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

EFFECTIVE DATE: October 16, 2019 REVISION DATES: September 1, 2020, April 5, 2023

**ISSUED TO** 

## **William Beaumont Hospital**

State Registration Number (SRN): G5067

LOCATED AT

3601 West 13 Mile Road, Royal Oak, Michigan 48073

## RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-G5067-2019b

Expiration Date: October 16, 2024

Administratively Complete ROP Renewal Application Due Between April 16, 2023 and April 16, 2024

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-G5067-2019b

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

Joyce Zhu,	Warren	District Supervisor	

## **TABLE OF CONTENTS**

A. GENERAL CONDITIONS	4
Permit Enforceability	4
General Provisions.	
Equipment & Design	
Emission Limits	
Testing/Sampling	
Monitoring/Recordkeeping	
Certification & Reporting	
Permit Shield	
Reopenings	
Renewals	
Stratospheric Ozone Protection	
Risk Management Plan	
Emission Trading	
Permit to Install (PTI)	
B. SOURCE-WIDE CONDITIONS	11
C. EMISSION UNIT CONDITIONS	
EMISSION UNIT SUMMARY TABLE	
EU-BOILER1	15
D. FLEXIBLE GROUP CONDITIONS	17
FLEXIBLE GROUP SUMMARY TABLE	17
FG-BOILERS2&3	
FG-BOILERS4&5	
FG-FUELOIL	
FG-EMERGENCY	
FG-MACTZZZZ-EMER	
FG-ELECGEN1&2R	
FG-ELECGEN3R&4R	
FG-ETOSTERILIZERSFG-RULE287(2)(c)	
FG-COLDCLEANERS	
E. NON-APPLICABLE REQUIREMENTS	49
APPENDICES	50
Appendix 1. Acronyms and Abbreviations	50
Appendix 2. Schedule of Compliance	
Appendix 3. Monitoring Requirements	
Appendix 4. Recordkeeping	
Appendix 5. Testing Procedures	
Appendix 6. Permits to Install	
Appendix 7. Emission Calculations	
Appendix 8. Reporting	54

## **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:" (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. (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):
  - a. June 21, 1999,
  - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
  - c. The date on which a regulated substance is first present above a threshold quantity in a process.
- 40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
- 41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

## **Emission Trading**

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

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

<sup>&</sup>lt;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.

## C. EMISSION UNIT CONDITIONS

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

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

## **EMISSION UNIT SUMMARY TABLE**

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-BOILER1	Keeler Model No. DS-30 boiler. Heat input capacity of 39 MMBtu/hour. Capable of producing 30,000 pounds of steam per hour. Combusts natural gas and fuel oil No. 2.	01/01/1978	FG-FUELOIL
EU-BOILER2	Cleaver-Brooks Model D-60-RH (D-series) boiler. Heat input capacity of 48.2 MMBtu/hour using natural gas fuel and 46.4 MMBtu/hour using fuel oil No. 2. Capable of producing 40,000 pounds of steam per hour.	02/01/1998	FG-BOILER2&3, FG-FUELOIL
EU-BOILER3	Cleaver-Brooks Model D-52 (D-series) boiler. Heat input capacity of 48.2 MMBtu/hour using natural gas fuel and 46.4 MMBtu/hour using fuel oil No. 2. Capable of producing 40,000 pounds of steam per hour.	06/26/2002	FG-BOILER2&3, FG-FUELOIL
EU-BOILER4	Erie City boiler. Heat input capacity of 48 MMBtu/hour and capable of producing 40,000 pounds of steam per hour. Combusts natural gas and fuel oil No. 2.	01/01/1973/ 09/09/1998	FG-BOILER4&5, FG-FUELOIL
EU-BOILER5	Keeler Model No. DS-40 boiler. Heat input capacity of 48 MMBtu/hour and capable of producing 40,000 pounds of steam per hours. Combusts natural gas and fuel oil No. 2.	01/01/1973/ 09/09/1998	FG-BOILER4&5, FG-FUELOIL
EU-ELECGEN6	Caterpillar Model 3512 internal combustion engine electrical generator. Heat input capacity of 10.0 MMBtu/hour and capable of producing 1,300 kilowatts of electricity. Combusts fuel oil No. 2.	02/01/1998	FG-FUELOIL, FG-EMERGENCY FG-MACTZZZZ-EMER
EU-ELECGEN7	Caterpillar Model 3512 internal combustion engine electrical generator. Heat input capacity of 10.0 MMBtu/hour and capable of producing 1,300 kilowatts of electricity. Combusts fuel oil No. 2.	02/01/1998	FG-FUELOIL, FG-EMERGENCY FG-MACTZZZZ-EMER
EU-ELECGEN8	Caterpillar Model 3516B internal combustion engine electrical generator. Heat input capacity of 17.0 MMBtu/hour. Capable of producing 2,000 kilowatts of electricity. Combusts fuel oil No. 2.	07/31/2002	FG-FUELOIL, FG-EMERGENCY FG-MACTZZZZ-EMER

Emission Unit ID	Emission Unit Description	Installation	Flexible Group ID
	(Including Process Equipment & Control Device(s))	Date/ Modification Date	
EU-ELECGEN9	Caterpillar Model 3516B internal combustion engine electrical generator. Heat input capacity of 17.0 MMBtu/hour. Capable of producing 2,000 kilowatts of electricity. Combusts fuel oil No. 2.	07/31/2002	FG-FUELOIL, FG-EMERGENCY FG-MACTZZZZ-EMER
EU-RESGEN1	Caterpillar Model 3508B internal combustion engine electrical generator. Heat input capacity of 6.7 MMBtu/hour. Capable of producing 900 kilowatts of electricity. Combusts fuel oil No. 2.	01/01/1999	FG-MACTZZZZ-EMER
EU-RESGEN2	Caterpillar Model 3508B internal combustion engine electrical generator. Heat input capacity of 6.7 MMBtu/hour. Capable of producing 900 kilowatts of electricity. Combusts fuel oil No. 2.	01/01/1999	FG-MACTZZZZ-EMER
EU-ELECGEN1R	Caterpillar Model 3516C internal combustion engine electrical generator. Heat input capacity of 19.0 MMBtu/hour. Capable of producing 2,000 kilowatts of electricity. Combusts fuel oil No. 2. Manufactured in 2013.	06/26/2015	FG-ELECGEN1&2R
EU-ELECGEN2R	Caterpillar Model 3516C internal combustion engine electrical generator. Heat input capacity of 19.0 MMBtu/hour. Capable of producing 2,000 kilowatts of electricity. Combusts fuel oil No. 2. Manufactured in 2013.	01/15/2016	FG-ELECGEN1&2R
EU-ELECGEN3R	Caterpillar Model 3516C internal combustion engine electrical generator. Heat input capacity of 23.5 MMBtu/hour. Capable of producing 2,500 kilowatts of electricity. Combusts fuel oil No. 2.	01/11/2023	FG-ELECGEN3R&4R
EU-ELECGEN4R	Caterpillar Model 3516C internal combustion engine electrical generator. Heat input capacity of 23.5 MMBtu/hour. Capable of producing 2,500 kilowatts of electricity. Combusts fuel oil No. 2.	01/11/2023	FG-ELECGEN3R&4R
EU-ETOSTERILIZER1	One 3M Steri-Vac 8XL Gas Sterilizer, 100% ethylene oxide (EtO) sterilizer. The sterilizer is controlled by one of three Advanced Air Technologies (AAT) Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters.	07/18/2013/ 02/26/2014	FG-ETOSTERILIZERS
EU-ETOSTERILIZER2	One 3M Steri-Vac 8XL Gas Sterilizer, 100% ethylene oxide (EtO) sterilizer. The sterilizer is controlled by one of three Advanced Air Technologies (AAT) Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters.	07/18/2013/ 02/26/2014	FG-ETOSTERILIZERS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-ETOSTERILIZER3	One 3M Steri-Vac 5XL Gas Sterilizer, 100% ethylene oxide (EtO) sterilizer. The sterilizer is controlled by one of three Advanced Air Technologies (AAT) Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters.	07/18/2013/ 02/26/2014	FG-ETOSTERILIZERS
EU-ETOSTERILIZER4	One 3M Steri-Vac 5XL Gas Sterilizer, 100% ethylene oxide (EtO) sterilizer. The sterilizer is controlled by one of three Advanced Air Technologies (AAT) Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters.	07/18/2013/ 02/26/2014	FG-ETOSTERILIZERS
EU-WOODSHOP	Woodworking shop used on a nonproduction basis, controlled by a dust collector; shop includes a paint spray booth.	10/11/1986	FG-RULE287(2)(c)
EU-CCGARAGE	Cold cleaner located in the garage.	05/01/2004	FG-COLDCLEANERS

## EU-BOILER1 EMISSION UNIT CONDITIONS

## **DESCRIPTION**

Keeler Model No. DS-30 boiler. Heat input capacity of 39 MM BTU/hour. Capable of producing 30,000 pounds of steam per hour. Combusts natural gas and fuel oil No. 2.

Flexible Group ID: FG-FUELOIL

## **POLLUTION CONTROL EQUIPMENT**

NA

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/	Equipment	Monitoring/	<b>Underlying Applicable</b>
		Operating Scenario		<b>Testing Method</b>	Requirements
1. SO <sub>2</sub>	0.33 lb/MMBtu	24-hour	EU-BOILER1	SC VI.3,	R 336.1401,
	of heat input2			FG-FUELOIL	R 336.2803,
				SC VI.1	R 336.2804,
					40 CFR 52.21(c) & (d)

#### II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn virgin fuel oil No. 2 during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. The periodic testing on liquid fuel shall not exceed a combined total of 48 hours, for each boiler, during any calendar year.<sup>2</sup> (40 CFR Part 63 Subpart JJJJJJ)

#### 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 not burn any fuel in EU-BOILER1 other than natural gas and/or virgin fuel oil No. 2.2 (R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 2. The permittee shall monitor and record natural gas and fuel oil No. 2 usage on a monthly basis.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 3. The permittee shall calculate the  $SO_2$  emission rate using the method in Appendix 7.1.<sup>2</sup> (R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

- 4. The permittee shall calculate the NOx emission rate using the method and emission factors in Appendix 7.2.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 5. The permittee shall develop and implement, in accordance with good engineering practices, a routine preventative maintenance plan for EU-BOILER1. The permittee shall record all completed preventative maintenance events.<sup>2</sup> (R 336.1910, R 336.1911)
- 6. The permittee shall monitor and keep records of the number of hours EU-BOILER1 was operated on liquid fuel for periodic testing, maintenance, or operator training during each calendar year. (**R 336.1213**)

## 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:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-STACK1	482	1312	R 336.1401 R 336.2803 R 336.2804 40 CFR 52.21(c) & (d)

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

## D. FLEXIBLE GROUP CONDITIONS

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

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

## **FLEXIBLE GROUP SUMMARY TABLE**

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

Flexible Group ID	Flexible Group Description	Associated
1 loxible Group is	Tioxible Group Boothpatin	Emission Unit IDs
FG-BOILERS2&3	Boiler 2 and Boiler 3. Both boilers combust natural gas as their primary fuel source, but also have the capability of combusting fuel oil No. 2.	EU-BOILER2, EU-BOILER3
FG-BOILERS4&5	Boiler 4 and Boiler 5. Both boilers combust natural gas as their primary fuel source, but also have the capability of combusting fuel oil No. 2.	EU-BOILER4, EU-BOILER5
FG-FUELOIL	Emission units subject to a sulfur dioxide emission standard and a fuel oil certification or analysis requirement. Some emission units are also subject to fuel usage limits.	EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER5, EU-COGEN1, EU-COGEN2, EU-ELECGEN6, EU-ELECGEN7, EU-ELECGEN8, EU-ELECGEN9, EU-RESGEN1, EU-RESGEN2
FG-EMERGENCY	Includes six permitted engines that were classified as existing institutional emergency stationary reciprocating internal combustion engines located at an area source of hazardous air pollutants under 40 CFR Part 63, Subpart ZZZZ.	EU-ELECGEN6, EU-ELECGEN7, EU-ELECGEN8, EU-ELECGEN9
FG-MACTZZZZ-EMER	Includes two existing institutional emergency stationary reciprocating internal combustion engines (EU-RESGEN1, EU-RESGEN2) that are exempt from obtaining a Permit to Install pursuant to R 336.1285(g).	EU-ELECGEN6, EU-ELECGEN7, EU-ELECGEN8, EU-ELECGEN9, EU-RESGEN1, EU-RESGEN2
FG-ELECGEN1&2R	Two 2,000 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.	EU-ELECGEN1R, EU-ELECGEN2R
FG-ELECGEN3R&4R	Two 23.5 MMBTU/hr, 3633bhp (2500 kilowatts (kW)), diesel-fueled emergency engines with a model year of 2011 or later, and a displacement of 4.88 liters/cylinder.	EU-ELECGEN3R, EU-ELECGEN4R

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-ETOSTERILIZERS	Two (2) 3M Steri-Vac 8XL Gas Sterilizer and two (2) 3M Steri-Vac 5XL Gas Sterilizer, each controlled by one of the three Advanced Air Technologies Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters.	EU-ETOSTERILIZER1, EU-ETOSTERILIZER2, EU-ETOSTERILIZER3, EU-ETOSTERILIZER4
FG-RULE287(2)(c)	Any existing or future emission unit that emits air contaminants that are exempt from R 336.1201 pursuant R 336.1278 and R 336.1287(c)	EU-WOODSHOP
FG-COLDCLEANERS	Any existing cold cleaner (in operation prior to July 1, 1979) or new cold cleaner (in operation after July 1, 1979) that is exempt from R 336.1201 pursuant R 336.1281(h) or R 336.1285(r)(iv)	EU-CCGARAGE

# FG-BOILERS2&3 FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Boiler 2 and Boiler 3. Both boilers combust natural gas as their primary fuel source, but also have the capability of combusting fuel oil No. 2.

Emission Units: EUBOILER2, EUBOILER3

## **POLLUTION CONTROL EQUIPMENT**

NA

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

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	23.0 tpy, for each boiler individually <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-BOILER2, EU-BOILER3	SC VI.4	40 CFR 52.21(c) & (d)
2. VE	6-minute average of 20% opacity, except for one 6- minute average per hour of not more than 27% opacity. The opacity standard shall apply at all times except during periods of startup, shutdown or malfunction. <sup>2</sup>		EU-BOILER2, EU-BOILER3	GC 11, SC VI.6	40 CFR 60.43c (c) & (d)
3. SO <sub>2</sub>	1.7 pounds per calendar day, for each boiler individually <sup>2</sup>	Calendar month average	EU-BOILER2, EU-BOILER3	SC VI.2	R 336.1401, 40 CFR 52.21(c) & (d)

Note: A calendar day is defined as 24 consecutive hours from midnight to midnight.

## II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/ Operating	Equipment		Underlying Applicable
			Scenario		Testing	Requirements
					Method	
1	. Natural Gas	420 MMscf per	12-month rolling time	EU-BOILER2,	SC VI.1	40 CFR 52.21(c) & (d),
		year, for each	period as determined at	EU-BOILER3		40 CFR 60.48c(g)
		boiler	the end of each calendar			
		individually <sup>2</sup>	month			
2	. Fuel Oil No. 2	200,000 gallons	12-month rolling time	EU-BOILER2,	SC VI.1	40 CFR 52.21(c) & (d),
		per year, for	period as determined at	EU-BOILER3		40 CFR 60.48c(g)
		each boiler	the end of each calendar			
		individually <sup>2</sup>	month			

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn virgin fuel oil No. 2 in EU-BOILER2 and EU-BOILER3 during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. The periodic testing on liquid fuel shall not exceed a combined total of 48 hours, for each boiler, during any calendar year.<sup>2</sup> (40 CFR Part 63 Subpart JJJJJJ)

## 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 monthly and 12-month rolling natural gas and fuel oil No. 2 usage records for EU-BOILER2 and EU-BOILER3 in a format acceptable to the AQD District Supervisor of the amount of natural gas used in MM cubic feet and of the amount of fuel oil used in gallons each calendar month. The records shall indicate the total amount of natural gas and fuel oil used.<sup>2</sup> (40 CFR 52.21(c) & (d), 40 CFR 60.48c(g))
- 2. The permittee shall calculate average daily SO<sub>2</sub> emissions from EU-BOILER2 and EU-BOILER3 each calendar month using the method delineated in Appendix 7.1.<sup>2</sup> (R 336.1401, 40 CFR 52.21(c) & (d))
- 3. The permittee shall keep a record of the number of operating days in each calendar month for EU-BOILER2 and EU-BOILER3.<sup>2</sup> (R 336.1401, 40 CFR 52.21(c) & (d))
- 4. The permittee shall calculate NOx emissions from EU-BOILER2 and EU-BOILER3 each calendar month and 12-month rolling time period, as determined at the end of each calendar month, using the method and emission factors delineated in Appendix 7.2.<sup>2</sup> (40 CFR 52.21(c) & (d))
- 5. The permittee shall keep a record of the emission calculations for EU-BOILER2 and EU-BOILER3.<sup>2</sup> (40 CFR 52.21(c) & (d))
- 6. The permittee shall develop and implement, in accordance with good engineering practices, a routine preventative maintenance plan for EU-BOILER2 and EUBOILER3. The permittee shall record all preventative maintenance events and have the records available upon request.<sup>2</sup> (R 336.1910, R 336.1911)

7. The permittee shall monitor and keep records of the number of hours EU-BOILER2 and EU-BOILER3 were operated on liquid fuel for periodic testing, maintenance, or operator training during each calendar year.<sup>2</sup> (40 CFR Part 63, Subpart JJJJJJ)

#### 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:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-STACK1	48 <sup>2</sup>	131 <sup>2</sup>	R 336.1224, 40 CFR 52.21(c) & (d)

## IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Unit.<sup>2</sup> (40 CFR 60 Subpart Dc)

#### Footnotes:

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

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

# FG-BOILERS4&5 FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Boiler 4 and Boiler 5. Both boilers combust natural gas as their primary fuel source, but also have the capability of combusting fuel oil No. 2.

Emission Units: EU-BOILER4, EU-BOILER5

## **POLLUTION CONTROL EQUIPMENT**

NA

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

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	48.5 tpy combined <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month		SC VI.4	40 CFR 52.21(c) & (d)
2. VE	6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity. The opacity standard shall apply at all times except during periods of startup, shutdown or malfunction. <sup>2</sup>	6-minute average per hour	EU-BOILER4, EU-BOILER5	GC 11, SC VI.6	40 CFR 60.43c(c) & (d)
3. SO2	1.1 pounds combined for each calendar day. <sup>2</sup>	Calendar month average	EU-BOILER4, EU-BOILER5	SC VI.2	R 336.1401, 40 CFR 52.21(c) & (d)

Note: A calendar day is defined as 24 consecutive hours from midnight to midnight.

## II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas	693.8 MMscf combined per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-BOILER4, EU-BOILER5	SC VI.1	40 CFR 52.21(c) & (d), 40 CFR 60.48c(g)
2. Fuel Oil No. 2	5,250 gallons combined per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-BOILER4, EU-BOILER5	SC VI.1	40 CFR 52.21(c) & (d), 40 CFR 60.48c(g)

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn virgin fuel oil No. 2 in EU-BOILER4 and EU-BOILER5 during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. The periodic testing on liquid fuel shall not exceed a combined total of 48 hours, for each boiler, during any calendar year.<sup>2</sup> (40 CFR Part 63, Subpart JJJJJJ)

## 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 monthly and 12-month rolling natural gas and fuel oil No. 2 usage records for EU-BOILER4 and EU-BOILER5 in a format acceptable to the AQD District Supervisor of the amount of natural gas used, in MM cubic feet, and of the amount of fuel oil used, in gallons, each calendar month. The records shall indicate the total amount of natural gas and fuel oil used.<sup>2</sup> (40 CFR 52.21(c) & (d), 40 CFR 60.48c(g))
- 2. The permittee shall calculate average daily SO<sub>2</sub> emissions from EU-BOILER4 and EU-BOILER5 each calendar month and on a rolling 12-month time period using the method delineated in Appendix 7.1.<sup>2</sup> (R 336.1401, 40 CFR 52.21(c) & (d))
- 3. The permittee shall keep a record of the number of operating days in each calendar month for EU-BOILER4 and EU-BOILER5.<sup>2</sup> (R 336.1401, 40 CFR 52.21(c) & (d))
- 4. The permittee shall calculate NOx emissions from EU-BOILER4 and EU-BOILER5 each calendar month and 12-month rolling time period, as determined at the end of each calendar month, using the method and emission factors delineated in Appendix 7.2.<sup>2</sup> (40 CFR 52.21(c) & (d))
- 5. The permittee shall keep a record of the emission calculations for EU-BOILER4 and EU-BOILER5.2 (40 CFR 52.21(c) & (d))
- 6. The permittee shall develop and implement, in accordance with good engineering practices, a routine preventative maintenance plan for EU-BOILER4 and EU-BOILER5. The permittee shall record all preventative maintenance events and have the records available upon request.<sup>2</sup> (R 336.1910, R 336.1911)

7. The permittee shall monitor and keep records of the number of hours EU-BOILER4 and EU-BOILER5 were operated on liquid fuel for periodic testing, maintenance, or operator training during each calendar year.<sup>2</sup> (40 CFR Part 63, Subpart JJJJJJ)

#### 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:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BOILER4	30.02	35.1 <sup>2</sup>	R 336.1224, 40 CFR 52.21(c) & (d)
2. SV-BOILER5	42.02	35.1 <sup>2</sup>	R 336.1224, 40 CFR 52.21(c) & (d)

## IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Unit.<sup>2</sup> (40 CFR 60 Subpart Dc)

#### Footnotes:

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

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

## FG-FUELOIL FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Emission units subject to a sulfur dioxide emission standard and a fuel oil certification or analysis requirement. Some emission units are also subject to fuel usage limits.

Emission Units: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-ELECGEN6,

EU-ELECGEN7, EU-ELECGEN8, EU-ELECGEN9

## POLLUTION CONTROL EQUIPMENT

NA

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

NA

## II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel Oil No. 2	65,000 gallons combined per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	period as EU-ELECGEN7 lined at the of each		40 CFR 52.21(c) & (d)
2. Fuel Oil No. 2	65,000 gallons combined per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-ELECGEN8, EU-ELECGEN9	SC VI.2	40 CFR 52.21(c) & (d)
3. Sulfur content in fuel	15 ppm sulfur in fuel by weight in each fuel shipment. <sup>2</sup>	Each fuel oil shipment	FG-FUELOIL	SC VI.1	R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR 60.42c(d)

## 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

#### 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, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in any emission unit in FG-FUELOIL, demonstrating that the fuel sulfur content meets the requirement for all emission units covered in FG-FUELOIL. The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil.<sup>2</sup> (R 336.1205(1)(a), R 336.1401, 40 CFR 60.48c(f))

- 2. The permittee shall keep fuel oil usage records for EU-ELECGEN6, EU-ELECGEN7, EU-ELECGEN8 and EU-ELECGEN9 in a format acceptable to the AQD District Supervisor indicating the amount of fuel used in gallons each calendar monthly and 12-month rolling. The records shall indicate the total amount of fuel oil used.<sup>2</sup> (40 CFR 52.21(c) & (d))
- 3. The permittee shall develop and implement, in accordance with good engineering practices, a routine preventative maintenance plan for EU-ELECGEN6, EU-ELECGEN7, EU-ELECGEN8 and EU-ELECGEN9. The permittee shall record all preventative maintenance events and have the records available upon request.<sup>2</sup> (R 336.1910, R 336.1911)

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))
- 4. The permittee shall submit semiannual reports consisting of fuel oil analyses either conducted by the fuel oil supplier or an independent laboratory and a certified statement signed by a responsible official indicating that the analysis submitted represents all of the fuel oil combusted during the reporting period. Each semiannual report shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period. The semiannual reporting periods shall coincide with the reporting periods specified for the semiannual deviation reports (January 1 through June 30 and July 1 through December 31, respectively).<sup>2</sup> (40 CFR 60.48c(d), 40 CFR 60.48c(e), 40 CFR 60.8(j))

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

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

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

## FG-EMERGENCY FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Includes six permitted engines that were classified as existing institutional emergency stationary reciprocating internal combustion engines located at an area source of hazardous air pollutants under 40 CFR Part 63, Subpart ZZZZ.

Emission Units: EU-ELECGEN6, EU-ELECGEN7, EU ELECGEN8, EU-ELECGEN9

## POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any engine in FG-EMERGENCY for more than 500 hours per year on a 12-month rolling time period basis, as determined at the end of each calendar month.<sup>2</sup> (R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FG-EMERGENCY with a non-resettable hour meter to track the operating hours.<sup>2</sup> (R 336.1205(1)(a))

## 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 monitor and record the total hours of operation and the hours of operation during non-emergencies for each engine in FG-EMERGENCY, on a monthly and 12-month rolling time period basis, as determined at the end of each calendar month, in a manner that is acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of each engine of FG-EMERGENCY, including what classified the operation as emergency and how many hours are spent for non-emergency operation. All records shall be kept on file and made available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a))
- 2. The permittee shall maintain the following record for each engine in FG-EMERGENCY. The following information shall be recorded and kept on file at the facility:
  - a. Engine manufacturer;

- b. Date engine was manufactured;
- c. Engine model number;
- d. Engine horsepower;
- e. Engine serial number;
- f. Engine specification sheet;
- g. Date of initial startup of the engine; and
- h. Date engine was removed from service at this stationary source.

All of the above information shall be stored in a format acceptable to the AQD District Supervisor.<sup>2</sup> (R 336.1301, R 336.1702, R 336.1910, R 336.1911, R 336.1912)

## 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:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-ELECGEN6	15.6 <sup>2</sup>	50 <sup>2</sup>	R 336.1224, 40 CFR 52.21(c) & (d)
2. SV-ELECGEN7	15.6 <sup>2</sup>	50 <sup>2</sup>	R 336.1224, 40 CFR 52.21(c) & (d)
3. SV-ELECGEN8	18 <sup>2</sup>	372	R 336.1224, 40 CFR 52.21(c) & (d)
4. SV-ELECGEN9	18 <sup>2</sup>	372	R 336.1224, 40 CFR 52.21(c) & (d)

#### IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all 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 FG-EMERGENCY.<sup>2</sup> (40 CFR Part 63, Subparts A & ZZZZ)

## Footnotes:

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

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

## FG-MACTZZZZ-EMER FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Includes four permitted engines that were classified as existing institutional emergency stationary reciprocating internal combustion engines located at an area source of hazardous air pollutants under 40 CFR Part 63, Subpart ZZZZ. Also, includes two existing institutional emergency stationary reciprocating internal combustion engines (EU-RESGEN1, EU-RESGEN2) that are exempt from obtaining a Permit to Install pursuant to R 336.1285(g).

Emission Units: EU-ELECGEN6, EU-ELECGEN7, EU ELECGEN8, EU-ELECGEN9, EU-RESGEN1,

**EU-RESGEN2** 

## **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

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

- 1. Engines in FG-MACTZZZZ-EMER shall not operate or be contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), as stated in SC IV.4.b.ii. and iii below. (40 CFR 63.6585(f)(3))
- 2. Engines in FG-MACTZZZZ-EMER shall not be used to supply power as part of a financial arrangement with another entity. (40 CFR 63.6585(f)(3))
- 3. In order for an engine to be considered an emergency stationary RICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), and listed below, is prohibited. If you do not operate the engine according to the requirements in paragraphs 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and will need to meet all requirements for non-emergency engines.
  - a. There is no time limit on the use of emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
  - b. You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs 40 CFR 63.6640(f)(2)(i) through (iii), listed below, for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs 40 CFR 63.6640(f) counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

i. Emergency stationary RICE may be operated 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 organization 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 calendar year.

- ii. Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- iii. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. (40 CFR 63.6640(f)(2)
- c. Emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. These 50 hours of operation are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. (40 CFR 63.6640(f)(3))

#### 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 monitor and record the total hours of operation and the hours of operation during non-emergencies for each engine in FG-MACTZZZZ-EMER, on a monthly and 12-month rolling time period basis, as determined at the end of each calendar month, in a manner that is acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of each engine of FG-MACTZZZZ-EMER, including what classified the operation as emergency and how many hours are spent for non-emergency operation. All records shall be kept on file and made available to the Department upon request. (R 336.1213(3))

## VII. REPORTING

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

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all 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 FG-MACTZZZZ-EMER. (40 CFR Part 63, Subparts A & ZZZZ)

## Footnotes:

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

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

## FG-ELECGEN1&2R FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Two 2,000 kilowatts (kW) diesel-fueled emergency engine manufactured in 2013.

Emission Units: EU-ELECGEN1R, EU-ELECGEN2R

## **POLLUTION CONTROL EQUIPMENT**

NA

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

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1 NIMHO I NOV	6.4	Hourly	Fach angine of	SC VI.2	40 CFR
1. NMHC + NOx	g/kW-hr²	Hourly	Each engine of FG-ELECGEN1&2R		60.4205(b)
2. CO	3.5	Hourly	Each engine of	SC VI.2	40 CFR
	g/kW-hr <sup>2</sup>	_	FG-ELECGEN1&2R		60.4205(b)
3. PM	0.20	Hourly	Each engine of	SC VI.2	40 CFR
	g/kW-hr <sup>2</sup>		FG-ELECGEN1&2R		60.4205(b)

## II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel, in each engine of FG-ELECGEN1&2R with the maximum sulfur content of 15 ppm (0.0015 percent) by weight.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate either engine of FG-ELECGEN1&2R 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) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))
- 2. The permittee may operate each engine of FG-ELECGEN1&2R 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, 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. Each engine of FG-ELECGEN1&2R 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 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)
- 3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart IIII, for the same model year, the permittee shall meet the following requirements for each engine of FG-ELECGEN1&2R:

a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.

- b. Keep a maintenance plan and the permittee may only change those engine settings that are permitted by the manufacturer. If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and
- c. Meet the requirements as specified in 40 CFR 89, as it applies to you.<sup>2</sup> (40 CFR 60.4211(a))
- 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 either engine of FG-ELECGEN1&2R 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 each engine of FG-ELECGEN1&2R with non-resettable hours meters to track the operating hours.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4209)
- 2. The nameplate capacity of each engine of FG-ELECGEN1&2R shall not exceed 2,000 kW, as certified by the equipment manufacturer.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4202, 40 CFR 89.112(a))

#### V. TESTING/SAMPLING

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

1. The permittee shall conduct an initial performance test for either engine of FG-ELECGEN1&2R within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engine has been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60 Subpart IIII. If a performance test is required, the performance test shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.<sup>2</sup> (40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60, Subpart IIII)

## 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 30th 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) & (3), 40 CFR 52.21 (c) & (d))
- 2. For each engine, the permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that each engine of FG-ELECGEN1&2R meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If either engine of FG-ELECGEN1&2R becomes uncertified, then the permittee must also keep records of a maintenance plan and of 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)
- 3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for each engine of FG-ELECGEN1&2R, on a monthly and 12-month rolling time period basis, as determined at the end of each calendar month, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of each engine of FG-ELECGEN1&2R, 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) & (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 each engine of FG-ELECGEN1&2R, demonstrating that the fuel sulfur

content meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 80.510(b))

5. The permittee shall develop and implement, in accordance with good engineering practices, a routine preventative maintenance plan for each engine of FG-ELECGEN1&2R. The permittee shall record all preventative maintenance events and have the records available upon request. (R336.1213(3), R 336.1910, R 336.1911)

## VII. REPORTING

- 1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of each engine of FG-ELECGEN1&2R.<sup>2</sup> (R 336.1201(7)(a))
- 2. The permittee shall submit a notification specifying whether each engine of FG-ELECGEN1&2R 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)
- 3. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 4. 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))
- 5. 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:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-ELECGEN1R	14.42	402	R 336.1225, 40 CFR 52.21 (c) & (d)
2. SV-ELECGEN2R	14.42	402	R 336.1225, 40 CFR 52.21 (c) & (d)

## 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, Subpart A and Subpart IIII, as they apply to each engine of FG-ELECGEN1&2R.<sup>2</sup> (40 CFR Part 60, Subparts A & 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, Subpart A and Subpart ZZZZ, as they apply to each engine of FG-ELECGEN1&2R, upon startup.<sup>2</sup> (40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6595)

## Footnotes:

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

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

## FG-ELECGEN3R&4R FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Two 23.5 MMBTU/hr, 3,633 bhp (2500 kilowatts (kW)), diesel-fueled emergency engines with a model year of 2011 or later, and a displacement of 4.88 liters/cylinder

Emission Units: EU-ELECGEN3R, EU-ELECGEN4R

#### POLLUTION CONTROL EQUIPMENT

NA

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/	Equipment	Monitoring/	Underlying
		Operating		<b>Testing Method</b>	Applicable
		Scenario			Requirements
1. NMHC + NOx <sup>A</sup>	6.4	Hourly	Each engine in	SC V.1, SC VI.2	40 CFR 60.4205(b),
	g/kW-hr <sup>2</sup>		FG-ELECGEN3R&4R		40 CFR 60.4202,
					Table 2 of Appendix I
					of 40 CFR 1039
2. CO <sup>A</sup>	3.5	Hourly	Each engine in	SC V.1, SC VI.2	40 CFR 60.4205(b),
	g/kW-hr <sup>2</sup>		FG-ELECGEN3R&4R		40 CFR 60.4202,
					Table 2 of Appendix I
					of 40 CFR 1039
3. PM <sup>A</sup>	0.20	Hourly	Each engine in	SC V.1, SC VI.2	40 CFR 60.4205(b),
	g/kW-hr <sup>2</sup>		FG-ELECGEN3R&4R		40 CFR 60.4202,
					Table 2 of Appendix I
					of 40 CFR 1039
4. NOx	25.6 tpy <sup>B,2</sup>	12-month	FG-ELECGEN3R&4R	SC VI.6	40 CFR 52.21(c) & (d)
		rolling time			
		period as			
		determined at			
		the end of			
		each calendar			
		month			

A These emission limits are for certified engines; if testing becomes required to demonstrate compliance, then the tested values must be compared to the Not to Exceed (NTE) requirements determined through 40 CFR 60.4212(c).

B Based on the emission factor 6.38 g/bhp-hr at maximum capacity of 3633 bhp at 500 hours as restricted in SC III.1

## II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel, in each engine of FG-ELECGEN3R&4R 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) & (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 1090.305)

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

1. The permittee shall not operate each engine in FG-ELECGEN3R&4R 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.2.2 (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))

- 2. The permittee may operate each engine in FG-ELECGEN3R&4R 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.<sup>2</sup> (40 CFR 60.4211(f)(2))
- 3. The permittee may operate each engine in FG-ELECGEN3R&4R up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted as part of the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.<sup>2</sup> (40 CFR 60.4211(f)(3))
- 4. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart IIII, for the same model year, the permittee shall meet the following requirements for each engine of FG-ELECGEN3R&4R:
  - 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 1068, as they apply to the engine.

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

5. 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 either engine of FG-ELECGEN3R&4R 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 each engine of FG-ELECGEN3R&4R with non-resettable hour meters to track the operating hours.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4209)
- 2. The nameplate capacity of each engine of FG-ELECGEN3R&4R shall not exceed 2,500 kW, as certified by the equipment manufacturer.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4202, 40 CFR 60.4205, 40 CFR 1039, 40 CFR 1042)

#### V. TESTING/SAMPLING

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

- 1. If any engine in FG-ELECGEN3R&4R is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
  - a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 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 you change emission-related settings in a way that is not permitted by the manufacturer.

ROP No: MI-ROP-G5067-2019b Expiration Date: October 16, 2024

PTI No: MI-PTI-G5067-2019b

- b. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.
- c. Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years thereafter, whichever comes first, to demonstrate compliance with the applicable emission standards.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.2 (40 CFR 60.4211(g) (3), 40 CFR 60.4212)

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.2 (R 336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d))
- 2. The permittee shall keep, in a satisfactory manner, the following records for each engine in FG-ELECGEN3R&4R:
  - a. For each certified engine: The permittee shall keep records of the manufacturer certification documentation.
  - b. For each uncertified engine: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request.2 (40 CFR 60.4211)

- 3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine in FG-ELECGEN3R&4R:
  - a. For each certified engine: The permittee shall keep records of the manufacturer's emission-related written instructions, and records demonstrating that the engine has been maintained according to those instructions, as specified in SC III.4.
  - b. For each uncertified engine: The permittee shall keep records of a maintenance plan, as required by SC III.5, 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)

- 4. The permittee shall monitor and record, the total hours of operation for each engine in FG-ELECGEN3R&4R on a monthly and 12-month rolling time period basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FG-ELECGEN3R&4R, on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of each engine in FG-ELECGEN3R&4RENGINES, 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) & (3), 40 CFR 60.4211, 40 CFR 60.4214)
- 5. 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 FG-ELECGEN3R&4R, demonstrating that the fuel meets the requirement of 40 CFR 1090.305. 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.2 (R 336.1205(1)(a) & (3), R 336.1402(1), 40 CFR 1090.305)
- 6. The permittee shall calculate and keep, in a manner acceptable to the AQD supervisor, records of monthly and 12-month rolling NO<sub>x</sub> emissions for FG-ELECGEN3R&4R during months of operation. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed in a method approved by the District Supervisor.<sup>2</sup> (40 CFR 52.21(c) & (d))

#### 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))
- 5. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of each engine of FG-ELECGEN3R&4R.<sup>2</sup> (R 336.1201(7)(a))
- 6. The permittee shall submit a notification specifying whether each engine of FG-ELECGEN3R&4R 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)

#### See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-STACK2	<b>36</b> <sup>2</sup>	126²	R 336.1225, 40 CFR 52.21(c) & (d)

#### 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 Subpart A and Subpart IIII, as they apply to each engine of FG-ELECGEN3R&4R.<sup>2</sup> (40 CFR Part 60, Subparts A & 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, Subpart A and Subpart ZZZZ, as they apply to each engine of FG-ELECGEN3R&4R, upon startup.<sup>2</sup> (40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6595)

#### Footnotes:

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

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

# FG-ETOSTERILIZERS FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Two (2) 3M Steri-Vac 8XL Gas Sterilizers and two (2) 3M Steri-Vac 5XL Gas Sterilizers, each controlled by one of the three Advanced Air Technologies Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters.

Emission Units: EU-ETOSTERILIZER1, EU-ETOSTERILIZER2, EU-ETOSTERILIZER3, EU-ETOSTERILIZER4

#### **POLLUTION CONTROL EQUIPMENT:**

Advanced Air Technologies Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters.

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. EtO	0.0059 pph <sup>2</sup>	Hourly	FG-	SC V.1,	R 336.1227(2)
		-	<b>ETOSTERILIZERS</b>	SC VI.3	
			(all sterilizers		
			combined)		
2. EtO	3.69 lb/year <sup>2</sup>	12-month rolling time	FG-	SC VI.2	R 336.1225(2),
	-	period as determined at	<b>ETOSTERILIZERS</b>		R 336.1702(a)
		the end of each calendar	(all sterilizers		
		month	combined)		

#### II. MATERIAL LIMIT(S)

1. The permittee shall not use more than 0.37 lb EtO per cycle/load in EU-ETOSTERILIZER1 or EU-ETOSTERILIZER2. Additionally, the permittee shall not use more than 0.22 lb EtO per cycle/load in EU-ETOSTERILIZER3 or EU-ETOSTERILIZER4.2 (R 336.1225, R 336.1702(a))

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

- 1. The permittee shall not operate any sterilizer associated with FG-ETOSTERILIZERS unless the Advanced Air Technologies Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the control system includes a minimum EtO destruction efficiency of 99.5 percent by weight, as well as, the Malfunction Abatement Plan (MAP) as described in SC III.2.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910)
- 2. The permittee shall not operate any sterilizer associated with FG-ETOSTERILIZERS unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 60 days of permit issuance, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)
- 3. The permittee shall sterilize full loads of items having a common aeration time, except under medically necessary circumstances, as that term is defined in 40 CFR 63.10448. (40 CFR 63.10390)

#### IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

1. The permittee shall not operate any sterilizer associated with FG-ETOSTERILIZERS unless each respective venturi and compressed air chamber exhaust system is installed, maintained, and operated in a satisfactory manner. The emission units shall not discharge EtO to a wastewater stream.<sup>2</sup> (R 336.1225, R 336.1702(a))

#### V. TESTING/SAMPLING

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

- 1. The permittee shall verify the EtO destruction efficiency of the acid scrubber and dry bed chemical filter system connected to the vents for EU-ETOSTERILIZER3 and EU-ETOSTERILIZER4 by testing at the owner's expense, in accordance with the Department requirements no later than May 30, 2020. 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 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 destruction efficiency of each acid scrubber and dry bed chemical filter system connected to the vents for EU-ETOSTERILIZER1 and EU-ETOSTERILIZER2 by testing at the owner's expense, in accordance with the Department requirements no later than September 30, 2024. 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 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(32), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall verify the EtO destruction efficiency of each acid scrubber and dry bed chemical filter system in FG-ETOSTERILIZERS, at a minimum, every five years from the date of the last test. This testing requirement may be waived if the most recent approved stack test results remain valid and representative and, an acceptable demonstration is made to and approved by the AQD District Supervisor. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1225, R 336.1702(a))
- 2. The permittee shall keep a separate monthly record of the following information:
  - a. The amount of EtO used in each sterilizer per cycle/load.
  - b. The number of cycles/loads processed in each sterilizer per calendar day and per calendar month.
  - c. EtO mass emission calculations determining the monthly emission rate, in pounds per calendar month, from each sterilizer, and for all sterilizers combined.

d. EtO mass emission calculations determining the annual emission rate in pounds per 12-month rolling time period as determined at the end of each calendar month, for each sterilizer and for all sterilizers combined.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1225, R 336.1702(a))

- 3. The permittee shall monitor a parameter of the Advanced Air Technologies Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters, based on either the manufacturer's specifications or a performance test, which assures at least 99.5 percent reduction of EtO emissions. A copy of the manufacturer's specifications for the control device shall be maintained on file.<sup>2</sup> (R 336.1225, R 336.1910)
- 4. The permittee shall keep the following in a satisfactory manner: records of the date, duration, and description of any malfunction of the control equipment; any maintenance performed; replacement of the Advanced Air Technologies Safe-Cell System Model 2002 acid scrubbers and dry bed chemical filters and any testing results for FG-ETOSTERILIZERS. All records shall be kept on file and made available to the Department upon request.<sup>2</sup> (R 336.1225, R 336.1910)
- 5. The permittee shall keep records of the date and time of any sterilization cycle that does not contain a full load of items. The records shall include a statement from a hospital central services staff, a hospital administrator, or a physician that it was medically necessary. (R 336.1213(3))
- 6. The permittee shall keep a copy of the Initial Notification of Compliance Status submitted to comply with 40 CFR 63 Subpart WWWWW. **(40 CFR 63.10432)**

#### 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 horizontally to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-ETOSTACK	18 <sup>2</sup>	35 <sup>2</sup>	R 336.1225,
			40 CFR 52.21 (c) & (d)

### IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart WWWWW for Hospital Ethylene Oxide Sterilizers by the initial compliance date.<sup>2</sup> (40 CFR Part 63, Subpart A and Subpart WWWWW)

#### Footnotes:

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

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

# FG-RULE287(2)(c) FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

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

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

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

#### POLLUTION CONTROL EQUIPMENT

Installed fabric filters on each paint booth. Dust collector installed on woodworking equipment.

#### I. EMISSION LIMIT(S)

NA

#### II. MATERIAL LIMIT(S)

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

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

NA

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

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

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 287(2)(c), Permit to Install Exemption Record form (EQP 3562) or in a format acceptable to the AQD District Supervisor. (R 336.1213(3))

- a. Volume of coating used, as applied, minus water, in gallons. (R 336.1287(2)(c)(iii))
- b. Documentation of any filter replacements or maintenance of water wash control for exhaust systems serving coating spray equipment or other documentation included in a plan developed by the owner or operator of the equipment. (R 336.1213(3))

#### VII. REPORTING

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

See Appendix 8

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

NA

#### IX. OTHER REQUIREMENT(S)

- 1. The permittee shall not operate woodworking tools in EU-WOODSHOP, unless a dust collection system is properly installed, operated, and maintained. (R 336.1213(3), R. 336.1910, R 336.1301(3))
- 2. The permittee shall maintain monthly maintenance records of the dust collection control located in the woodworking area of EU-WOODSHOP. (R 336.1213(3), R 336.1301(3))

# FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to 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 Units**: EU-CCGARAGE

#### 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(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(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

## **E. NON-APPLICABLE REQUIREMENTS**

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

### **APPENDICES**

**Appendix 1. 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	
СОМ	Continuous Opacity Monitoring	°F	Degrees Fahrenheit	
Department/	Michigan Department of Environment,	gr	Grains	
department	Great Lakes, and Energy	HAP	Hazardous Air Pollutant	
EGLE	Michigan Department of Environment,	Hg	Mercury	
	Great Lakes, and Energy	hr	Hour	
EU	Emission Unit	HP	Horsepower	
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide	
GACS	Gallons of Applied Coating Solids	kW	Kilowatt	
GC	General Condition	lb	Pound	
GHGs	Greenhouse Gases	m	Meter	
HVLP	High Volume Low Pressure*	mg	Milligram	
ID	Identification	mm	Millimeter	
IRSL	Initial Risk Screening Level	MM	Million	
ITSL	Initial Threshold Screening Level	MW	Megawatts	
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds	
MACT	Maximum Achievable Control Technology	$NO_x$	Oxides of Nitrogen	
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram	
MAP	Malfunction Abatement Plan	PM	Particulate Matter	
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10	
NA	Not Applicable		microns in diameter	
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter	
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour	
NCDC	Air Pollutants	ppm	Parts per million	
NSPS	New Source Performance Standards	ppmv	Parts per million by volume	
NSR	New Source Review	ppmw	Parts per million by weight	
PS	Performance Specification	%	Percent	
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute	
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge	
PTI	Permit to Install	scf	Standard cubic feet	
RACT	Reasonable Available Control Technology	sec	Seconds	
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide	
SC	Special Condition	TAC	Toxic Air Contaminant	
SCR	Selective Catalytic Reduction	Temp	Temperature	
SNCR	Selective Non-Catalytic Reduction	THC	Total Hydrocarbons	
SRN	State Registration Number	tpy	Tons per year	
TEQ	Toxicity Equivalence Quotient	μg	Microgram	
USEPA/EPA	United States Environmental Protection	μm	Micrometer or Micron	
\/F	Agency	VOC	Volatile Organic Compounds	
VE	Visible Emissions	yr	Year	

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

#### Appendix 2. Schedule of Compliance

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

#### **Appendix 3. Monitoring Requirements**

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

#### Appendix 4. Recordkeeping

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

#### **Appendix 5. Testing Procedures**

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

#### Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-G5067-2014. 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-G5067-2014 is being reissued as Source-Wide PTI No. MI-PTI-G5067-2019b.

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

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-G5067-2019.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
95-19	202000085 / September 1, 2020	Incorporate PTI 95-19 into the ROP, which was to modify the monitoring/recordkeeping frequency for fuel usage from daily to monthly. The underlying applicability (UAR) for this condition was 40 CFR Part 60.48c(g) (Subpart Dc). At the time the boilers were initially permitted Subpart DC required daily fuel records; however, it has been amended to allow for records to be maintained on a monthly basis when using a fuel certification in 60.48c(f). The change in recordkeeping impacts the requirement for daily calculations of SO2 and NOx for FG-BOILERS2&3 and FG-BOILERS3&4. The facility requested for monthly calculations instead of daily. Additionally, during permitting, it was determined that EU-RESGEN1 and EU-RESGEN2 could be included in Flexible Groups FG-FUELOIL and FG-EMERGENCY, and therefore, FG-RESGENS was removed.	EU-RESGEN1 EU-RESGEN2 FG-BOILERS2&3 FG-BOILERS4&5 FG-FUELOIL, FG-EMERGENCY
		installed nor any existing equipment proposed to be physically modified. The only changes requested are related to recordkeeping. This PTI was not required to go through the public participation process.	
95-19A	202300007 / April 5, 2023	Incorporate PTI No. 95-19A which was to install two emergency reciprocating internal combustion engines, , and to remove two existing emergency Rice gensets. The two existing gensets removed were EU-COGEN1 and EU-COGEN2. The two new emergency RICE gensets are EU-ELECGEN3R and EU-ELECGEN4R and are fueled with No. 2 fuel oil.  Additionally, EURESGEN1 and EURESGEN2 are exempt emission units that were kept in the ROP and renamed the associated flexible group as FG-MACTZZZZ-EMER and just carried forward the federal requirements for the emission units. Emission Units EU-ELECGEN6, EU-ELECGEN7, EU-ELECGEN8, EU-ELECGEN9 were also carried forward in as FG-MACTZZZZ-EMER. The flexible group FG-EMERGENCY was added to the ROP from PTI No. 95-19A permitted Conditions.	EU-ELECGEN3R, EU-ELECGEN4R FG-BOILERS2&3, FG-BOILERS4&5 FG-ELECGEN3R&4R FG-FUELOIL FG-EMERGENCY FG-MACTZZZZ-EMER

#### **Appendix 7. Emission Calculations**

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU-BOILER1, FG-BOILERS2&3, and FG-BOILERS4&5.

# 7.1 The permittee shall calculate the $SO_2$ emissions from Boiler No. 1 through Boiler No. 5 using the following equation:

 $ESO2_{daily} = F_{fueloil}/O * D * S * 2$ 

Where:

"ESO2<sub>daily</sub>" is the emission of SO<sub>2</sub>, in pounds, on a daily basis recorded each calendar month;

"Ffueloil" = is the monthly fuel oil usage rate, in gallons;

"D" is the density of the fuel oil in lbs. per gallon based on the most recent fuel supplier certification or fuel sample test data, or 7.2 if not data is available;

"S" is the sulfur content of the fuel oil in lb. per lb. of fuel oil based on the most recent fuel supplier certification or fuel sample test data;

"2" is the conversion of sulfur to sulfur dioxide; and

"O" is the number of operating days recorded each calendar month.

# 7.2 The permittee shall calculate the NOx emissions from Boiler No. 1 through Boiler No. 5 using the following equation:

 $ENOx_{daily} = (F_{gasflow} * 0.0001) + (F_{fueloil} * 0.02)$ 

Where:

"ENOxdaily" is the emission rate, in pounds, of NOx on a daily which shall be recorded each calendar day;

"F<sub>gasflow</sub>" is the natural gas usage rate, in cubic feet;

"F<sub>fueloil</sub>" is the fuel oil usage rate, gallon(s);

"0.0001" is the emission factor for NOx emissions in pounds per cubic foot of natural gas; and

"0.02" is the emission factor of NOx is pounds per gallon of fuel oil.

ENOx<sub>annual</sub> in tons = The sum of all ENOx<sub>daily</sub> for the previous consecutive 365 calendar days/2000.

ENOx<sub>annual</sub> shall be recorded each calendar day.

<sup>1</sup>Compliance with the allowable emission rate shall be determined using an emission factor of. 0.00000154 pounds of NOx per BTU, until such time that the NOx emission testing is completed. Following completion of the NOx emission testing, compliance with the annual allowable NOx emission rate shall be determined using the results of the most recent performance test.

#### Appendix 8. Reporting

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

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

#### **B.** Other Reporting

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