

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

EFFECTIVE DATE: March 3, 2021

ISSUED TO

**Central Michigan University**

State Registration Number (SRN): K2460

LOCATED AT

1720 South East Campus Drive, Mount Pleasant, Isabella County, Michigan 48859

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-K2460-2021

Expiration Date: March 3, 2026

Administratively Complete ROP Renewal Application Due Between  
September 3, 2024 and September 3, 2025

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

**SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-K2460-2021

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

Michigan Department of Environment, Great Lakes, and Energy

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Chris Hare, Bay City District Supervisor

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## AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

## A. GENERAL CONDITIONS

### Permit Enforceability

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

### General Provisions

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

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

### Equipment & Design

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

### Emission Limits

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

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

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

### Testing/Sampling

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

## Monitoring/Recordkeeping

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

## Certification & Reporting

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

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

## Permit Shield

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

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

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

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

## Revisions

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

## Reopenings

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

## Renewals

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

## Stratospheric Ozone Protection

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

## Risk Management Plan

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

## Emission Trading

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

## Permit to Install (PTI)

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

### Footnotes:

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

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

## **B. SOURCE-WIDE CONDITIONS**

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

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

## SOURCE-WIDE CONDITIONS

### DESCRIPTION

All process equipment source-wide including grand-fathered equipment and exempt equipment. (PTI No. 32-05)

### POLLUTION CONTROL EQUIPMENT

NA

### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Individual HAP	8.9 TPY <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	Entire Source	SC VI.1	R 336.1205(3)
2. Total HAPs	22 TPY <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	Entire Source	SC VI.1	R 336.1205(3)

### II. MATERIAL LIMIT(S)

NA

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

NA

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

NA

### V. TESTING/SAMPLING

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

NA

See Appendix 5

### VI. MONITORING/RECORDKEEPING

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

- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period individual and total HAP calculation records for all processes at the stationary source. All records shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>2</sup> (R 336.1205(3))

### VII. REPORTING

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

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

See Appendix 8

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

### C. EMISSION UNIT SPECIAL CONDITIONS

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

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

#### EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBLR4	Steam boiler providing campus heat and electricity. The electricity is generated by steam coming from EUBLR4 at 450 psi. After a small turbine (approx. 1 MW or 3.413 MMBTU), the steam pressure is down to 60 psi suitable for campus piping. Originally rated at 68.5 MMBTU/hr to burn wood and equipped with ash handling system. Permit modified in 2016 to allow installation of low-NOx natural gas burners, with a total maximum rating of 68 MMBTU/hr. When burning wood, emissions are controlled by a multi-cyclone collector and a wet scrubber. Emissions from chip unloading, wood feed, and ash handling are controlled by three individual baghouses. When burning natural gas, low-NOx burners are used. This emission unit is subject to 40 CFR Part 63, Subparts A and JJJJJ, and 40 CFR Part 64. (PTI 218-15)	01-01-1984 03-10-2016	FGPOWERPLANT FGBOILERGACT
EUBLR5	117 MMBTU/hr boiler acts as a waste heat boiler using hot exhaust gases from the turbine (EUGASTURBINE). It can also function without the turbine using natural gas. This emission unit is subject to 40 CFR Part 60, Subparts A and Db. (PTI 102-13)	01-01-1992 06-17-1993	FGPOWERPLANT
EUGASTURBINE	Natural gas or fuel oil fired turbine, 3,130 KW output (40 MMBTU/hr input) for campus electric generation. This emission unit is subject to 40 CFR Part 60, Subparts A and GG. (PTI 32-05)	01-01-1992 06-15-1999	FGPOWERPLANT
EUBIOSCIENCES	A 1,500 kilowatts (kW) diesel-fueled emergency engine with a model year of 2015, and a displacement of less than 30 liters/cylinder. This emission unit subject to 40 CFR Part 60, Subparts A and IIII, and 40 CFR Part 63, Subparts A and ZZZZ. (PTI 190-15)	11-03-2015	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBLR1	Natural gas or fuel oil fired Wickes 75,000 lbs/hr (90 MMBTU/hr) steam boiler for campus heat. This emission unit is subject to 40 CFR Part 63, Subparts A and JJJJJ. (PTI 32-05)	01-01-1961	FGBLRS1&2 FGPOWERPLANT FGBOILERGACT
EUBLR2	Natural gas or fuel oil fired Wickes 75,000 lbs/hr (90 MMBTU/hr) steam boiler for campus heat. This emission unit is subject to 40 CFR Part 63, Subparts A and JJJJJ. (PTI 32-05)	01-01-1961	FGBLRS1&2 FGPOWERPLANT FGBOILERGACT
EUFUELTANK2018	Two-compartment above ground fuel tank includes a 4,000-gallon exempt (Rule 284(2)(d) or 284(2)(g)(ii)) diesel compartment and an 8,000-gallon exempt (Rule 284(2)(g)(ii)) gasoline compartment for dispensing fuel, located at Grounds South. Only the gasoline compartment is subject to 40 CFR Part 63, Subparts A and CCCCC.	2018	FGGASDISPGACT
EUKOHLER1	300 KW 300RE02V Kohler emergency compression ignition (CI) internal combustion engine (ICE), serial number 2127734. Located in the Cart building. This emission unit is subject to 40 CFR Part 60, Subparts A and IIII.	2006	FGNPSPIII
EUKOHLER2	500 KW 500RE02VB Kohler emergency CI ICE, serial number 2093918. Located in the Woldt Food building. This emission unit is subject to 40 CFR Part 60, Subparts A and IIII.	2006	FGNPSPIII
EUKOHLER3	60 KW 60RE22G Kohler emergency CI ICE, serial number SGM323NPR. Located in the Merrill building. This emission unit is subject to 40 CFR Part 60, Subparts A and IIII.	2013	FGNPSPIII
EUKATOLIGHT	350 KW 0350FRX4T3 Katolight Corp emergency CI ICE, serial number 153554-0108. Located in the New Education building. This emission unit is subject to 40 CFR Part 60, Subparts A and IIII.	2009	FGNPSPIII
EUCAT1	500 KW C-15 Caterpillar emergency CI ICE, serial number CE03974. Located in the Data Center South #1 building. This emission unit is subject to 40 CFR Part 60, Subparts A and IIII.	2013	FGNPSPIII
EUCAT2	500 KW C-15 Caterpillar emergency CI ICE, serial number C5E04049. Located in the Data Center North #2 building. This emission unit is subject to 40 CFR Part 60, Subparts A and IIII.	2013	FGNPSPIII
EUCUMMINS1	114 HP GGHG-5773108 Cummins emergency spark ignition (SI) ICE, serial number H060964131. Located in the Stadium building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2006	FGNPSPIII
EUCUMMINS2	134 HP GGLB7255993 Cummins emergency SI ICE, serial number JO80214097. Located in the Satellite Energy Facility (SEF) building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2007	FGNPSPIII

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCUMMINS3	201 HP GGLB-7255993 Cummins emergency SI ICE, serial number J080214097. Located in the SEF building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2007	FGNPSJJJJ
EUCUMMINS4	134 HP GGHH4502160 Cummins emergency SI ICE, serial number F100134631. Located in the Event Center/McGuirk Arena building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2010	FGNPSJJJJ
EUCUMMINS5	134 HP GGLB-9299809 Cummins emergency SI ICE, serial number L110281753. Located in the Cart Research Facility building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2012	FGNPSJJJJ
EUCUMMINS6	134 HP DSGAA-1207538 Cummins emergency SI ICE, serial number F120355234. Located in the Anspach building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2012	FGNPSJJJJ
EUCUMMINS7	47 HP GGPA-1208079 Cummins emergency SI ICE, serial number G120359583. Located in the Grad Housing building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2013	FGNPSJJJJ
EUCUMMINS8	33.5 HP C5N6 Cummins emergency SI ICE, serial number F150834053. Located in the Multipurpose building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2016	FGNPSJJJJ
EUONAN	188 HP 140GGFB Onan emergency SI ICE, serial number 25190155. Located in the Telecom-Woldt Complex building. This emission unit is subject to 40 CFR Part 60, Subparts A and JJJJ.	2012	FGNPSJJJJ
EUPAINING	Maintenance spray booth.	01-01-1991	FG287
EUPRINTING	Campus printing operations.	01-01-1991	FG287
EUCOLDCLEANER	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	After 1979	FGCOLDCLEANERS

**EUBLR4  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Steam boiler providing campus heat and electricity. The electricity is generated by steam coming from EUBLR4 at 450 psi. After a small turbine (approx. 1 MW or 3.413 MMBTU), the steam pressure is down to 60 psi suitable for campus piping. Originally rated at 68.5 MMBTU/hr to burn wood and equipped with ash handling system. Permit modified in 2016 to allow installation of low-NOx natural gas burners, with a total maximum rating of 68 MMBTU/hr. The boiler can operate using either wood or natural gas, though not simultaneously. This emission unit is subject to 40 CFR Part 63, Subparts A and JJJJJ, and 40 CFR Part 64. (PTI 218-15)

**Flexible Group ID:** FGPOWERPLANT, FGBOILERGACT

**POLLUTION CONTROL EQUIPMENT**

When burning wood, emissions are controlled by a multi-cyclone collector and a wet scrubber. Emissions from chip unloading, wood feed, and ash handling are controlled by three individual baghouses.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring/ Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. PM	0.15 pounds per 1,000 pounds of exhaust gas <sup>a,2</sup>	Hourly*	EUBLR4, when burning wood	SC V.1	<b>R 336.1331(a)</b>
2. PM	0.10 pounds per 1,000 pounds of exhaust gas <sup>b,2</sup>	Hourly*	EUBLR4 material handling and ash conveying systems, when burning wood	SC V.1	<b>R 336.1331(a)</b>
3. NOx	8.20 pph <sup>2</sup>	Hourly*	EUBLR4, when burning natural gas	See FGBOILERGACT, III.1.-3	<b>R 336.1205(1)(a) and (3), 40 CFR 52.21(c) and (d)</b>

<sup>a</sup> Corrected to 50% excess air

<sup>b</sup> Calculated on a dry gas basis

\* If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not burn wood in EUBLR4 unless the multi-cyclone collector and wet scrubber are installed and operating properly.<sup>2</sup> **(R 336.1910)**
2. The permittee shall not operate the chip unloading, wood feed, or ash handling systems unless their fabric filter collectors are installed and operating properly.<sup>2</sup> **(R 336.1910)**
3. The permittee shall not burn natural gas and wood simultaneously in EUBLR4.<sup>2</sup> **(40 CFR 52.21(c) and (d))**

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

1. The permittee shall not install natural gas-fired burners unless they are low-NOx burners.<sup>2</sup> **(40 CFR 52.21(c) and (d))**
2. The permittee shall not install natural gas-fired burners that have a total nominal rated capacity of greater than 68.0 MMBTU/hr.<sup>2</sup> **(40 CFR 52.21(c) and (d))**

#### **V. TESTING/SAMPLING**

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

1. In the event that EUBLR4 re-starts wood burning operations after a period of burning only natural gas:<sup>2</sup> **(R 336.1205, R 336.1331(1)(a), R 336.1331(2), R 336.2001, R 336.2001(4), R 336.2003, R 336.2004)**
  - a. Within 15 days, the permittee shall notify the AQD district office that EUBLR4 has re-started wood-burning operations;
  - b. The permittee shall verify particulate emission rates from EUBLR4 by testing, at the owner's expense, in accordance with Department requirements, within 90 days of notification from the AQD District Supervisor;
  - c. Within 45 days upon notification from the AQD District Supervisor, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing;
  - d. The permittee shall notify the District Supervisor or the Technical Programs Unit no less than 7 days prior to the anticipated test date;
  - e. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 30 days following the last date of the test.

**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. While EUBLR4 is burning wood, the permittee shall conduct visual emissions survey for opacity from stack (SV-1) each operating day. The date and time of the visual emissions shall be recorded on a log. In the event that opacity exceeds normal levels for more than one (1) hour, a certified reader shall use EPA Method 9 to determine compliance.<sup>2</sup> **(R 336.1910)**
2. While EUBLR4 is burning wood, the permittee shall continuously monitor the pressure drop across the multi-cyclone and wet scrubber controlling emissions from the boiler, and the individual baghouses controlling emissions from chip unloading, wood feed, and ash handling with differential pressure instrumentation. Results of the monitoring shall be continuously recorded on a chart recorder or log and shall be kept on file.<sup>2</sup> **(R 336.1910)**
3. The permittee shall record the dates that wood is fired in EUBLR4. **(R 336.1213(3))**
4. While EUBLR4 is burning wood, the permittee shall continuously measure pressure drop and record once every four operating hours per day as an indicator of proper operation of the scrubber. The indicator range is 3 to 6 inches water column. The pressure gauge shall continuously monitor the pressure drop. The monitor shall be calibrated once per year. An excursion is a departure from the indicator range of 2 to 7 inches water column. **(40 CFR 64.6(c)(1), 40 CFR 60.46(c)(2))**
5. While EUBLR4 is burning wood, the permittee shall continuously monitor the scrubber liquid flow rate and record once every four operating hours per day as an indicator of proper operation of the scrubber. The indicator range is 15 gallons per minute (gpm) or greater. The flow meter shall continuously monitor the liquid flow rate. The monitor shall be checked once every four hours and replaced if not registering flow. An excursion is a departure from the indicator range of 15 gpm or greater. **(40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2))**
6. While EUBLR4 is burning wood, the permittee shall continuously measure pressure drop and record once every four operating hours per day as an indicator of proper operation of the multi-cyclone collector. The indicator

range is 1 to 4 inches water column. The pressure gauge shall continuously monitor the pressure drop. The monitor shall be calibrated once per year. An excursion is a departure from the indicator range of 1 to 4 inches water column. **(40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2))**

7. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
8. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
9. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
10. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. If EUBLR4 has burned wood during the semiannual period, the semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. If EUBLR4 has burned wood during the semiannual period, the semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**
6. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-1	48 <sup>2</sup>	89 <sup>2</sup>	R 336.2804

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64.<sup>2</sup> **(40 CFR Part 64)**
2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**
3. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, as specified in 40 CFR Part 63, Subparts A and JJJJJJ. **(40 CFR Part 63, Subparts A and JJJJJJ)**

**Footnotes:**

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

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

**EUBLR5  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

117 MMBTU/hr boiler acts as a waste heat boiler using hot exhaust gases from the turbine (EUGASTURBINE). It can also function without the turbine using natural gas. This emission unit is subject to 40 CFR Part 60, Subparts A and Db. (PTI 102-13)

**Flexible Group ID:** FGPOWERPLANT

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	35.9 TPY <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	EUBLR5	SC VI.1	R 336.1205(3)
2. NOx	0.20 lb/MMBTU heat input <sup>2</sup>	Hourly*	EUBLR5	NA	40 CFR 60.44b(a)(4)(i)

\* If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas	359 million standard cubic feet <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	EUBLR5	SC VI.7	R 336.1205(3)

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

1. The permittee shall only burn natural gas in EUBLR5.<sup>2</sup> (R 336.1205)

**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

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 keep, in a satisfactory manner, monthly and previous 12-month NO<sub>x</sub> calculation records as appropriate to demonstrate compliance with the limits found in SC I.1.<sup>2</sup> **(R 336.1205(3))**
2. The permittee shall monitor and record the amount of natural gas combusted in the waste heat boiler, without the turbine, on a daily basis, with instrumentation acceptable to the Air Quality Division, and kept on file for a period of at least 5 years.<sup>2</sup> **(R 336.1201(3))**
3. The permittee shall keep records of emissions and operating information to comply with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Db.<sup>2</sup> **(40 CFR Part 60, Subparts A and Db)**
4. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of EUBLR5; any malfunction of the air pollution equipment; or any periods during which a continuous monitoring system or alternative monitoring device is inoperative.<sup>2</sup> **(40 CFR Part 60, Subpart A, Section 60.7(b))**
5. Each owner or operator electing to install a continuous monitoring system (CEMS) shall submit an excess emissions and monitoring systems performance report and/or a summary report form to the USEPA Administrator semiannually; or the CEMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or the USEPA Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30<sup>th</sup> date following the end of each calendar half (or quarter, as appropriate).<sup>2</sup> **(40 CFR Part 60, Subpart A, Section 60.7(c))**
6. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurement; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection.<sup>2</sup> **(40 CFR Part 60, Subpart A, Section 60.7(f))**
7. The owner or operator of an affected facility shall record and maintain records of the amounts of natural gas combusted during each day and calculate the combined annual capacity factor. The annual capacity factor shall be determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.<sup>2</sup> **(40 CFR Part 60, Subpart Db, Section 60.49(d))**
8. The permittee shall comply with all applicable recordkeeping requirements of 40 CFR 60.49(b).<sup>2</sup> **(40 CFR 60.49(b))**

**See Appendices 4 and 7**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall comply with all applicable reporting requirements of 40 CFR 60.49(b).<sup>2</sup> **(40 CFR 60.49(b))**

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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-2	48 <sup>2</sup>	75 <sup>2</sup>	<b>R 336.1201(3)</b>

**IX. OTHER REQUIREMENT(S)**

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

**Footnotes:**

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

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

**EUGASTURBINE  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Natural gas or fuel oil fired turbine, 3,130 KW output (40 MMBTU/hr input) for campus electric generation. This emission unit is subject to 40 CFR Part 60, Subparts A and GG. (PTI 32-05)

**Flexible Group ID:** FGPOWERPLANT

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	167 ppmv, on a dry gas basis corrected to 15% oxygen and ISO standard day conditions <sup>2</sup>	Hourly*	EUGASTURBINE when firing natural gas	SC V.1	<b>40 CFR 60.332(a)(2)</b>
2. NOx	125 TPY <sup>2</sup>	12 month rolling time period as determined at the end of each calendar month	EUGASTURBINE when firing natural gas	SC VI.2	<b>R 336.1205(3)</b>

\* If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

**II. MATERIAL LIMIT(S)**

1. The sulfur content of the fuel combusted in EUGASTURBINE shall not exceed 0.8 percent by weight.<sup>2</sup> (**40 CFR 60.333(b)**)

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

1. The permittee shall not use fuel oil in EUGASTURBINE except as an emergency fuel as defined in the federal Standards of Performance for New Stationary Sources, 40 CFR 60.331(r).<sup>2</sup> (**40 CFR 60.331(r)**)

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

NA

**V. TESTING/SAMPLING**

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

1. Within two years of the effective date of this renewable operating permit, the permittee shall verify NOx emission rates from EUGASTURBINE by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical

Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall verify the NO<sub>x</sub> emission rates from EUGASTURBINE, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. Not less than 30 days before performance tests are conducted, the permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor of the date of testing. **(R 336.1213(3))**

**See Appendix 5**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor the sulfur content in the fuel being fired in EUGASTURBINE in accordance with 40 CFR 60.334(h).<sup>2</sup> **(40 CFR Part 60, Subpart GG, 60.334 and 60.335)**
2. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NO<sub>x</sub> calculation records for EUGASTURBINE.<sup>2</sup> **(R 336.1205(3))**
3. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the turbine: any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.<sup>2</sup> **(40 CFR Part 60, Subpart A, Section 60.7(b))**
4. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurement; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection.<sup>2</sup> **(40 CFR Part 60, Subpart A, Section 60.7(f))**

**See Appendices 3, 4, and 7**

## **VII. REPORTING**

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

**See Appendix 8**

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-2	48 <sup>2</sup>	75 <sup>2</sup>	<b>R 336.1201(3)</b>
2. SV-12 (by-pass stack)	42 <sup>2</sup>	75 <sup>2</sup>	<b>R 336.1201(3)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the New Source Performance Standards for Stationary Gas Turbines as specified in 40 CFR Part 60, Subparts A and GG. **(40 CFR Part 60, Subparts A and GG)**

**Footnotes:**

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).  
<sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUBIOSCIENCES  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A 1,500 kilowatts (kW) diesel-fueled emergency engine with a model year of 2015, and a displacement of less than 30 liters/cylinder. The engine is subject to 40 CFR Part 60, Subparts A and III, and 40 CFR Part 63, Subparts A and ZZZZ. (PTI 190-15)

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	6.4 g/kW-hr <sup>2</sup>	Hourly*	EUBIOSCIENCES	SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), Table 1 of 40 CFR 89.112
2. CO	3.5 g/kW-hr <sup>2</sup>	Hourly*	EUBIOSCIENCES	SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), Table 1 of 40 CFR 89.112
3. PM	0.20 g/kW-hr <sup>2</sup>	Hourly*	EUBIOSCIENCES	SC VI.2	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), Table 1 of 40 CFR 89.112

\* If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

**II. MATERIAL LIMIT(S)**

- The permittee shall burn only diesel fuel in EUBIOSCIENCES with the maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent.<sup>2</sup> (R 336.1205(1)(a) and (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))

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

- The permittee shall not operate EUBIOSCIENCES for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.2.<sup>2</sup> (R 336.1205(1)(a) and (3), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))

2. The permittee may operate EUBIOSCIENCES for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. EUBIOSCIENCES may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity.<sup>2</sup> **(40 CFR 60.4211(f))**
3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart IIII, for the same model year and maximum engine power, the permittee shall meet the following requirements for EUBIOSCIENCES:
  - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions;
  - b. Change only those emission-related settings that are permitted by the manufacturer; and
  - c. Meet the requirements as specified in 40 CFR Part 89, 94, and/or 1068, as they apply to the permittee.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine may be considered a non-certified engine.<sup>2</sup> **(40 CFR 60.4211(a) and (c))**

4. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EUBIOSCIENCES and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions.<sup>2</sup> **(40 CFR 60.4211(g)(3))**

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

1. The permittee shall equip and maintain EUBIOSCIENCES with a non-resettable hours meter to track the operating hours.<sup>2</sup> **(R 336.1205(1)(a) and (3), R 336.1225, 40 CFR 60.4209)**
2. The nameplate capacity of EUBIOSCIENCES shall not exceed 1,500 kW, as certified by the equipment manufacturer.<sup>2</sup> **(R 336.1205(1)(a) and (3), 40 CFR 60.4202, R 336.1225)**

#### **V. TESTING/SAMPLING**

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

1. If the engine is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:<sup>2</sup> **(40 CFR 60.4211(g)(3))**
  - a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. The permittee must conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years, whichever comes first, thereafter, to demonstrate compliance with the applicable emission standards.
2. If the permittee conducts a performance test, testing shall be at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing,

including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete test report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

3. Not less than 30 days before performance tests are conducted, the permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor of the date of testing. **(R 336.1213(3))**

**See Appendix 5**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205(1)(a) and (3), 40 CFR 52.21(c) and (d))**
2. The permittee shall keep, in a satisfactory manner, manufacturer certification documentation indicating that EUBIOSCIENCES meets the applicable requirements contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart IIII. If EUBIOSCIENCES becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(40 CFR 60.4211(a), (c), and (g))**
3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EUBIOSCIENCES, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of EUBIOSCIENCES, including what classified the operation as emergency and how many hours are spent for non-emergency operation.<sup>2</sup> **(R 336.1205(1)(a) and (3), 40 CFR 60.4211, 40 CFR 60.4214)**
4. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EUBIOSCIENCES, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil.<sup>2</sup> **(R 336.1205(1)(a) and (3), R 336.1402(1), 40 CFR 80.510(b))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit a notification specifying whether EUBIOSCIENCES will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation.<sup>2</sup> **(40 CFR Part 60, Subpart IIII)**
5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD.

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-BIOSCIENCES	18 <sup>2</sup>	83.6 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21(c) and (d)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and IIII, as they apply to EUBIOSCIENCES.<sup>2</sup> **(40 CFR Part 60, Subparts A and IIII, 40 CFR 63.6590)**
2. The permittee shall comply with the 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 EUBIOSCIENCES.<sup>2</sup> **(40 CFR Part 63, Subparts A and ZZZZ)**

**Footnotes:**

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

<sup>2</sup> 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
FGBLRS1&2	Each boiler is a Wickes 75,000 lbs/hr (90 MMBTU/hr) natural gas or fuel oil fired steam boiler for campus heat. (PTI 32-05)	EUBLR1 EUBLR2
FGPOWERPLANT	Collection of boilers and gas turbine onsite. (PTI 32-05)	EUBLR1 EUBLR2 EUBLR4 EUBLR5 EUGASTURBINE
FGBOILERGACT	Conditions for existing large (>10 MMBTU/hr) gaseous fuel fired industrial, commercial or institutional boilers as defined in 40 CFR 63.11237 that are located at, or are part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195. These boilers are subject to 40 CFR Part 63, Subpart JJJJJJ because they have the ability to burn either fuel oil or wood fuel.	EUBLR1 EUBLR2 EUBLR4
FGGASDISPGACT	<p>Conditions for existing and new/reconstructed stationary gasoline dispensing facilities (GDFs) located at an area source of hazardous air pollutants (HAP) that are subject to 40 CFR Part 63, Subpart CCCCCC and have a maximum monthly gasoline throughput of one of the following:</p> <ol style="list-style-type: none"> <li>1. Less than 10,000 gallons; or</li> <li>2. At least 10,000 gallons and no more than 100,000 gallons.</li> </ol> <p>GDF means any stationary source which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine use solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.</p>	EUFUELTANK2018

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGNSPSIIII	Conditions for emergency compression ignition (CI) internal combustion engines (ICE) that are subject to 40 CFR Part 60, Subparts A and IIII.	EUKOHLER1 EUKOHLER2 EUKOHLER3 EUKATOLIGHT EUCAT1 EUCAT2
FGNSPSJJJJ	Conditions for emergency spark ignition (SI) internal combustion engines (ICE) that are subject to 40 CFR Part 60, Subparts A and JJJJ.	EUCUMMINS1 EUCUMMINS2 EUCUMMINS3 EUCUMMINS4 EUCUMMINS5 EUCUMMINS6 EUCUMMINS7 EUCUMMINS8 EUONAN
FG287	All surface coating operations on campus including maintenance spray booth and campus printing services.	EUPAINTING EUPRINTING
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUCOLDCLEANER

**FGBLRS1&2  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Each boiler is a Wickes 75,000 lbs/hr (90 MMBTU/hr) natural gas or fuel oil fired steam boiler for campus heat. (PTI 32-05)

**Emission Units:** EUBLR1, EUBLR2

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO2	1.11 lb / MMBTU heat input <sup>2</sup>	24-hour when burning fuel oil.	EUBLR1	SC V.1, VI.1	R 336.1401(1)
2. SO2	1.11 lb / MMBTU heat input <sup>2</sup>	24-hour when burning fuel oil.	EUBLR2	SC V.1, VI.1	R 336.1401(1)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel oil	986 gallons total <sup>2</sup>	Hourly	EUBLR1 and EUBLR2 combined	SC VI.1	R 336.1205(3)

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

1. The sulfur content of the fuel oil shall not exceed 1.0 percent by weight. (R 336.1213(3))

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

NA

**V. TESTING/SAMPLING**

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

1. The permittee shall take a fuel oil sample for sulfur content at the front end of the fuel delivery system into the boiler when fuel oil is fired in either EUBLR1 or EUBLR2.<sup>2</sup> (R 336.1205(3), R 336.1402(c))

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 keep, in a satisfactory manner, 24-hour SO<sub>2</sub> calculation records for EUBLR1 and EUBLR2.<sup>2</sup> **(R 336.1402(c))**
2. The permittee shall keep a record of the amount of fuel oil burned per hour in EUBLR1 and EUBLR2 combined.<sup>2</sup> **(R 336.1205(3))**
3. The permittee shall keep records of the results of the fuel oil sampling for EUBLR1 and EUBLR2. **(R 336.1213(3))**

See Appendix 7

**VII. REPORTING**

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

See Appendix 8

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-3	36 <sup>2</sup>	66 <sup>2</sup>	<b>R 336.1201(3)</b>

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

**FGPOWERPLANT  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Collection of boilers and gas turbine onsite. (PTI 32-05)

**Emission Units:** EUBLR1, EUBLR2, EUBLR4, EUBLR5, EUGASTURBINE

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel Oil	750,000 gallons <sup>2</sup>	Calendar quarter	FGPOWERPLANT	SC III.1, VI.3.c	<b>R 336.1205(3)</b>

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

1. For every 1,000 cubic feet of natural gas burned, the permittee shall reduce the allowed quarterly fuel oil limitation by 5.6 gallons.<sup>2</sup> **(R 336.1205(3))**
2. The permittee shall not produce more than 175,000 pounds of steam per hour based on a 12-month rolling average in FGPOWERPLANT.<sup>2</sup> **(R 336.1205(3))**

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

NA

**V. TESTING/SAMPLING**

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

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 conduct daily visual emissions survey for opacity (not including steam) from each stack for the power plant facility. In the event that opacity exceeds normal levels for more than (1) one hour, a certified reader shall use EPA Method 9 to determine compliance.<sup>2</sup> **(R 336.1201(3))**
2. The permittee shall keep the following written records in a manner acceptable to the District Supervisor of the Air Quality Division:<sup>2</sup> **(R 336.1201(3))**
  - a. Written record of amount of steam produced per hour;
  - b. Written record of amount of natural gas burned per calendar quarter;
  - c. Written record of amount of fuel oil burned per calendar quarter;

- d. Written record of percent sulfur content and BTU contents of each fuel oil delivery for each combustion unit in FGPOWERPLANT.

**See Appendices 3 and 7**

**VII. REPORTING**

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

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

## **FGBOILERGACT FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Conditions for existing large (>10 MMBTU/hour) gaseous fuel fired industrial, commercial or institutional boilers as defined in 40 CFR 63.11237 that are located at, or are part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.

**Emission Units:** EUBLR1, EUBLR2, EUBLR4

### **POLLUTION CONTROL EQUIPMENT**

EUBLR4 is controlled by a multi-clone followed by a wet scrubber when burning wood. FGBLRS1&2 use an "oxygen trim system" as defined in 40 CFR 63.11237.

### **I. EMISSION LIMIT(S)**

NA

### **II. MATERIAL LIMIT(S)**

1. Any boiler that is gaseous fuel fired and also has the capability of using liquid fuel, and does not have the capability of biomass and/or coal firing, shall be considered a gaseous fuel fired boiler unless the liquid fuel use for periodic testing purposes is greater than 48 hours per calendar year. Liquid fuel use in a boiler for periodic testing purposes that is more than 48 hours in a calendar year will result in the boiler as being designated as an oil subcategory. The use of liquid fuel during gas curtailments, gas supply interruption or startups where the use of the liquid fuel could be more than 48 hours per calendar year, or periodic testing where the liquid fuel use is 48 hours per calendar year or less, does not change a boiler's designation from a gaseous fuel fired boiler to an oil subcategory. **(40 CFR 63.11237)**

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

1. The permittee shall perform an initial performance tune up of each affected boiler that is operating as of March 21, 2014 in accordance with Table 2 of 40 CFR Part 63, Subpart JJJJJJ no later than March 21, 2014. Subsequent tune ups related to FGBLRS1&2 shall be performed no more than 61 months from the date of the previous tune up. **(40 CFR 63.11201(b))**
2. If EUBLR4 resumes burning wood after March 21, 2014, the permittee shall perform the initial performance tune up of EUBLR4 in accordance with Table 2 of 40 CFR Part 63, Subpart JJJJJJ no more than 30 days after startup. Subsequent tune ups shall be performed no more than 25 months from the date of the previous tune up. **(40 CFR 63.11210(j)(2))**
3. The permittee shall comply with the energy assessment and initial tune up requirements for EUBLR1 and/or EUBLR2 within 180 days following the calendar year that EUBLR1 and/or EUBLR2 becomes an oil subcategory. **(40 CFR 63.11210(h))**

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

NA

## **V. TESTING/SAMPLING**

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

NA

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep records of each notification and report submitted, and all supporting documentation, to comply with 40 CFR Part 63, Subparts A and JJJJJJ. **(40 CFR 63.11225(c)(1))**
2. The permittee shall keep records of the initial energy assessment report for each affected boiler. **(40 CFR 63.11225(c)(2))**
3. The permittee shall keep records of all tune ups that were performed for each affected boiler. These records shall include the date that the tune up was performed, procedures used for the tune up of each affected boiler and the manufacturer's specifications for the tune up of each affected boiler. **(40 CFR 63.11225(c)(2))**
4. The permittee shall maintain records of the hours of operation when liquid fuel is used for EUBLR1 and/or EUBLR2 and the purpose of using liquid fuel; e.g., periodic testing, natural gas curtailments, gas supply interruption, startup or other purposes. **(40 CFR Part 63, Subpart JJJJJJ)**

See Appendix 4

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. No later than 30 days after EUBLR1 and/or EUBLR2 becomes an oil subcategory, the permittee shall submit an initial notification identifying EUBLR1 and/or EUBLR2 as being subject to the requirements of 40 CFR Part 63, Subparts A and JJJJJJ. **(40 CFR 63.9(b)(2), 40 CFR 63.11225(a)(2))**
5. No later than 30 days after EUBLR4 becomes a biomass subcategory, the permittee shall submit an initial notification identifying EUBLR4 as being subject to the requirements of 40 CFR Part 63, Subparts A and JJJJJJ. **(40 CFR 63.9(b)(2), 40 CFR 63.11225(a)(2))**
6. The permittee shall submit a notification of compliance status no later than 120 days after EUBLR4 resumes burning wood that includes the information contained in 40 CFR 63.11225(a)(4)(ii). **(40 CFR 63.9(h)(2)(i), 40 CFR 63.11225(a)(1), 40 CFR 63.11225(a)(4))**
7. The permittee shall submit an initial notification of compliance status no later than 120 days after EUBLR1 and/or EUBLR2 becomes an oil subcategory. The initial notification of compliance status shall include the information contained in 40 CFR 63.11225(a)(4)(ii) and (iii). **(40 CFR 63.9(h)(2)(i), 40 CFR 63.11225(a)(1), 40 CFR 63.11225(a)(4))**

See Appendix 8

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

NA

**IX. OTHER REQUIREMENT(S)**

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

**Footnotes:**

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

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

## **FGGASDISPGACT FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Conditions for existing and new/reconstructed stationary gasoline dispensing facilities (GDFs) located at an area source of hazardous air pollutants (HAP) that are subject to 40 CFR Part 63, Subpart CCCCCC and have a maximum monthly gasoline throughput of one of the following:

1. Less than 10,000 gallons;
2. At least 10,000 gallons and no more than 100,000 gallons.

GDF means any stationary source which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine use solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

**Emission Unit:** EUFUEL TANK2018 (gasoline compartment only)

### **POLLUTION CONTROL EQUIPMENT**

NA

#### **I. EMISSION LIMIT(S)**

NA

#### **II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall comply with the following measures for a GDF with the monthly throughput of <10,000 gallons: **(40 CFR 63.11116(a))**
  - a. 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;
  - b. The permittee shall minimize gasoline spills;
  - c. Spills shall be cleaned up as expeditiously as practicable;
  - d. The permittee shall cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - e. 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.
2. The permittee shall comply with the following measures for a GDF with the monthly throughput of >10,000 gallons and <100,000: **(40 CFR 63.11117(a) and (b))**
  - a. The permittee shall comply with the requirements for GDF facilities with monthly throughput <10,000 gallons unless the tank is less than 250 gallons;
  - b. The permittee shall only load gasoline into storage tanks by utilizing submerged filling;
  - c. Fill pipes not meeting the submerge pipe specifications are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation for such demonstration must be made available for inspection.

**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))**

**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 federal National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities as specified in 40 CFR Part 63, Subparts A and CCCCC. **(40 CFR Part 63, Subparts A and CCCCC)**
2. If the EUFUEL TANK 2018 throughput exceeds an applicable throughput threshold, then EUFUEL TANK 2018 will remain subject to the requirements for sources above the threshold, even if the EUFUEL TANK 2018 throughput later falls below the applicable throughput threshold. **(40 CFR 63.11111(i))**

**Footnotes:**

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

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

**FGNSPSIII  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Conditions for emergency compression ignition (CI) internal combustion engines (ICE) that are subject to 40 CFR Part 60, Subpart IIII.

**Emission Units:** EUKOHLER1, EUKOHLER2, EUKOHLER3, EUKATOLIGHT, EUCAT1, EUCAT2

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
<b><i>Compression Ignition Engines kw<math>\geq</math>130, Pre-2007 Model Years</i></b>					
1. PM	0.54 g/KW-hr	Hourly*	EUKOHLER1 EUKOHLER2	SC IV.2, V.1	40 CFR 60.4205(a)
2. NO <sub>x</sub>	9.2 g/KW-hr	Hourly*	EUKOHLER1 EUKOHLER2	SC IV.2, V.1	40 CFR 60.4205(a)
3. HC	1.3 g/KW-hr	Hourly*	EUKOHLER1 EUKOHLER2	SC IV.2, V.1	40 CFR 60.4205(a)
4. CO	11.4 g/KW-hr	Hourly*	EUKOHLER1 EUKOHLER2	SC IV.2, V.1	40 CFR 60.4205(a)
<b><i>Compression Ignition Engines 130 <math>\leq</math> kw <math>\leq</math> 560, Beginning Model Year 2007</i></b>					
5. PM	0.2 g/KW-hr	Hourly*	EUKATOLIGHT EUCAT1 EUCAT2	SC IV.2, V.1	40 CFR 60.4205(b), 40 CFR 89.112(a)
6. NMHC + NO <sub>x</sub>	4.0 g/KW-hr	Hourly*	EUKATOLIGHT EUCAT1 EUCAT2	SC IV.2, V.1	40 CFR 60.4205(b), 40 CFR 89.112(a)
7. CO	3.5 g/KW-hr	Hourly*	EUKATOLIGHT EUCAT1 EUCAT2	SC IV.2, V.1	40 CFR 60.4205(b), 40 CFR 89.112(a)
<b><i>Compression Ignition Engines 37 <math>\leq</math> kw &lt; 75, Beginning Model Year 2008</i></b>					
8. PM	0.4 g/KW-hr	Hourly*	EUKOHLER3	SC IV.2, V.1	40 CFR 60.4205(b), 40 CFR 89.112(a)
9. NMHC + NO <sub>x</sub>	4.7 g/KW-hr	Hourly*	EUKOHLER3	SC IV.2, V.1	40 CFR 60.4205(b), 40 CFR 89.112(a)
10. CO	5.0 g/KW-hr	Hourly*	EUKOHLER3	SC IV.2, V.1	40 CFR 60.4205(b), 40 CFR 89.112(a)

\* If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

11. Emergency stationary ICE with a maximum engine power greater than or equal to 37 KW (50 HP), must meet the emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007. **(40 CFR 60.4205(b))**

## **II. MATERIAL LIMIT(S)**

1. The permittee shall only burn diesel fuel that meets the requirements of 40 CFR 80.510(b), as follows: **(40 CFR 60.4207(b))**
  - a. Maximum sulfur content of 15 ppm per gallon; and
  - b. A minimum cetane index of 40; or a maximum aromatic content of 35 percent by volume.

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

1. The permittee shall operate each emergency stationary ICE according to the requirements in the paragraphs below: **(40 CFR 60.4211(f)(1) and (2))**
  - a. There is no time limit on the use of emergency stationary ICE in emergency situations.
  - b. The permittee may operate each emergency stationary ICE for a maximum of 100 hours per calendar year for any of the following combination of the purposes:
    - i. For maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission authority or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.
2. The permittee may operate the emergency stationary ICE for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f)(3))**

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

1. The permittee shall equip the emergency stationary ICE with a non-resettable hour meter to track the number of operating hours. **(40 CFR 60.4209(a))**
2. Except as provided in SC IV.3 and SC V.1, the emergency stationary ICE must be installed and configured according to the manufacturer's emission-related specifications: **(40 CFR 60.4211(a))**
  - a. The permittee shall operate and maintain the emergency stationary ICE and control device according to the manufacturer's emission-related written instructions;
  - b. The permittee shall change only those emission-related settings that are permitted by the manufacturer; and
  - c. The permittee shall meet the requirements of 40 CFR Parts 89, 94, and/or 1068, as applicable.
3. If the engine and control device (if applicable) are not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows: **(40 CFR 60.4211(g))**
  - a. Keep a written maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

4. Except as provided in SC IV.2 and SC V.1, for 2007 model year and later engines the permittee must comply with the emission standards specified in 40 CFR 60.4205(b) by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. **(40 CFR 60.4211(c))**

## **V. TESTING/SAMPLING**

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

1. If the engine and control device (if applicable) are not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
  - a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. The permittee must conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years, whichever comes first, thereafter, to demonstrate compliance with the applicable emission standards. **(40 CFR 60.4211(g))**
2. The permittee shall verify PM, NOx, CO, hydrocarbons (HC), and non-methane hydrocarbons (NMHC) + NOx emission rates from FGNSPSIII by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

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

3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

## **VI. MONITORING/RECORDKEEPING**

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

1. If the engine uses a diesel particulate filter to comply with the emission standards, the permittee must keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached. **(40 CFR 60.4214(c))**
2. The permittee shall maintain records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **(40 CFR 60.4214(b))**
3. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. **(40 CFR 60.4214(b))**
4. The permittee shall maintain an up-to-date list of all units subject to the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII. The list shall include each engine's location, manufacturer, model ID/serial number, year of installation, and power rating. **(R 336.1213(3)(b)(ii))**

## **VII. REPORTING**

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

**See Appendix 8**

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

NA

## **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, as specified in 40 CFR Part 60, Subparts A and IIII. **(40 CFR Part 60, Subparts A and IIII)**

### **Footnotes:**

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

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

**FGNSPSJJJJ  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Conditions for emergency spark ignition (SI) internal combustion engines (ICE) that are subject to 40 CFR Part 60, Subparts A and JJJJ.

**Emission Units:** EUCUMMINS1, EUCUMMINS2, EUCUMMINS3, EUCUMMINS4, EUCUMMINS5, EUCUMMINS6, EUCUMMINS7, EUCUMMINS8, EUONAN

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
<b><i>Spark Ignition Engines 25&lt;HP&lt;130, 2009 Model Years and Later</i></b>					
1. NOx + HC	10 g/HP-hr	Hourly*	EUCUMMINS7 EUCUMMINS8	SC IV.2, V.1	<b>40 CFR 60.4233(d)</b>
2. CO	387 g/HP-hr	Hourly*	EUCUMMINS7 EUCUMMINS8	SC IV.2, V.1	<b>40 CFR 60.4233(d)</b>
<b><i>Spark Ignition Engines HP≥130, 2009 Model Years and Later</i></b>					
3. NOx	2.0 g/HP-hr (160 ppmvd @15% O2)	Hourly*	EUCUMMINS4 EUCUMMINS5 EUCUMMINS6 EUONAN	SC IV.2, V.1	<b>40 CFR 60.4233(d)</b>
4. CO	4.0 g/HP-hr (540 ppmvd @15% O2)	Hourly*	EUCUMMINS4 EUCUMMINS5 EUCUMMINS6 EUONAN	SC IV.2, V.1	<b>40 CFR 60.4233(d)</b>
5. VOC	1.0 g/HP-hr (86 ppmvd @15% O2)	Hourly*	EUCUMMINS4 EUCUMMINS5 EUCUMMINS6 EUONAN	SC IV.2, V.1	<b>40 CFR 60.4233(d)</b>

\* If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

6. Emergency stationary ICE manufactured after January 1, 2009, which are greater than or equal to 25 horsepower (HP) must comply with the emission standards in Table 1 of 40 CFR Part 60, Subpart JJJJ (with the exception of gasoline and rich burn engines that use liquefied petroleum gas (LPG)) **(40 CFR 60.4233(d))**

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall operate each emergency stationary ICE according to the requirements in paragraphs below: **(40 CFR 60.4243(d)(1) and (2))**
  - a. There is no time limit on the use of emergency stationary ICE in emergency situations;

- b. The permittee may operate each emergency stationary ICE for a maximum of 100 hours per calendar year for any of the following combination of the purposes:
  - i. For maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission authority or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
2. The permittee may operate the emergency stationary ICE for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.4243(d)(2). Except as provided in 40 CFR 40.423(d)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d)(3))**

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

1. The permittee shall equip the emergency stationary ICE with a non-resettable hour meter to track the number of operating hours. **(40 CFR 60.4237)**
2. Except as provided in SC IV.3, and SC V.1, the engine must be installed and configured according to the manufacturer's emission-related specifications: **(40 CFR 60.4243(a)(1))**
  - a. The permittee shall operate and maintain the emergency stationary ICE and control device according to the manufacturer's emission-related written instructions;
  - b. The permittee shall adjust engine settings according to and consistent with the manufacturer's instructions, and the emergency stationary ICE will not be considered out of compliance; and
  - c. The permittee shall meet the requirements of 40 CFR Part 1068, Subparts A to D, as applicable.
3. If the engine and control device (if applicable) are not operated and maintained according to the manufacturer's emission-related written instructions, the engine will be considered non-certified, and the permittee must demonstrate compliance as follows: **(40 CFR 60.4243(a)(2))**
  - a. For each emergency stationary ICE less than 100 HP, the permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required;
  - b. For each emergency stationary ICE greater than or equal to 100 HP, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
4. Except as provided in SC IV.2 and SC V.1, for 2009 model year and later engines, the permittee must comply with the emission standards specified in 40 CFR 60.4233(d) by purchasing an engine certified to the emission standards in Table 1 to Subpart JJJJ for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. **(40 CFR 60.4243(a))**

#### **V. TESTING/SAMPLING**

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

1. If the engine and control device (if applicable) are not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, the permittee must demonstrate compliance as follows: **(40 CFR 60.4243(a)(2))**
  - a. For each emergency stationary ICE greater than or equal to 100 HP and less than 500 HP, conduct an initial performance test within 1 year of engine startup to demonstrate compliance;

- b. For each emergency stationary ICE greater than 500 HP, conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter, to demonstrate compliance.
- 2. The permittee shall verify NOx, NOx + hydrocarbons (HC), CO, and VOC emission rates from FGNSPSJJJJ by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A

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

- 3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

**VI. MONITORING/RECORDKEEPING**

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

- 1. The permittee shall maintain records of the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **(40 CFR 60.4245(b))**
- 2. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. **(40 CFR 60.4245(b))**
- 3. The permittee shall maintain an up-to-date list of all units subject to the federal Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ. The list shall include each engine's location, manufacturer, model ID/serial number, year of installation, and power rating. **(R 336.1213(3)(b)(ii))**

**VII. REPORTING**

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

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the federal Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, as specified in 40 CFR Part 60, Subparts A and JJJJ. **(40 CFR Part 60, Subparts A and JJJJ)**

**Footnotes:**

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

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

**FG287**  
**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Maintenance paint booth and campus printing operations. (PTI No. 32-05)

**Emission Units:** EUPAINTING, EUPRINTING

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/Operating Scenario	Equipment	Underlying Applicable Requirement
1. Coatings	200 Gallons/month (minus water as applied) <sup>2</sup>	Calendar month	Each emission unit	<b>R 336.1201(3)</b>

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

NA

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

1. All exhaust systems shall be supplied with a properly installed and operating particulate control system.<sup>2</sup> **(R 336.1910)**

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep monthly coatings usage rate records in gallons per month of coating used, as applied, minus water, per emission unit.<sup>2</sup> **(R 336.1201(3))**
2. The permittee shall promptly notify the AQD District Supervisor of new Rule 287(2)(c) exempt equipment installation.<sup>2</sup> **(R 336.1201(3))**

**See Appendix 4**

**VII. REPORTING**

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

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

## **FGCOLDCLEANERS 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:** EUCOLDCLEANER

### **POLLUTION CONTROL EQUIPMENT**

NA

### **I. EMISSION LIMIT(S)**

NA

### **II. MATERIAL LIMIT(S)**

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

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

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

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

1. The cold cleaner must meet one of the following design requirements:
  - a. The air/vapor interface of the cold cleaner is no more than ten square feet; **(R 336.1281(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))**

See Appendix 8

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

NA

#### **IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

## E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that the requirements identified in the table below are not applicable to the specified emission unit(s) and/or flexible group(s). This determination is incorporated into the permit shield provisions set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii). If the permittee makes a change that affects the basis of the non-applicability determination, the permit shield established as a result of that non-applicability decision is no longer valid for that emission unit or flexible group.

<b>Emission Unit/Flexible Group ID</b>	<b>Non-Applicable Requirement</b>	<b>Justification</b>
FGNSPSIII	40 CFR Part 63, Subpart ZZZZ	See below
FGNSPSJJJ	40 CFR Part 63, Subpart ZZZZ	See below

40 CFR 63.6585(f)(3) exempts institutional emergency stationary Reciprocating Internal Combustion Engines at area sources of HAPs, from the requirements of the federal National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, as specified in 40 CFR Part 63, Subparts A and ZZZZ. Institutional emergency stationary RICE is defined in 63.6675, as:

*Emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.*

## APPENDICES

### Appendix 1. Acronyms and Abbreviations

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

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

## Appendix 2. 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

### Section 3.1

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

For every 1000 cubic feet of natural gas burned at the power plant facility, permittee shall reduce allowed quarterly fuel oil limitation by 5.6 gallons.  $(750,000 - (\text{cubic feet of natural gas combusted} * 5.6/1000)) = \text{allowed gallons per quarter of fuel oil.}$

The frequency of determination for amount of fuel oil burned in the facility shall be as follows:

- a. If the power plant is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source;
- b. If the power plant is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section. (40 CFR Part 60, Subpart GG, Section 60.334(b))

### Section 3.2

All monitoring requirements will be followed in accordance with the applicable provisions of 40 CFR Part 60, Subpart A, specific requirements include section: 60.13 (a)(b)(e)(f)(g)(h) and (i).

### Section 3.3

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced for FGPOWERPLANT. All monitoring requirements shall be followed in accordance with the applicable provisions of 40 CFR Part 60, Subpart GG. Specific requirements include: Section 60.334(C)(1)(2)(3)(4)

## Appendix 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in EUBLR5. Alternative formats must be approved by the AQD District Supervisor.

### 40 CFR Subpart Db 60.49b Reporting and recordkeeping requirements.

Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the nitrogen oxides standards under 40 CFR 60.44b shall maintain records of the following information for each steam generating unit operating day:

1. Calendar date;
2. The average hourly nitrogen oxides emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/million BTU heat input) measured or predicted;

3. The 30-day average nitrogen oxides emission rates (ng/J or lb/million BTU heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
4. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
5. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
6. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
7. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
8. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system;
9. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3;
10. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

### 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 EUBLR5 and EUGASTURBINE. All testing procedure requirements shall be followed in accordance with the applicable provisions of 40 CFR Part 60, Subpart Db and GG.

### 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-K2460-2015. 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-K2460-2015a is being reissued as Source-Wide PTI No. MI-PTI-K2460-2021.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
190-15 and 218-15	201600196 / March 7, 2017	<p>Incorporate PTI 190-15 that installs a 1500 kW diesel-fueled emergency generator for back-up power supply for the new Biosciences Building on campus. The engine is subject to the New Source Performance Standards (NSPS) for Compression Ignition Stationary Engines, 40 CFR Part 60, Subpart IIII.</p> <p>And incorporate PTI 218-15, which is for the installation of natural gas burners (low-NOx burners) in EUBLR4. Additionally, a removable floor will be installed in EUBLR4, which will separate the wood firing grates from the boiler, restricting the boiler from burning any wood while it is burning gas. The removable floor will minimize excess air from the bottom of the</p>	EUBIOSCIENCES EUBLR4

		boiler, to maximize efficiency while the boiler burns gas.	
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## Appendix 7. Emission Calculations

### Section 7.1

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EUBLR5, FGBLR1&2, and FGPOWERPLANT.

For every 1000 cubic feet of natural gas burned at the power plant facility, permittee shall reduce allowed quarterly fuel oil limitation by 5.6 gallons.  $(750,000 - (\text{cubic feet of natural gas combusted} * 5.6/1000)) = \text{allowed gallons per quarter of fuel oil.}$

Annual capacity factor shall be determined on a twelve-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

### Section 7.2

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EUGASTURBINE. All emission calculation requirements shall be followed in accordance with the applicable provisions of 40 CFR Part 60, Subpart GG, specific requirements include: Section 60.332(a)(1)(3), f and j.

## 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

The permittee shall use the following approved formats and procedures for the reporting requirements referenced in tables EUBLR5 and EUGASTURBINE. All reporting requirements shall be followed in accordance with the applicable provisions of 40 CFR Part 60, Subpart A, Db, and GG. Specific requirements include Subpart A, Section 60.7(c) and (d), Subpart Db, Section 60.49b, and Subpart GG, Section 60.334(c). Alternative formats must be approved by the AQD District Supervisor.