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|   | **MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY****AIR QUALITY DIVISION** |  |
| EFFECTIVE DATE: August 14, 2020 ISSUED TO**Ypsilanti Community Utilities Authority**State Registration Number (SRN): B6237LOCATED AT2777 State Street, Ypsilanti, Washtenaw County, Michigan 48197 |
|  |
| **RENEWABLE OPERATING PERMIT**Permit Number: MI-ROP-B6237-2020Expiration Date: August 14, 2025Administratively Complete ROP Renewal Application Due Between February 14, 2024 and February 14, 2025This 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. |

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| **SOURCE-WIDE PERMIT TO INSTALL**Permit Number: MI-PTI-B6237-2020This 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 PTl 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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Scott Miller, Jackson District Supervisor **TABLE OF CONTENTS**

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# AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or his or her designee.

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

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

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

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

# A. GENERAL CONDITIONS

## Permit Enforceability

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

## General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as “state-only” are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee’s own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
	1. 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.
	2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
	3. Inspect, at reasonable times, any of the following:
		1. Any stationary source.
		2. Any emission unit.
		3. Any equipment, including monitoring and air pollution control equipment.
		4. Any work practices or operations regulated or required under the ROP.
	4. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**
6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

## Equipment & Design

1. 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)**
2. 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

1. 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))**
	1. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
	2. A limit specified by an applicable federal new source performance standard.

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

1. 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:
	1. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.1 **(R 336.1901(a))**
	2. Unreasonable interference with the comfortable enjoyment of life and property.1**(R 336.1901(b))**

## Testing/Sampling

1. 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)**
2. 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))**
3. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

## Monitoring/Recordkeeping

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

## Certification & Reporting

1. 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))**
2. 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))**
3. 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))**
4. 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))**
	1. 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).
	2. 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.
	3. 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.
5. 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))**
	1. 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.
	2. 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.
6. 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))**
7. 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))**
8. 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

1. 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))**
	1. The applicable requirements are included and are specifically identified in the ROP.
	2. 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.

1. Nothing in this ROP shall alter or affect any of the following:
	1. 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))**
	2. 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))**
	3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
	4. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
2. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
	1. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
	2. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
	3. 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))**
	4. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
	5. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
3. 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

1. 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)**
2. 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))**
3. 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))**
4. 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

1. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
	1. 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))**
	2. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
	3. 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))**
	4. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

## Renewals

1. 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

1. 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.
2. 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

1. 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).
2. 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):
	1. June 21, 1999,
	2. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
	3. The date on which a regulated substance is first present above a threshold quantity in a process.
3. 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.
4. 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

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

## Permit to Install (PTI)

1. 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))**
2. 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)**
3. 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)**
4. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.2 **(R 336.1201(4))**

**Footnotes:**

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

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

# B. SOURCE-WIDE CONDITIONS

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

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

# C. EMISSION UNIT SPECIAL CONDITIONS

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

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

## EMISSION UNIT SUMMARY TABLE

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

| **Emission Unit ID** | **Emission Unit Description****(Including Process Equipment & Control Device(s))** | **Installation****Date/****Modification Date** | **Flexible Group ID** |
| --- | --- | --- | --- |
| EU-FBSSI | Fluidized Bed Sewage Sludge (Biosolids) Incinerator controlled with an advanced Air Pollution Control (APC) system consisting of a venturi scrubber, a multi-stage impingement tray scrubber, a wet electrostatic precipitator (WESP), and a granular activated carbon adsorber bed (GAC). | 04-21-2005 | NA |
| EU-4M-NSPS-INCIN | Fluidized Bed Sewage Sludge (Biosolids) Incinerator subject to 40 CFR Part 60, Subpart MMMM. The conditions for this emission unit take effect on and after the effective date of Subpart MMMM: March 21, 2016. | 03-21-2016 | NA |
| EU-GASTANK#1 | 3,000 gallon aboveground gasoline storage tank for fueling of vehicles subject to 40 CFR Part 63, Subpart CCCCCC Gasoline Dispensing Facility GACT. | 10-17-2019 | NA |
| EU-BOILER1 | 21 MMBTU/hr. Natural Gas fired boiler. | 10-08-2003 | FG-BOILERS |
| EU-BOILER2 | 21 MMBTU/hr. Natural Gas fired boiler. | 10-08-2003 | FG-BOILERS |
| EU-GENSOLIDS | Solids Building 750kW (37.7L displacement) emergency generator subject to RICE MACT (40 CFR Part 63, Subpart ZZZZ). | 12-01-1981 | FG-ENGINES |
| EU-GENUV | UV Building 400 kW (591HP@fullstandby) emergency generator subject to RICE MACT (40 CFR Part 63, Subpart ZZZZ). | 08-01-2005 | FG-ENGINES |
| EU-COLDCLEANER | 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. | NA | FG-COLDCLEANERS |

## EU-FBSSI

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Fluidized Bed Sewage Sludge (Biosolids) Incinerator controlled with an advanced Air Pollution Control (APC) system consisting of a venturi scrubber, a multi-stage impingement tray scrubber, a wet electrostatic precipitator (WESP), and a granular activated carbon adsorber bed (GAC).

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

Advanced APC system

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. CO
 | 100 ppmvd at 7 percent oxygen2 | Hourly\* | EU-FBSSI | SC V.3 | **R 336.1201(3)** |
| 1. PM
 | 0.35 lb/ton dry sewage sludge2 | Hourly\* | EU-FBSSI | SC VI.4(h)  | **R 336.1331, 40 CFR 60.152(a)(1)** |
| 1. Arsenic
 | 1.3E-03 lb/ton dry sewage sludge1 | Hourly\* | EU-FBSSI | SC V.1 | **R 336.1224(1), R336.1225** |
| 1. Beryllium
 | 2.5E-05 lb/ton dry sewage sludge1 | Hourly\* | EU-FBSSI | SC V.2, SC VI.2 | **R 336.1224(1)** |
| 1. Beryllium
 | 10 gram per 24-hour period2 | Test Protocol pursuant to 40 CFR 61.33 | EU-FBSSI | SC V.2, SC VI.2  | **40 CFR 61.32(a)** |
| 1. Cadmium
 | 8.5E-03 lb/ton dry sewage sludge1 | Hourly\* | EU-FBSSI | SC V.1 | **R 336.1224(1), R 336.1225** |
| 1. Total Chromium
 | 4.5E-02 lb/ton dry sewage sludge1 | Hourly\* | EU-FBSSI | SC V.1 | **R 336.1224(1), R 336.1225** |
| 1. Mercury
 | 6.9E-04 lb/ton dry sewage sludge1 | Hourly\* | EU-FBSSI | SC V.4,SC VI.1  | **R 336.1224(1)** |
| 1. Mercury
 | 3200 gram per 24-hour period2 | Test Protocol pursuant to 40 CFR 61.53 (d) | EU-FBSSI | SC V.4,SC VI.1,SC VI.3  | **40 CFR 61.52(b)** |
| 1. 2,3,7,8 TCDD TEQ
 | 1.4E-09 lb/ton dry sewage sludge1 | Hourly\* | EU-FBSSI | SC V.1 | **R 336.1224(1), R 336.1225** |
| 1. Total PCB
 | 1.2E-06 lb/ton dry sewage sludge1 | Hourly\* | EU-FBSSI | SC V.1 | **R 336.1224(1), R 336.1225** |
| 1. HCl
 | 0.8 lb/ton dry sewage sludge1 | Hourly\* | EU-FBSSI | SC V.1 | **R 336.1224(1), R 336.1225** |

\*Represents the minimum time period/operating scenario

**Visible Emission Limits**

1. Visible emissions from EU-FBSSI shall not exceed a six-minute average of 20 percent opacity.2 **(40 CFR 60.152 (a)(2))**

**II. MATERIAL LIMIT(S)**

| **Material** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. Arsenic | 13 mg/kg dry sewage sludge1 | Instantaneous (Sewage sludge sampling once per year)\*\* | EU-FBSSI | SC V.5 | **R 336.1225** |
| 2. Beryllium | 0.25 mg/kg dry sewage sludge2 | Instantaneous (Sewage sludge sampling once per year)\*\* | EU-FBSSI | SC V.5 | **R 336.1201(3)****40 CFR 61.32(a)** |
| 3. Cadmium | 85 mg/kg dry sewage sludge1 | Instantaneous (Sewage sludge sampling once per year)\*\* | EU-FBSSI | SC V.5 | **R 336.1225** |
| 4. Total Chromium | 450 mg/kg dry sewage sludge1 | Instantaneous (Sewage sludge sampling once per year)\*\* | EU-FBSSI | SC V.5 | **R 336.1225** |
| 5. Mercury | 3.7 mg/kg dry sewage sludge2 | Instantaneous (Sewage sludge sampling once per year)\*\* | EU-FBSSI | SC V.5 | **R 336.1201(3)****40 CFR 61.52(b)** |
| 6. Dry Sewage Sludge | 6,300 lbs/hr2 | 24-hour average | EU-FBSSI | SC IV.3,SC VI.4(a)  | **R 336.1224(1)****R 336.1225****R 336.1702(a)****40 CFR Part 60, Subpart O****40 CFR Part 61, Subparts C & E** |
| 7. Dry Sewage Sludge | 16,380 tons2 | 12-month rolling time period as determined at the end of each calendar month | EU-FBSSI | SC IV.3,SC VI.4(b)  | **R 336.1224(1)****R 336.1225****R 336.1702(a)****40 CFR Part 60, Subpart O****40 CFR Part 61, Subparts C & E** |
| 8. Fuel | Only burn sewage sludge and natural gas2 | Instantaneous | EU-FBSSI | SC IV.3,SC IV.8,SC VI.4(b) and (f) | **R 336.1224(1)****R 336.1331,****R 336.1702(a)** |

\*\*If the instantaneous sample shows an exceedance in the metal contents listed above, the permittee shall collect two additional samples for analysis within one week. For any year that stack testing is required pursuant to SC V.1, SC V.2, and/or SC V.4, the sewage sludge sampling shall occur at the same time.

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. During all start-up procedures, natural gas shall be used to preheat the fluidized sand bed of EU-FBSSI to a minimum temperature of 1200 °F, prior to the ignition of any sewage sludge. During all shutdown procedures, other than during emergency situations, natural gas shall be used to ensure that the temperature in the freeboard does not drop below 1500 °F while any sewage sludge is still burning.2 **(R 336.1225, R 336.1702(a), R 336.912)**
2. The oxygen content of the exhaust gas in EU-FBSSI shall not be less than 2 percent wet or 3 percent dry based on a 15 minute average.2 **(R 336.1225, R 336.1301, R 336.1331, R 336.1702 (a), R 336.1901, R 336.1910)**
3. The maximum total volumetric air flow rate through EU-FBSSI at the fluidizing air blower shall not exceed 13,061 scfm based on an hourly average.2 **(R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**
4. The permittee shall not operate EU-FBSSI unless a minimum temperature of 1150 °F based on a 15 minute average and a minimum design retention time of 2 seconds in the fluidized sand bed are maintained.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**
5. The permittee shall not operate EU-FBSSI unless a minimum temperature of 1500 °F based on a 15 minute average and a minimum design retention time of 6 seconds in the freeboard are maintained.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**
6. The permittee shall submit to the AQD District Supervisor, for review and approval, a malfunction abatement plan for EU-FBSSI including the APC system. The permittee shall not operate EU-FBSSI unless the approved malfunction abatement plan, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall include procedures for maintaining and operating in a satisfactory manner, EU-FBSSI, the APC system, and associated monitoring equipment during startup, shutdown and malfunction events, and a program for corrective action for any malfunction events. If the malfunction abatement plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the malfunction abatement plan within 45 days after such an event occurs.2 **(R 336.1911, R336.1912)**
7. Sewage sludge input feed to EU-FBSSI shall cease immediately, consistent with safe operating procedures, upon malfunction of the APC system. Input feed to EU-FBSSI shall not restart until the APC system is back online and operating in a satisfactory manner.2 **(R 336.1910, R 336.1911, R 336.1912)**
8. Sewage sludge input feed to EU-FBSSI shall cease automatically and immediately, consistent with safe operating procedures, upon any of the following conditions:2 **(R 336.1910, R 336.1911, R 336.1912)**

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  | **Operating Parameter** | **Sewage Sludge Input Feed Cutoff Limit** |
| a. | Minimum Fluidized Bed Temperature | Less than 1150 °F based on a 15 minutes average |
| b. | Fluidizing Blower | Failure as defined in the Malfunction Abatement Plan pursuant to SC III.6 |
| c. | Sewage Sludge Cake Feed System | Malfunction |
| d. | Minimum Oxygen Concentration of Incinerator Exhaust | Less than 2 percent wet or 3 percent dry based on a 15 minute average |
| e. | Minimum Freeboard Temperature | Less than 1500 °F based on a 15 minute average |
| f. | Minimum Venturi Scrubber Water Flow | 300 gallons per minute (gpm) |
| g. | Minimum Impingement Tray Scrubber Water Flow | 350 gpm |
| h. | Purge Air System Blower | Failure as defined in the Malfunction Abatement Plan pursuant to SC III.6 |

**See Appendix 9**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate EU-FBSSI unless the APC system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining each control equipment within the following pressure drop range:2 **(R 336.1224 (1), R 336.1225, R 336.1301, R 336.1331, R 336.1702 (a), R 336.1901, R336.1910)**

|  |  |  |
| --- | --- | --- |
|  | **Control Equipment** | **Pressure Drop (Inches water column)** |
| a. | Venturi Scrubber | 30-40 (during sewage sludge combustion)20-40 (during start-up activities) |
| b. | Impingement Tray Scrubber | 5-15 |
| c. | Granular Activated Carbon | 1-10 |

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the oxygen content of the exhaust gas from EU-FBSSI on a continuous basis.2  **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910, 40 CFR 60.153(b)(2))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a flow measuring device to determine the mass of sewage sludge charged to EU-FBSSI on a continuous basis.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the water flow through the control devices according to the following time periods:2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**

|  |  |  |
| --- | --- | --- |
|  | **Control Equipment** | **Time Period** |
| a. | Venturi Scrubber | Continuous |
| b. | Impingement Tray Scrubber | Continuous |
| c. | WESP | Each discrete water flush event |

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the pressure drop of the gas flow through the venturi scrubber, the impingement tray scrubber, and the WESP on a continuous basis.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910, 40 CFR 60.153(b)(1))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the pressure drop of the gas flow through the GAC system on a continuous basis.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the temperature in the freeboard and the fluidized sand bed of EU-FBSSI on a continuous basis.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702, R 336.1901, R 336.1910)**
4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the fuel flow to EU-FBSSI on a continuous basis.2  **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**
5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the volumetric air flow rate through EU-FBSSI at the fluidizing air blower on a continuous basis.2 **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**

**V. TESTING/SAMPLING**

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

1. Verification of arsenic, cadmium, total chromium, 2,3,7,8 TCDD TEQ, Total PCB, and HCl emission rates from EU-FBSSI, by testing at owner's expense, in accordance with Department requirements, will be required. Testing must be performed at maximum routine operating feed rate. Testing must be performed once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.2 **(R 336.1224(1), R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. Verification of beryllium emission rates from EU-FBSSI, by testing at owner's expense, in accordance with Department requirements, will be required. Testing must be performed at maximum routine operating feed rate. Testing must be performed once every five years. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.2 **(R 336.1224(1), R 336.2001, R 336.2003, R 336.2004)**
3. Verification of CO emission rate from EU-FBSSI, by testing at owner's expense, in accordance with Department requirements will be required. Testing must be performed at maximum routine operating feed rate. Testing must be performed once per calendar year. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.2 **(R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
4. Verification of mercury emission rate from EU-FBSSI, by testing at owner's expense, in accordance with Department requirements, will be required. Testing must be performed at maximum routine operating feed rate. Testing must be performed once per calendar year. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.2 **(R 336.1224(1), R 336.2001, R 336.2003, R 336.2004)**
5. The permittee shall collect a well-mixed representative grab sample of the sewage sludge fed to EU-FBSSI and analyze it for arsenic, beryllium, cadmium, total chromium, and mercury, in mg pollutant per kg of sewage sludge fed to the incinerator, once per calendar year.2 **(R 336.1201(3), R 336.1225)**

**See Appendix 5**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor, in a satisfactory manner, the granular activated carbon (GAC) adsorption system for mercury breakthrough by annual testing in accordance with SC V.4. Within two weeks of detecting mercury at greater than 80 percent of the permitted emission level in SC I.8, the permittee will replace spent carbon from the first bed with the carbon from the second bed, and the second bed will be filled with fresh carbon.  Alternatively, the permittee may monitor mercury breakthrough using an alternative plan approved by the AQD.2 **(R 336.1224(1), R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)**
2. The permittee shall keep records of beryllium emission test results and other data needed to determine total beryllium emissions to comply with the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 61, Subparts A and C. All data shall be retained at the source and kept on file for a period of at least five years and made available to the Department upon request.2 **(40 CFR 61.33(e))**
3. The permittee shall keep records of mercury emission test results and other data needed to determine total mercury emissions to comply with the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 61, Subparts A and E. All data shall be retained at the source and kept on file for a period of at least five years and made available to the Department upon request.2 **(40 CFR 61.53(d)(6))**
4. The permittee shall keep, in a satisfactory manner, the following records for EU-FBSSI: 24-hour average sewage sludge feed-rate (in pounds sewage sludge).
5. Monthly and previous 12-month sewage sludge feed-rate (in tons sewage sludge).
6. Temperature in the fluidized sand bed every 15 minutes.
7. Temperature in the freeboard every 15 minutes.
8. Oxygen content of the incinerator exhaust gas every 15 minutes.
9. The fuel flow every 15 minutes.
10. Volumetric air flow rate through EU-FBSSI at the fluidizing air blower every hour.
11. Documentation of the performance test for PM, as required by 40 CFR Part 60, Subpart O, which shows PM emissions less than 0.75 lb per ton of dry sewage sludge input.
12. Arsenic, beryllium, cadmium, total chromium, and mercury content in the sewage sludge once per calendar year.

 All records shall be kept on file for a period of at least five years and made available to the Department upon request.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR Part 60, Subpart O, 40 CFR Part 61, Subparts C & E)**

1. The permittee shall keep, in a satisfactory manner, records of the pressure drop across the venturi scrubber, impingement tray scrubber, WESP, and GAC system, every 15 minutes. All records shall be kept on file for a period of at least five years and made available to the Department upon request.2 **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall keep, in a satisfactory manner, records of the water flow through the venturi scrubber, impingement tray scrubber and WESP, according to the following time periods:

|  |  |  |
| --- | --- | --- |
|  | **Control Equipment** | **Time Period** |
| a. | Venturi Scrubber | Every 15 minutes |
| b. | Impingement Tray Scrubber | Every 15 minutes |
| c. | WESP | Each discrete water flush event |

All records shall be kept on file for a period of at least five years and made available to the Department upon request.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, R 336.1910)**

1. The permittee shall maintain a daily log of GAC readings and if necessary, any corrective action taken. All records shall be kept on file for a period of at least five years and made available to the Department upon request.2 **(R 336.1224(1), R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)**
2. The permittee shall maintain a log of all automatic and immediate shutdowns of EU-FBSSI and/or the APC system. All records shall be kept on file for a period of at least five years and made available to the Department upon request.2 **(R 336.1224(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1901, 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))**

1. 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))**
2. Reporting of emissions and operating information for EU-FBSSI is required to comply with the federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60, Subparts A and O.2  **(40 CFR 60.153, 40 CFR 60.155)**
3. The permittee shall submit any performance test reports including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

**VIII. STACK/VENT RESTRICTION(S)**

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

| **Stack & Vent ID** | **Maximum Exhaust Dimensions****(inches)** | **Minimum Height Above Ground****(feet)** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- |
| 1. SV-001 | 422 | 1092 | **R 336.1225, 40 CFR 52.21 (c) & (d)** |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the Standards of Performance for New Stationary Sources, as specified in 40 CFR Part 60, Subparts A and MMMM, for Existing Sewage Sludge Incineration Units as they apply to EU-FBSSI. **(R 336.1213(3), R 336.1972, 40 CFR Part 60, Subparts A and MMMM)**
2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants for Beryllium as specified in 40 CFR Part 61, Subparts A and C, and for Mercury as specified in 40 CFR Part 61, Subpart E, as they apply to the EU-FBSSI.2 **(40 CFR Part 61 Subparts A, C and E)**
3. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources for Sewage Treatment Plants as specified in 40 CFR Part 60, Subparts A and O, as they apply to the EU-FBSSI.2 **(40 CFR Part 60, Subparts A and O)**

**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).

## EU-4M-NSPS-INCIN

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Fluidized Bed Sewage Sludge (Biosolids) Incinerator (EU-FBSSI) subject to 40 CFR Part 60, Subpart MMMM emission guidelines through Rule 972 (R 336.1972). The conditions for this emission unit take effect on and after the effective date of Subpart MMMM: March 21, 2016.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

A venturi scrubber (VS), a multi-stage impingement tray scrubber (ITS), a wet electrostatic precipitator (WESP), and a granular active carbon adsorber bed (GAC) from EU-FBSSI.

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. Particulate Matter | 18 milligrams per dry standard cubic metera  | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 2. Hydrogen chloride | 0.51 ppmv drya  | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 3. Carbon monoxide | 64 ppmv drya  | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 4. Dioxins/furans (total mass basis) b, c | 1.2 nanograms per dry standard cubic metera  | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 5. Dioxins/furans (toxic equivalency basis) b, c | 0.10 nanograms per dry standard cubic metera | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 6. Mercury | 0.037 milligrams per dry standard cubic metera  | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 7. Oxides of nitrogen | 150 ppmv drya | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 8. Sulfur Dioxide | 15 ppmv drya | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **40 CFR 60.5165****40 CFR 60.5185** |
| 9. Cadmium | 0.0016 milligrams per dry standard cubic metera | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 10. Lead | 0.0074 milligrams per dry standard cubic metera | Test protocolc | EU-FBSSI | SC V.1-4, VI.1, VI.2, VI.3 | **R 336.1972****40 CFR 60.5165****40 CFR 60.5185** |
| 11. Fugitive  Emissions  from ash  handling | Visible emissions of combustion ash shall be no more than 5 percent for the hourly observation period | Test Protocolc | Ash Handling (ash conveying system including conveyor transfer points) | SC V.1-5, VI.1, VI.2, VI.3 | **40 CFR 60.5165****40 CFR 60.5185** |

a All emission limits are measured at 7 percent oxygen, dry basis, at standard conditions. For the emission limits in this table, standard conditions are defined in 40 CFR 60.5250.

b The permittee has the option to comply with either the dioxin/furan limit on a total mass basis or the dioxin//furan emission limit on a toxic equivalency basis.

c Test protocol shall specify averaging time; reference 40 CFR 60.5250, Table 2, for averaging methods and minimum sampling volumes or durations, and Compliance Method(s).

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Use of the bypass stack associated with EU-FBSSI 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.1 through SC I.10. **(****R 336.1972, 40 CFR 60.5220(d))**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall meet a site-specific operating limit for minimum operating temperature of the combustion chamber temperature (or afterburner combustion chamber) for EU-FBSSI that is established in 40 CFR 60.5190. **(R 336.1972, 40 CFR 60.5200, 40 CFR 60.5170(a))**

2. If the permittee uses a wet scrubber, electrostatic precipitator, activated carbon injection, or afterburner to comply with an emission limit, the permittee must meet the site-specific operating limits that are established in 40 CFR 60.5190 for each operating parameter associated with each air pollution control device for EU-FBSSI. **(R 336.1972, 40 CFR 60.5200, 40 CFR 60.5170(b))**

3. The permittee must 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. **(40 CFR 60.5200, 40 CFR 60.5170(d))**

1. If the permittee uses an air pollution control device other than a wet scrubber, fabric filter, electrostatic precipitator, or activated carbon injection to comply with the emission limits in Table 2, Subpart MMMM, the permittee must meet any site-specific operating limits or requirements that are established as required in 40 CFR 60.5175. **(40 CFR 60.5170(h))**

**V. TESTING/SAMPLING**

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

1. The permittee shall 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. If the permittee chooses the option of performing emission tests, then the emission tests shall be conducted using the test methods, averaging methods and minimum sampling volumes or durations specified in Table 2 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. The permittee may use results from a performance test conducted within the two previous years that was conducted under the same conditions and demonstrated compliance with the emission limits and standards specified in the Emission Limits section of this Flexible Group, provided that no process changes have been made since the performance test was conducted. If the results of a past performance test are used, the permittee shall continue to meet the operating limits established during that performance test that demonstrated compliance with the applicable emission limits. The past performance test must have used the same test methods specified in Table 2 of 40 CFR Part 60, Subpart MMMM. 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))**
2. In lieu of conducting the emissions test specified in SC V.1, the permittee may demonstrate initial compliance with the emission limits for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans, mercury, nitrogen oxides, sulfur dioxide, cadmium and lead by substituting the use of a continuous emission monitoring system (CEMS) for any or all of these pollutants in accordance with the requirements of 40 CFR 60.5185(b). **(R 336.1972, 40 CFR 60.5185(b))**
3. The permittee shall have the option of demonstrating 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. The performance testing to demonstrate continuous compliance with the emission limits for the pollutants previously listed, 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 2 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))**
4. In lieu of conducting the performance tests specified in SC V.3, the permittee may elect to demonstrate continuous compliance with the emission limits for particulate matter, hydrogen chloride, carbon monoxide, dioxins/furans, mercury, nitrogen oxides, sulfur dioxide, cadmium and lead by substituting the use of a CEMS for any or all of these pollutants in accordance with the requirements of 40 CFR 60.5205(b). A continuous automated sampling system can be used in lieu of performance tests to demonstrate continuous compliance with the mercury or dioxin/furans emission limits. Should the permittee discontinue use of the CEMS to demonstrate continuous compliance with an emission limit for an incinerator, then a performance test, as specified in SC V.3, shall be performed before discontinuing use of the CEMS. **(R 336.1972, 40 CFR 60.5205(b)**
5. As specified in 40 CFR 60.5190, the permittee shall establish operating parameters from the performance tests specified in SC V.1 and V.2. Each established parameter shall be equal to the lowest 4-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)**
6. 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))**

**See Appendix 5**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor the feed rate and moisture content of the sewage sludge fed to EU-FBSSI, as specified in paragraphs (a) and (b) below. **(R 336.1972, 40 CFR 60.5170(f)(1) and (2))**
	1. Continuously monitor the sewage sludge feed rate and calculate a daily average for all hours of operation during each 24-hour period. Keep a record of the daily average feed rate, as specified 40 CFR 60.5230(f)(3)(ii).
	2. Take at least one grab sample per day of the sewage sludge fed to the sewage sludge incinerator. If more than one grab sample is taken in a day, calculate the daily average for the grab samples. Keep a record of the daily average moisture content, as specified in 40 CFR 60.5230(f)(3)(ii)
2. The permittee shall continuously monitor and record the operating parameters established during the performance tests specified in SC V.1, V.3 and V.5. **(R 336.1972, 40 CFR 60.5190)**
3. The permittee shall keep records of any notifications to the AQD District Supervisor required by SC VII.4 and VII.5. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1972, 40 CFR 60.5230(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 orreceived 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))**

1. 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.1-10. **(R 336.1972, 40 CFR 60.5220(b)(1))**
2. The permittee shall notify the AQD District Supervisor, in writing, one month before stopping use of a continuous emissions monitoring system to demonstrate compliance with an emission limit in SC I.1-10. **(****R 336.1972, 40 CFR 60.5220(b)(1))**
3. The permittee shall submit any performance test reports including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The requirements of this flexible group become effective on March 21, 2016. Before that date, they are not applicable requirements. **(R 336.1972, 40 CFR Part 60, Subparts A and MMMM)**

2. The permittee shall implement and comply with the Operator Training and Qualification provisions as specified in 40 CFR 60.5130 through 60.5160. **(R 336.1972, 40 CFR 60.5130, 40 CFR 60.5135, 40 CFR 60.5140, 40 CFR 60.5145, 40 CFR 60.5150, 40 CFR 60.5155, 40 CFR 60.5160)**

3. For each air pollution control device in EU-FBSSI, the permittee shall conduct an air pollution control device inspection according to 40 CFR 60.5220(c) by March 21, 2016. The inspection shall include, at a minimum, all of the following:

a. Inspect air pollution control device(s) for proper operation;

b. Generally, observe that the equipment is maintained in good operating condition;

c. Develop a site-specific monitoring plan according to the requirements of 40 CFR 60.5200.  **(R 336.1972, 40 CFR 60.5195(a), 40 CFR 60.5220(c))**

4. The permittee shall comply with all applicable provisions of the Standards of Performance for New Stationary Sources for Existing Sewage Sludge Incineration Units, as specified in 40 CFR Part 60, Subparts A and MMMM. **(R 336.1972, 40 CFR Part 60, Subparts A and MMMM)**

5. The emission limits and standards of 40 CFR Part 60, Subparts A and MMMM, apply to EU-FBSSI 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)**

**Footnotes:**

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

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

## EU-GASTANK#1

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Existing stationary gasoline dispensing facility (GDF) located at an Area Source of HAPs subject to 40 CFR Part 63, Subpart CCCCCC, NESHAP for Source Category: Gasoline Dispensing Facilities and for Area Sources, also referred to as generally available control technologies (GACT). Existing GDF includes one 3,000 gallon aboveground gasoline storage tank for fueling of vehicles.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Required measures for a gasoline dispensing facility (GDF) with Monthly Throughput <10,000 gallons
	1. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. **(40 CFR 63.11116(a))**
	2. The permittee shall minimize gasoline spills. **(40 CFR 63.11116(a)(1))**
	3. Spills shall be cleaned up as expeditiously as practicable. **(40 CFR 63.11116(a)(2))**
	4. The permittee shall cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. **(40 CFR 63.11116(a)(3))**
	5. The permittee shall minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. **(40 CFR 63.11116(a)(4))**
2. Provide Gasoline Throughput Records Upon Request by USEPA or EGLE
	1. The permittee is not required to submit notifications or reports but must have records available. **(40 CFR 63.11116, 40 CFR 63.11117)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep a record of gasoline throughput to be able to demonstrate that monthly throughput is less than 10,000 gallons and such record must be made available to USEPA or to EGLE within 24 hours of a request. **(40 CFR 63.11116(b))**
2. If the permittee’s GDF (affected source) throughput ever exceeds an applicable throughput threshold, as referenced in SC VI.1., (other thresholds are between 10,000 gallons and 100,000 gallons, or greater than 100,000 gallons) then the permittee’s affected source will remain subject to and shall comply with the requirements for sources above the applicable threshold, even if the GDF’s throughput later falls below the applicable threshold. **(40 CFR 63.11111(i) and (h))**

**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 orreceived by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

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

**See Appendix 8**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and CCCCCC for Gasoline Dispensing Facilities. **(40 CFR Part 63, Subparts A and CCCCCC)**

**Footnotes:**

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

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

# D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

##  FLEXIBLE GROUP SUMMARY TABLE

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

| **Flexible Group ID** | **Flexible Group Description** | **Associated****Emission Unit IDs** |
| --- | --- | --- |
| FG-BOILERS | Two (2) 21 MMBTU/hr. natural gas-fired boilers with a total heat capacity of 42 MMBTU/hr. Natural gas-fired boilers with a total heat input less than 50 MMBTU/hr. | EU-BOILER1EU-BOILER2 |
| FG-ENGINES | Two (2) existing compression ignition (CI) reciprocating internal combustion engines (RICE) as identified within 40 CFR Part 63, Subpart ZZZZ (RICE MACT), 40 CFR 63.6590(a)(1), located at an Area Source, for emergency use and exempt from the requirements of Rule 201 pursuant to Rules 282(2)(b) or 285(2)(g). | EU-GENSOLIDSEU-GENUV |
| 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

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two (2) 21 MMBTU/hr. natural gas-fired boilers with a total heat capacity of 42 MMBTU/hr. Natural gas-fired boilers with a total heat input less than 50 MMBTU/hr.

**Emission Units:** EU-BOILER1, EU-BOILER2

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall only burn pipeline quality natural gas in FG-BOILERS.2 **(40 CFR Part 60, Subpart Dc)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall comply with the notification requirements of 40 CFR Part 60, Subpart Dc, 40 CFR 60.48c (a) for each boiler greater than 10 MMBTU/hr.2 **(40 CFR 60.48c (a))**
2. The permittee shall keep, in a satisfactory manner, monthly natural gas use records for each boiler included in FG-BOILERS that is greater than 10 MMBUT/hr. All records shall be kept on file for a period of at least five years and made available to the Department upon request.2 **(40 CFR 60.48c (g))**

**VII. REPORTING**

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

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

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

**See Appendix 8**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the Standards of Performance, as specified in 40 CFR Part 60, Subparts A and Dc for Small Industrial, Commercial, Institutional Steam Generating Units. **(R 336.1213(3), 40 CFR Part 60, Subparts A and Dc)**

**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).

## FG-ENGINES

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two (2) existing compression ignition (CI) reciprocating internal combustion engines (RICE) as identified within 40 CFR Part 63, Subpart ZZZZ (RICE MACT), 40 CFR 63.6590(a)(1), located at an Area Source, for emergency use and exempt from the requirements of Rule 201 pursuant to Rules 282(2)(b) or 285(2)(g).

**Emission Units:** EU-GENSOLIDS, EU-GENUV

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. Beginning January 1, 2015, the permittee shall limit the sulfur content of diesel fuel to no more than 15 ppm by weight for each emergency CI-ICE with a site rating greater than 100 HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), or that operate for the purposes specified in 40 CFR 63.6640(f)(4)(ii) except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. **(40 CFR 63.6604(b))**

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall operate and maintain any affected RICE, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.6605(b))**
2. The permittee shall comply with the following requirements for emission units subject to 40 CFR Part 63, Subpart ZZZZ, the following requirements apply except during periods of startup. **(40 CFR 63.6603(a) and Table 2d)**:
3. **For CI Engines:**
	1. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2.
	2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
	3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
4. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in 40 CFR63.6603 and as listed in SC III.2. The oil analysis program must be performed at the same frequency as oil changes are required. The analysis program must analyze the parameters and keep records as required in 40 CFR 63.6625(i) for CI engines. **(40 CFR 63.6625(i))**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall equip and maintain each existing emergency stationary RICE with a non-resettable hour meter to track the operating hours. **(40 CFR 63.6625(f))**
2. The permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer’s emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air-pollution control practice for minimizing emissions. **(40 CFR 63.6625(e))**

**V. TESTING/SAMPLING**

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

1. If using the oil analysis program for CI Engine(s), the permittee shall test for Total Base Number, viscosity and percent water content and maintain these within the acceptable limits as specified in 40 CFR 63.6625(i). **(40 CFR 63.6625(i))**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep all records required by 40 CFR 63.6655 (except 63.6655(c)). **(40 CFR 63.6655(a))**
2. The permittee shall maintain, at a minimum, the following records by the applicable compliance date:
	1. A copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart ZZZZ and the documentation supporting each notification and report. **(40 CFR 63.6655(a)(1))**
	2. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(2))**
	3. Records of all required maintenance performed on the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(4))**
	4. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5))**
3. The permittee shall keep records as required in SC IV.2 to show continuous compliance with each emission or operating limit that applies. **(40 CFR 63.6655(d), 40 CFR 63.6660)**
4. The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee’s maintenance plan. **(40 CFR 63.6655(e), 40 CFR 63.6660)**
5. The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document: **(40 CFR 63.6655(f), 40CFR 63.6660)**
6. How many hours are spent for emergency operation.
7. What classified the operation as emergency.
8. How many hours are spent for non-emergency operation.
9. If the engines are used for demand response operation or as part of a financial arrangement the permittee must keep records of the notification of the emergency situation, the date and the start and end time the engine was operated as part of demand response.

**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 orreceived 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 orreceived by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to FGENGINES. The permittee may choose an alternative compliance method not listed in FG-ENGINES by complying with all applicable provisions required by 40 CFR Part 63, Subpart ZZZZ for the compliance option chosen. **(40 CFR 70.6(9), 40 CFR 63.9(j), 40 CFR Part 63, Subparts A and ZZZZ)**

**Footnotes:**

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

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

## 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:

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))**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

NA

# E. NON-APPLICABLE REQUIREMENTS

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

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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 | CO2e | Carbon Dioxide Equivalent |
| CEMS | Continuous Emission Monitoring System | dscf | Dry standard cubic foot |
| CFR | Code of Federal Regulations | dscm | Dry standard cubic meter |
| COM | Continuous Opacity Monitoring | °F | Degrees Fahrenheit |
| Department/department | Michigan Department of Environment, Great Lakes, and Energy | gr | Grains |
| HAP | Hazardous Air Pollutant |
| EGLE | Michigan Department of Environment, Great Lakes, and Energy | Hg | Mercury |
| hr | Hour |
| EU | Emission Unit | HP | Horsepower |
| FG | Flexible Group | H2S | 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 | NOx | Oxides of Nitrogen |
| MAERS | Michigan Air Emissions Reporting System | ng | Nanogram |
| MAP | Malfunction Abatement Plan | PM | Particulate Matter |
| MSDS | Material Safety Data Sheet | PM10 | Particulate Matter equal to or less than 10 microns in diameter |
| NA | Not Applicable |
| NAAQS | National Ambient Air Quality Standards | PM2.5 | Particulate Matter equal to or less than 2.5microns in diameter |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | pph | Pounds per hour |
| 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 | SO2 | Sulfur Dioxide |
| SC | Special Condition | TAC | Toxic Air Contaminant |
| SCR | Selective Catalytic Reduction | Temp | Temperature |
| SNCR | Selective Non-Catalytic Reduction | THC | Total Hydrocarbons |
| SRN | State Registration Number | tpy | Tons per year |
| TEQ | Toxicity Equivalence Quotient | µg | Microgram |
| USEPA/EPA | United States Environmental Protection Agency | µm | Micrometer or Micron |
| VOC | Volatile Organic Compounds |
| VE | Visible Emissions | yr | Year |

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

## Appendix 2. Schedule of Compliance

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

## Appendix 3. Monitoring Requirements

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

## Appendix 4. Recordkeeping

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

## Appendix 5. Testing Procedures

The permittee shall use the following approved test plans, procedures, and averaging to measure the pollutant emissions for the applicable requirements referenced in EU-4M-NSPS-INCIN. The following table lists the test methods that are to be used, in accordance with 40 CFR Part 60, Subpart MMMM, to satisfy the testing requirements for EU-FBSSI in EU-4M-NSPS-INCIN.

| **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 1 dry standard cubic meters per run) |
| Hydrogen chloride | EPA Reference Test Method 26A at 40 CFR Part 60, Appendix A-8. | 3-run average 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 or toxic equivalency 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) |
| 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 60 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. Use GFAAS or ICP/MS for the analytical finish. | 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 Use GFAAS or ICP/MS for the analytical finish. | 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-B6237-2015. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B6237-2015 is being reissued as Source-Wide PTI No. MI-PTI-B6237-2020.

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

## Appendix 7. Emission Calculations

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

## Appendix 8. Reporting

**A. Annual, Semiannual, and Deviation Certification Reporting**

The permittee shall use 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.

## Appendix 9. Malfunction Abatement Plan

The permittee shall implement and maintain a Malfunction Abatement Plan (MAP) for EU-FBSSI including the Air Pollution Control (APC) system.

An approved MAP, last revision dated October 2018, was submitted to the AQD Jackson District Supervisor. The approved plan covers the EU-FBSSI and associated APC system. Any significant modifications to the plan are subject to the review and approval of the AQD District Supervisor. Records in support of the activities required by the plan shall be maintained. These records shall be made available upon inspection of the facility, or as otherwise requested by the AQD.