eliminators), fans, blowers, (whichever is applicable), during the scrubber inspection. (R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate the incinerator unless the VenturiPak wet scrubber consisting of three stages including: 1) Quench stage, 2) Subcooling Stage (Impingement Type Wet Scrubber), and 3) Venturi Stage with a Venturi style wet scrubber followed by a mist eliminator is installed, maintained, and operated in a satisfactory manner acceptable to the AQD District Supervisor.² (R 336.1331, R 336.1910)
- 2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, one or more devices to monitor and record the pressure drop across the scrubber on a continuous basis. A differential pressure

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transducer shall be used to measure the static pressure upstream and downstream of the wet scrubber.² (R 336.1331, R 336.1910, 40 CFR 64.6(c)(1)(i & ii), R 336.1910, R 336.1972, 40 CFR 60.5170(b), 40 CFR 60.5210, 40 CFR 60.5225(a))

- The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the liquid flow rate through the scrubber on a continuous basis.² (R 336.1331, R 336.1910, 40 CFR 60.5210, 40 CFR 60.5225(a))
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the liquid pH for the venturi scrubber on a continuous basis when pH is being adjusted to control emissions.² (R 336.1331, R 336.1910, R 336.1972, 40 CFR 60.5200, 40 CFR 60.5170(b), 40 CFR 60.5210, 40 CFR 60.5225(a))
- 5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the sewage sludge feed rate for EU-Incinerator on a continuous basis. (R 336.1972, 40 CFR 60.5170(f)(1))
- 6. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the combustion chamber temperature for EU-Incinerator on a continuous basis. (R 336.1910, R 336.1972, 40 CFR 60.5200, 40 CFR 60.5170(a), 40 CFR 60.5210, 40 CFR 60.5225(a))
- 7. The permittee shall install, operate, calibrate, and maintain the continuous parameter monitoring systems devices specified in SC IV.2 through IV.4, as follows: (R 336.1972, 40 CFR 60.5225)
 - a. Collect data according to the requirements in 40 CFR 60.5225(a)(1)
 - b. Operate and maintain the devices according to the monitoring plan required in SC III.7.c.

V. TESTING/SAMPLING

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

1. Upon the request of the District Supervisor, the permittee shall verify PM emission rates from EU-Incinerator by testing at owner's expense, in accordance with 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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1331, R 336.2001, R 336.2003, R 336.2004))

- 2. The permittee shall sample and analyze the mercury content of the sludge feed to the incinerator once a month in accordance with 40 CFR 61.54(c).² (40 CFR 61.52(b), 40 CFR 61.54(c))
- 3. The permittee shall analyze the mercury content of the ash from the incinerator once a year. (R 336.1213(3))
- 4. The permittee shall utilize Method 105 of Appendix B of 40 CFR Part 61 or Method 7471B of EPA document SC-846 for mercury analysis. (R 336.1213(3))
- 5. The permittee shall analyze the beryllium content of the sludge feed to the incinerator once a month and beryllium content of the ash from the incinerator once a year. (R 336.1213(3))

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6. The permittee shall utilize the Method 6020A of the USEPA document SW-846 for the beryllium analysis. (R 336.1213(3))

- 7. The permittee shall conduct emission tests to demonstrate initial compliance with the emission limits and standards for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total mass or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium, and lead. The emission tests shall be conducted using the test methods, averaging methods and minimum sampling volumes or durations specified in Table 3 of 40 CFR Part 60, Subpart MMMM, and according to the testing, monitoring and calibration requirements specified in 40 CFR 60.5220(a). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60, Appendix A. Not less than 30 days prior to the anticipated test date, a complete stack testing plan shall be submitted to the AQD Technical Programs Unit and District Office for approval. The AQD must approve the final plan prior to testing. (R 336.1972, 40 CFR 60.5185(a), 40 CFR 60.5235(g)(2))
- 8. The permittee shall demonstrate continuous compliance with the emission limits and standards for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans (total mass or toxic equivalency basis), mercury, nitrogen oxides, sulfur dioxide, cadmium and lead using a performance test. Performance tests shall be conducted on an annual basis for each pollutant (between 11 and 13 calendar months following the previous performance test), except as provide in 40 CFR 60.5205(a)(3) and (e). The performance tests shall be conducted using the test methods, averaging methods and minimum sampling volumes or durations specified in Table 3 of 40 CFR Part 60, Subpart MMMM, and according to the testing, monitoring and calibration requirements specified in 40 CFR 60.5220(a). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60, Appendix A. Not less than 30 days prior to the anticipated test date, a complete stack testing plan shall be submitted to the AQD Technical Programs Unit and District Office for approval. The AQD must approve the final plan prior to testing. (R 336.1972, 40 CFR 60.5205(a), 40 CFR 60.5235(g)(2))
- 9. The permittee may conduct a repeat of the performance test required in SC V. 8 at any time to establish new values for the operating limits to apply from that point forward. The AQD may request a repeat performance test at any time. (R 336.1972, 40 CFR 60.5205(a)(1)
- 10. The permittee shall repeat the performance test required in SC V.8 within 60 days of a process change, as defined in 40 CFR 60.5250. (R 336.1972, 40 CFR 60.5205(a)(2))
- 11. Except as specified in paragraphs 40 CFR 63.5205(a)(1) and (2) (SC V.9 and V.10), the permittee may conduct performance tests less often for a given pollutant, as specified below: (R 336.1972, 40 CFR 63.6205(3))
 - a. The permittee may conduct performance tests less often if the performance tests for the pollutant for at least two consecutive years show that the emissions for that pollutant are at or below 75 percent of the emission limit specified in Table 3 of 40 CFR Part 60, Subpart MMMM, and there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, the permittee does not have to conduct a performance test for that pollutant for the next two years. The permittee shall conduct a performance test during the third year and no more than 37 months after the previous performance test.
 - b. If EU-Incinerator continues to meet the emission limit for the pollutant, the permittee may choose to conduct performance tests for the pollutant every third year if emissions of that pollutant are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test.
 - c. If a performance test shows emissions exceeded 75 percent of the emission limit for a pollutant, the permittee shall conduct annual performance tests for that pollutant until all performance tests over two consecutive years show compliance.
- 12. The permittee shall establish the following parameters during the performance tests specified in SC V.7 through V.9:
 - a. A minimum combustion chamber operating temperature (or minimum afterburner temperature) for the incinerator.
 - b. A minimum pressure drop across the wet scrubber.

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- c. A minimum scrubber liquid flow rate (measured at the inlet to each wet scrubber in each scrubber train).
- d. A minimum scrubber liquid pH for the wet scrubber.

Each established parameter shall be equal to the lowest four-hour average of the parameter measured during the most recent performance test demonstrating compliance with all applicable emission limits. The permittee shall keep records on file at the facility for a period of five years. (R 336.1972, 40 CFR 60.5190)

- 13. The use of a bypass stack during a performance test invalidates the results of the performance test. (R 336.1972, 40 CFR 60.5220(d))
- 14. The permittee shall perform and record, on annual basis, a visible emissions observation to determine the presence or absence of visible emissions of combustion ash from an ash conveying system (including conveyer transfer points). The permittee shall perform and record the visible emission observation utilizing Method 22 of Appendix A-7 of 40 CFR Part 60 to determine the presence or absence of visible emissions. The visible emissions observations shall consist of three one-hour observation periods. If visible emissions are observed, it should be recorded along with the corrective action. (R336.1972, (40 CFR 60.5205(a))

See Appendices 5 and 7

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 calculations in a format acceptable to the AQD District Supervisor and the facility by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (40 CFR 52.21(c) & (d))
- 2. The permittee shall keep, in a satisfactory manner, acceptable to the AQD District Supervisor, monthly all records related to, or as required by, the MAP.² (R 336.1910, R 336.1911)
- 3. The permittee shall keep, in a satisfactory manner, acceptable to the AQD District Supervisor, daily records of the pressure drop across the scrubber. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1331, R 336.1910, R 336.1911)
- 4. The permittee shall keep, in a satisfactory manner, acceptable to the AQD District Supervisor, daily records of the liquid flow rate through the scrubber. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1331, R 336.1910, R 336.1911)
- 5. The permittee shall keep, in a satisfactory manner, acceptable to the AQD District Supervisor, daily records of the liquid pH for the venturi scrubber. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1331, R 336.1910, R 336.1911)
- 6. The permittee shall calculate the mercury emission rate from the incinerator operations once a month using the calculation method specified in 40 CFR 61.54(d). Records of sludge sampling, charging rate determination and other data needed to determine mercury content of wastewater treatment plant sludges shall be kept on file and made available to the Department upon request.² (40 CFR 61.54(d) and (g))
- 7. The permittee may calculate the mercury emission rate from the incinerator operations once a month using calculation method specified in Appendix 7. (R 336.1213(3))
- 8. The permittee shall keep records of mercury content of the sludge feed to the incinerator, mercury content of the ash from the incinerator and the mercury emission rates. (R 336.1213(3))
- 9. The permittee shall retain the records of beryllium emission test results, emission rates and other data (beryllium content of the sludge feed and the ash) needed to determine total emissions of beryllium at the facility for a period of five years and made available to AQD upon request. (R 336.1213(3), 40 CFR 61.33(e)))

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10. The permittee shall calculate the beryllium emission rate from the incinerator operations once a month using calculation method specified in Appendix 7. (R 336.1213(3))

- 11. The permittee shall continuously measure pressure drop and record every 15 minutes for 12-hour block average as an indicator of proper operation of the scrubber. The indicator range is established during each performance test to verify compliance with emission limits. (R336.1972, 40 CFR 60.5170(b), 40 CFR 60.5225(a)(1), 40 CFR 64.6(c)(1)(i) and (ii))
- 12. The permittee shall continuously measure scrubber liquid flow and record every 15 minutes for 12-hour block average as an indicator of proper operation of the scrubber. The indicator range is established during each performance test to verify compliance with emission limits. (R336.1972, 40 CFR 60.5170(b), 40 CFR 60.5225(a)(1), 40 CFR 64.6(c)(1)(i) and (ii))
- 13. The permittee shall calculate and record the hourly arithmetic average pressure drop. Records of the 1-hour averages shall be kept on file at the facility and made them available to the Department upon request. (R336.1972, 40 CFR 60.5170(b), 40 CFR 60.5230(f)(3)(i)(A))
- 14. The permittee shall calculate and record the hourly arithmetic average scrubber liquid flow rate. Records of the 1-hour average scrubber liquid flow rate shall be kept on file at the facility and made them available to the Department upon request. (R336.1972, 40 CFR 60.5170(b), 40 CFR 60.5230(f)(3)(i)(A))
- 15. The pressure gauge and liquid flow monitor shall continuously monitor the pressure drop across the scrubber and scrubber liquid flow rate. The averaging period is 12-hr blocks. The monitors shall be calibrated annually or according to manufacturer specifications, whichever is more frequent. (40 CFR 64.6(c)(1)(iii))
- 16. An excursion for the differential pressure is a departure from the indicator range established during the most recent accepted performance test. (40 CFR 64.6(c)(2))
- 17. An excursion for the scrubber flow rate is a departure from the indicator range established during the most recent accepted performance test. (40 CFR 64.6(c)(2))
- 18. For each control device in operation, the permittee shall conduct bypass monitoring for each bypass line such that the valve or closure method cannot be opened without creating an alarm condition for which a record shall be made. Records of the bypass line that was opened and the length of time the bypass line was opened shall be kept on file. (40 CFR 64.3(a)(2))
- 19. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). See Appendix 3 for the corrective action plan. (40 CFR 64.7(d))
- 20. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))
- 21. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))

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22. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. (40 CFR 64.9(b)(1))

- 23. The permittee shall monitor and record the sewage sludge feed rate to the EU-Incinerator on a continuous basis and calculate the daily average sewage sludge feed to the incinerator for all hours of operation during each 24-hour period. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R336.1972, 40 CFR 60.5170(f)(1), 40 CFR 60.5230(f)(3)(ii))
- 24. The permittee shall monitor and record the moisture content (as a weight percent) of the sewage sludge by taking at least one grab sample of the sewage sludge per day for the purpose of recording the range of moisture content. If the permittee takes more than one grab sample in a day, then the daily average moisture content for the number of grab samples taken shall be calculated. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R336.1972, 40 CFR 60.5170(f)(2), 40 CFR 60.5230(f)(3)(ii))
- 25. The permittee shall monitor and record the combustion chamber temperature for the EU-Incinerator on a continuous basis. Measurements of the combustion chamber temperature shall be recorded every 15 minutes for 12-hour block average. The permittee shall keep all records of the 1-hour average combustion chamber temperature on file at the facility and make them available to the Department upon request. (R336.1972, 40 CFR 60.5170(a), 40 CFR 60.5230(f)(3)(i)(A))
- 26. The permittee shall monitor and record, on a continuous basis, the scrubber liquid pH for the Venturi scrubber when pH adjustment is utilized for treatment for EU-Incinerator in operation. Measurements of the scrubber liquid pH for the Venturi scrubber shall be recorded every 15 minutes for 3-hour block average. The permittee shall keep records of the 1-hour average pH values on file at the facility and make them available to the Department upon request. (R336.1972, 40 CFR 60.5170(b), 40 CFR 60.5225(a)(1), 40 CFR 60.5230(f)(3)(i)(B))
- 27. The permittee shall keep records of any notifications to the AQD District Supervisor required by SC VII.9 though VII.11. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R336.1972, 40 CFR 60.5230(g)(1), 40 CFR 60.5230(h))
- 28. The permittee shall keep documentation of the operator training procedures and records specified in 40 CFR 60.5160 and 40 CFR 60.5230(c)(1) through (c)(4). The permittee shall make available and readily accessible at the facility at all times for all SSI unit operators the documentation specified in 40 CFR 60.5230(c)(1). (R 336.1972, 40 CFR 60.5230(c))
- 29. The permittee shall keep records of the results of initial and annual air pollution control device inspections conducted as specified in 40 CFR 60.5195 and 40 CFR 60.5220(c) (SC III.7 and III. 8), including any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the Administrator. (R 336.1972, 40 CFR 60.5230(d))
- 30. The permittee shall keep records of the performance test data specified in 40 CFR 60.5230(e). (R 336.1972, 40 CFR 60.5230(e)
- 31. The permittee shall keep records of the following: (R 336.1972, 40 CFR 60.5230(i), 40 CFR 60.5230(j), 40 CFR 60.5230(n), 40 CFR 60.5230(n))
 - a. Equipment specifications and related operation and maintenance requirements received from vendors for the incinerator, emission controls, and monitoring equipment
 - b. Inspections, calibration, and validation checks of any monitoring devices as required under 40 CFR 60.5220 and 40 CFR 60.5225
 - c. The use of the bypass stack, including dates, times, and durations as required under 40 CFR 60.5225(d)
 - d. If a malfunction occurs, the information submitted in the annual report in 40 CFR 60.5235(c)(16)

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VII. REPORTING

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

- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. (40 CFR 64.9(a)(2)(i))
- 5. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. (40 CFR 64.9(a)(2)(ii))
- 6. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))
- 7. The permittee shall submit an annual compliance report that includes the items in 40 CFR 60.5235(c)(1) through (c)(16). The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1972, 40 CFR 60.5235(c), 40 CFR 60.5235(i))
- 8. The permittee shall submit a deviation report containing the information in 40 CFR 60.5235(d)(3) and (d)(4) if:
 - a. Any recorded operating parameter level, based on the averaging time specified in Table 4 to 40 CFR Part 60, Subpart MMMM, is above the maximum operating limit or below the minimum operating limit established under 40 CFR Part 60, Subpart MMMM
 - b. There are visible emissions of combustion ash from an ash conveying system for more than 5 percent of the hourly observation period.
 - c. A performance test was conducted that deviated from any emission limit in SC I.1 SC I.14
 - d. A continuous monitoring system was out of control.
 - e. There was a malfunction (e.g., continuous monitoring system malfunction) that caused or may have caused any applicable emission limit to be exceeded.

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 336.1972, 40 CFR 60.5235(d), 40 CFR 60.5235(i))

- 9. If all qualified operators are not accessible for 2 weeks or more, the permittee shall take the two actions in 40 CFR 60.5235(e)(1)(i) and (e)(1)(ii). (R 336.1972, 40 CFR 60.5235(e))
- 10. The permittee shall notify the AQD District Supervisor, in writing, one month before starting use of a continuous emissions monitoring system to demonstrate continuous compliance with an emission limit in SC I.1-13. (R 336.1972, 40 CFR 60.5220(b)(1), 40 CFR 60.5235(g)(1))
- 11. If a force majeure is about to occur, occurs, or has occurred for which the permittee intends to assert a claim of force majeure, the permittee shall submit a notification of a force majeure specified in 40 CFR 60.5235(f) to the appropriate AQD District Office. (R 336.1972, 40 CFR 60.5235(f))

See Appendix 8

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VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions	Minimum Height Above Ground	Underlying Applicable Requirements
	(inches)	(feet)	
SV007	48 ²	67 ²	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

- 1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 61, Subpart A and Subpart E, as they apply to EU-Incinerator.² (40 CFR Part 61 Subparts A and E)
- 2. The permittee shall comply with all applicable provisions of the New Source Performance Standards, as specified in 40 CFR Part 60, Subpart A and Subpart MMMM, and Michigan Administrative Code, R 336.1972, as they apply to EU-Incinerator.² (R 336.1972, 40 CFR Part 60 Subparts A and MMMM)
- 3. The permittee shall comply with all applicable requirements of 40 CFR Part 61, Subpart C (National Emission Standard for Beryllium). (40 CFR Part 61 Subparts A and C)
- 4. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)
- 5. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))

Footnotes:

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

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

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EU-BeltPress EMISSION UNIT CONDITIONS

DESCRIPTION

Three 2.2 meter sewage sludge belt filter presses with attached gravity belt thickeners used to de-water the liquid sludge to form a sludge cake that is approximately 80% water and 20% solid material. The exhaust from the filter press room is vented to an activated carbon adsorption unit to assure worker safety by controlling possible H_2S emissions from the sludge.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Activated carbon adsorption unit

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall route exhaust gases from EU-BeltPress to a properly installed, operated, and maintained activated carbon adsorption unit. Proper operation and maintenance of the activated carbon adsorption unit includes:² (R 336.1910)
 - a. Operating the activated carbon adsorption unit so that the differential pressure is less than or equal to 10 inches water column.
 - b. Cleaning the lattice screen holding the carbon media inside the carbon adsorption unit as needed to ensure the differential pressure does not exceed 10 inches water column.
 - c. Replacing the carbon media in the carbon adsorption unit when the breakthrough indicator indicates the carbon media is saturated.
 - d. Replacing ductwork air intake filters once every six months.
- The permittee shall install, calibrate, maintain and operate a device to monitor the pressure drop across the
 activated carbon adsorption system to determine when the FRP lattice screen holding the carbon media inside
 the carbon adsorption unit needs to be cleaned. The permittee should follow the recommendations of the
 manufacturer or system designer of the monitor to ensure proper installation, calibration, maintenance and
 operation.² (R336.1910)
- 3. The permittee shall install, operate and maintain a device to monitor the status of the hydrogen sulfide breakthrough (carbon saturation level) of the carbon media.² (R336.1910)

V. TESTING/SAMPLING

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

NA

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VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and the facility by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (40 CFR 52.21(c) & (d))
- 2. The permittee shall monitor and record the differential pressure reading of the carbon adsorption unit while in operation at minimum of once per quarter.² (R 336.1910)
- 3. The permittee shall conduct monthly inspections of the ductwork air intake filters and record the date of the inspection and appearance of the filters.² (R 336.1910)
- 4. The permittee shall conduct and record visual inspection of the hydrogen sulfide breakthrough indicator once a month.² (R 336.1910)

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

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

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EU-Wetwell EMISSION UNIT CONDITIONS

DESCRIPTION

Raw sewage (influent) flows into the wet well and from there it is pumped to the Grit Chamber where the wastewater treatment process begins. Exhaust from the wet well is treated using a chemical scrubber odor control system. The odor control system includes a reaction chamber, air compressors, and a chemical feed system with pH monitoring.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Oxidizing Scrubber Odor Control System

I. EMISSION LIMITS

1. There shall be no visible emissions (other than uncombined water vapor) from EU-Wetwell.² (R 336.1301)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. When exhausting emissions from the raw sewage wet well through the oxidizing scrubber, the permittee shall operate the oxidizing scrubber as described in the permit to install application.² (R 336.1201(3))
- 2. The permit to install application referenced in SC III.1 indicates the following regarding operation of the oxidizing scrubbing system: (R 336.1213(3))
 - a. The oxidizing scrubber system will be equipped with a reaction scrubber chamber, air compressor, chemical feed system, and automatic pH monitoring and control.
 - b. The chemical supply system for the oxidizing scrubber is automatic.
 - c. The chemical solution shall be discarded after a single pass through the reaction chamber.
 - d. The minimum liquid distribution flow rate shall be 0.75 gallons/minute.
- 3. The permittee shall operate the oxidizing scrubber so that the pH of the effluent from the chemical scrubber is equal to or greater than seven. (R 336.1213(3), R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall equip and maintain the oxidizing scrubber odor control system with a liquid flow indicator.² (R 336.1201(3), R 336.1910)
- 2. The permittee shall equip the chemical scrubber with a chemical feed system and a pH monitor for the effluent from the scrubber. (R 336.1213(3), R 336.1910)

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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1. The permittee shall keep records of the hours and days of operation of the oxidizing scrubber and shall be made available to the AQD upon request.² (R 336.1201(3))

- 2. The permittee shall record the chemical feed to the oxidizing scrubber on a weekly basis. (R 336.1213(3))
- 3. The permittee shall keep a daily record of pH measurement of the effluent from the scrubber on file. (R 336.1213(3), R 336.1910)
- 4. The permittee shall monitor and record the liquid flow rate through the scrubber on a weekly basis. (R336.1213(3))

See Appendix 3

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SV006	42 ²	42 ²	R 336.1201(3)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

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

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EU-GritBox EMISSION UNIT CONDITIONS

DESCRIPTION

Grit chamber and Primary Splitting Box-The exhaust air from the enclosure around the grit chamber and primary splitting box is captured and treated through a carbon adsorption treatment unit during times when wastewater temperature is above 60°F. The carbon adsorption unit has three sampling points (25%, 50% and 75%).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Activated Carbon Adsorption Canister

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee does not need to operate the blower at all times, but must operate when the wastewater temperature is greater than or equal to 60°F.2 (R 336.1201(3))
- 2. The permittee shall not operate the blower (odor control fan) controlling odor from Grit Chamber, Primary Splitting Tank, Influent Flow Splitter Box, and Grit Handling Room unless the blower's exhaust gases are routed to the activated carbon adsorption canister.² (R 336.1201(3))
- 3. The wastewater tanks (grit chamber and influent flow splitter box) shall remain covered at all times.² (R 336.1201(3))

IV. <u>DESIGN/EQUIPMENT PARAMETERS</u>

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall continuously monitor the waste water temperature and activate visible signal when the waste water temperature is greater than or equal to 60°F.² (R 336.1201(3))
- 2. The permittee shall keep records of the following: (R 336.1201(3))
 - a. Daily waste water temperature
 - b. Date and time when the blower is turned on or off

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3. The permittee shall monitor the carbon bed for carbon saturation level at least once a year until 25% saturation level is reached. Thereafter the saturation level shall be monitored once per quarter year until 50% saturation level is reached. Upon exceeding the 50% saturation level, the saturation level shall be monitored once per month until the 75% saturation level is reached. If the bed has reached 75% saturation level, the bed shall be regenerated or replaced. (R 336.1213(3))

4. The permittee shall keep the records of the carbon bed sampling data on file for five years and made available to AQD upon request.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))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

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

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EU-Generator EMISSION UNIT CONDITIONS

DESCRIPTION

2.1 MW, 2,855 HP, diesel fuel-fired, compression ignition, emergency generator for backup electrical supply.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-Generator for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii). (40 CFR 63.6590(b)(3))

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall maintain records of the size (BHP or MW), installation date, hours of operation, and type of fuel used in EU-Generator. (R 336.1213(3)(b), 40 CFR 63, Subpart ZZZZ)
- 2. The permittee shall keep records of hours of operation of EU-Generator, including how many hours are spent for emergency situations, emergency demand response and for non-emergency situations. (R 336.1213(3)(b))

VII. REPORTING

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

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

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).

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EU-HouseGenerator EMISSION UNIT CONDITIONS

DESCRIPTION

Less than 10 MMBTU/hr, (60 KW, 82 hp), 4 cylinders with a total displacement of 3.92 liters (0.98 liter/cylinder), diesel-fired emergency generator (black start) needed to start the backup power generator (EU-Generator) after total loss of Edison power and a total blackout in the area.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable
				-	Requirements
NOx	9.2 g/KW-Hr (6.9 g/HP-hr)	Hourly	EU-HouseGenerator	SC VI.1 and 3	40 CFR 60.4205(a). Table 1 of 40 CFR Part 60, Subpart IIII

II. MATERIAL LIMITS

1. The permittee shall burn only diesel fuel in EU-HouseGenerator with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. (40 CFR 60.4207(b), 40 CFR 1090.305)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must comply with the emission standards specified in 40 CFR Part 60, Subpart IIII, and operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer. The permittee must also meet the requirements of 40 CFR Part 89. (40 CFR 60.4211(a))
- 2. The permittee shall demonstrate compliance with the emission standards specified in 40 CFR 60.4205(a), according to one of the methods specified in paragraphs 40 CFR 60.4211 (b)(1) through (5), as stated below: (40 CFR 60.4211(b))
 - a. Purchasing an engine certified according to 40 CFR Part 89 or 40 CFR Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
 - b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
 - c. Keeping records of engine manufacturer data indicating compliance with the standards.
 - d. Keeping records of control device vendor data indicating compliance with the standards.
 - e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.

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3. The permittee may operate EU-HouseGenerator for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2))

- 4. The permittee may operate EU-HouseGenerator up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. (40 CFR 60.4211(f)(3))
- 5. If the permittee does not operate EU-HouseGenerator according to the requirements in paragraphs 40 CFR 60.4211(f)(1) through (3) (SC III.3 and SC III.4), EU-HouseGenerator will not be considered an emergency engine under 40 CFR 60 Subpart IIII and must meet all requirements for non-emergency engines. (40 CFR 63.4211(f)(1))
- 6. The permittee shall meet the following requirements for EU-HouseGenerator:
 - a. Operate and maintain EU-HouseGenerator according to the manufacturer's emission-related written instructions:
 - b. Change only those emission-related settings that are permitted by the manufacturer; and
 - c. Meet the requirements as specified in 40 CFR Parts 89, 94, and/or 1068, as they apply to you.

If the permittee does not operate and maintain EU-HouseGenerator according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine. (40 CFR 60.4211(b))

7. If the permittee does not install, configure, operate, and maintain EU-HouseGenerator according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall keep a maintenance plan and records of conducted maintenance for EU-HouseGenerator and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year of such action. (40 CFR 60.4211(g)(1))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall install a non-resettable hour meter on EU-HouseGenerator prior to startup of the engine. (40 CFR 60.4209(a))
- 2. The nameplate capacity of EU-HouseGenerator shall not exceed 60 kW, as certified by the equipment manufacturer. (40 CFR 60.4202, 40 CFR 89.112(a))

V. TESTING/SAMPLING

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

- 1. If EU-HouseGenerator is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
 - a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year after EU-HouseGenerator is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within one year after you change emission-related settings in a way that is not permitted by the manufacturer.

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b. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. 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. (40 CFR 60.4211(g)(1), 40 CFR 60.4212)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall keep records of the manufacturer certification documentation. (R 3 36.1213(3))
- 2. The permittee shall keep records of the manufacturer's emission-related written instructions, and records demonstrating that EU-HouseGenerator has been maintained according to those instructions, as specified in SC III.6. (R 336.1213(3))
- 3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies recorded through the non-resettable hour meter for EU-HouseGenerator, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of EU-HouseGenerator, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (R 336.1213(3))
- 4. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EU-HouseGenerator, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. (R 336.1213(3))
- 5. If the permittee does not install, configure, operate, and maintain EU-HouseGenerator according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall keep a maintenance plan and records of conducted maintenance for EU-HouseGenerator. (40 CFR 60.4211(g)(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))

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subpart A and Subpart IIII. (40 CFR 63.6590(c)(6), 40 CFR Part 60, Subparts A and IIII)

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).

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D. FLEXIBLE GROUP CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-COLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EU-ColdCleaner
FG-BOILERS	Requirements for new boilers with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn only natural gas.	EU-HWBoiler1 EU-HWBoiler2

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FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EU-ColdCleaner

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

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a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. (R 336.1707(2)(a))

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

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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FG-BOILERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for new boilers with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn only natural gas.

Emission Unit: EU-HWBoiler1, EU-HWBoiler2

Equal to or less than 5 MMBTU/hr	EU-HWBoiler1, EU-HWBoiler2
and only burns gaseous or light	
liquid fuels	

POLLUTION CONTROL EQUIPMENT

NA

I. <u>EMISSION LIMIT(S)</u>

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must, for boilers or process heaters installed after June 4, 2010 with a heat input capacity of less than or equal to 5 MMBTU/hr, complete an initial tune-up as specified in SC III.4 by no later than April 1, 2013. (40 CFR 63.7510(g))
- 2. The permittee must, for boilers or process heaters with a heat input capacity of less than or equal to 5 MMBTU/hr, conduct a five-year tune-up according to 40 CFR 63.7540(a)(12). Each five-year tune-up must be conducted no more than 61 months after the previous tune-up. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. (40 CFR 63.7500(d) or (e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3.1)
- 3. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than April 1, 2013. (40 CFR 63.7510(e))
- 4. The permittee must conduct a tune-up of each boiler or process heater as specified in the following: (40 CFR 63.7540(a)(11) or (12))
 - a. As applicable, inspect the burner and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or may delay the burner inspection until the next scheduled unit shutdown. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. (40 CFR 63.7540(a)(10)(i))
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (40 CFR 63.7540(a)(10)(ii))

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c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown. (40 CFR 63.7540(a)(10)(iii))

- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject. (40 CFR 63.7540(a)(10)(iv))
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))
- 5. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13))
- 6. At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.7500(a)(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or 5 year compliance report or one-time energy assessment, as applicable, that the permittee submitted. (40 CFR 63.7555(a)(1))
- 2. The permittee must keep the records in a form suitable and readily available for expeditious review. (40 CFR 63.7560(a))
- 3. The permittee must keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.7560(b))
- 4. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining three years. (40 CFR 63.7560(c))

VII. REPORTING

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

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

- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status before the close of business on the 60th day following the completion of the initial boiler tune-up for all boiler or process heaters at the facility. The Notification of Compliance Status report must contain all the information specified below.
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. (40 CFR 63.7545(e)(1))
 - b. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - i. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." (40 CFR 63.7545(e)(8)(i))
 - ii. "The facility has had an energy assessment performed according to 40 CFR 63.7530(e)." (40 CFR 63.7540(e)(8)(ii))
 - iii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit." (40 CFR 63.7545(e)(8)(iii))
- 5. The permittee must submit boiler or process heater tune-up compliance reports to the appropriate AQD District Office and must be postmarked or submitted by March 15 of the year following the applicable five-year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to EPA Region 5. (40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))
- 6. The permittee must include the following information in the compliance report. (40 CFR 63.7550(c)(1))
 - a. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
 - b. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
 - c. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
 - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a five-year period and was delayed until the next scheduled or unscheduled unit shutdown. (40 CFR 63.7550(c)(5)(xiv))
 - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (40 CFR 63.7550(c)(5)(xvii))

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VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. (40 CFR Part 63, Subparts A and DDDDD)

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).

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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).

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APPENDICES

Appendix 1. Acronyms and Abbreviations

Common Acronyms			Pollutant / Measurement Abbreviations		
AQD	Air Quality Division	acfm	Actual cubic feet per minute		
BACT	Best Available Control Technology	BTU	British Thermal Unit		
CAA	Clean Air Act	°C	Degrees Celsius		
CAM	Compliance Assurance Monitoring	co	Carbon Monoxide		
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent		
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot		
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter		
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit		
Department/	Michigan Department of Environment,		Grains		
department	Great Lakes, and Energy	gr HAP	Hazardous Air Pollutant		
EGLE	Michigan Department of Environment,	Hg	Mercury		
	Great Lakes, and Energy	hr	Hour		
EU	Emission Unit	HP	Horsepower		
FG	Flexible Group	H ₂ S	Hydrogen Sulfide		
GACS	Gallons of Applied Coating Solids	kW	Kilowatt		
GC	General Condition	lb	Pound		
GHGs	Greenhouse Gases	m	Meter		
HVLP	High Volume Low Pressure*	mg	Milligram		
ID	Identification	mm	Millimeter		
IRSL	Initial Risk Screening Level	MM	Million		
ITSL	Initial Threshold Screening Level	MW	Megawatts		
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds		
MACT	Maximum Achievable Control Technology	NO _x	Oxides of Nitrogen		
MAERS	Michigan Air Emissions Reporting System		Nanogram		
MAP	Malfunction Abatement Plan	ng PM	Particulate Matter		
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10		
NA	Not Applicable		microns in diameter		
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5		
100100	realization of the realization of the realization	1 1112.0	microns in diameter		
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour		
	Air Pollutants	ppm	Parts per million		
NSPS	New Source Performance Standards	ppmv	Parts per million by volume		
NSR	New Source Review	ppmw	Parts per million by weight		
PS	Performance Specification	%	Percent		
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute		
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge		
PTI	Permit to Install	scf	Standard cubic feet		
RACT	Reasonable Available Control Technology	sec	Seconds		
ROP	Renewable Operating Permit	SO ₂	Sulfur Dioxide		
SC	Special Condition	TAC	Toxic Air Contaminant		
SCR	Selective Catalytic Reduction	Temp	Temperature		
SDS	Safety Data Sheet	THC	Total Hydrocarbons		
SNCR	Selective Non-Catalytic Reduction	tpy	Tons per year		
SRN	State Registration Number	μg	Microgram		
TEQ	Toxicity Equivalence Quotient	μm	Micrometer or Micron		
USEPA/EPA	United States Environmental Protection	VOC	Volatile Organic Compounds		
	Agency	yr	Year		
VE	Visible Emissions				

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

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Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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

Pollutant	Test Method	Minimum Sampling Volumes or Durations
Particulate matter	EPA Reference Test Method 5 at 40 CFR Part 60, Appendix A-3; Method 26A or Method 29 at 40 CFR Part 60, Appendix A-8.	3-run average (collect a minimum volume of 0.75 dry standard cubic meters per run).
Hydrogen chloride	EPA Reference Test Method 26 or 26A at 40 CFR Part 60, Appendix A-8.	3-run average (for Method 26, collect a minimum volume of 200 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meters per run).
Carbon monoxide	EPA Reference Test Method 10, 10A, or 10B at 40 CFR Part 60, Appendix A-4.	3-run average (collect sample for a minimum duration of one hour per run).
Dioxins/furans (total mass basis)	EPA Reference Test Method 23 at 40 CFR Part 60, Appendix A-7.	3-run average (collect a minimum volume of 1 dry standard cubic meters per run).
Mercury	EPA Reference Test Method 29 at 40 CFR Part 60, Appendix A-8; Method 30B at 40 CFR Part 60, Appendix A-8; or ASTM D6784-02 (Reapproved 2008).	3-run average (for Method 29 and ASTM D6784-02 (Reapproved 2008), collect a minimum volume of 1 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR Part 60, Appendix A-8).
Oxides of nitrogen	EPA Reference Test Method 7 or 7E at 40 CFR Part 60, Appendix A-4.	3-run average (collect sample for a minimum duration of one hour per run).

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Pollutant	Test Method	Minimum Sampling Volumes or Durations
Sulfur dioxide	EPA Reference Test Method 6 or 6C at 40 CFR Part 40, Appendix A-4; or ANSI/ASME PTC 19.10-1981.	3-run average (for Method 6, collect a minimum volume of 200 liters per run. For Method 6C, collect sample for a minimum duration of one hour per run).
Cadmium	EPA Reference Test Method 29 at 40 CFR Part 60, Appendix A-8.	3-run average (collect a minimum volume of 1 dry standard cubic meters per run)
Lead	EPA Reference Test Method 29 at 40 CFR Part 60, Appendix A-8.	3-run average (collect a minimum volume of 1 dry standard cubic meters per run).
Fugitive emissions from ash handling	Visible emission test (Method 22 of Appendix A-7 of 40 CFR Part 60).	Three 1-hour observation periods.

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B1792-2016. 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- B1792-2016 is being reissued as Source-Wide PTI No. MI-PTI-B1792-2021.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
23-21	2020000151*	Include new control for EU-Incinerator and EU-BeltPress in PTI	EU-Incinerator and EU-BeltPress

Appendix 7. Emission Calculations

The permittee may use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU-Incinerator.

Mercury (Hg) Emission limit

Beryllium (Be) Emission limit

$$Be (g/day) = \underbrace{mg \ Be}_{Kg \ sludge} \ x \ \underbrace{1gm}_{1000 \ mg} \ x \ \underbrace{kg}_{2.204 \ lb} \ x \ \underbrace{ton \ sludge \ incinerated}_{day} \ x \ \underbrace{2000 \ lb}_{ton}$$

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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