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

EFFECTIVE DATE: October 1, 2019

ISSUED TO

Marquette Board of Light and Power Marquette Energy Center (MEC)

State Registration Number (SRN): P0668

LOCATED AT

2200 Wright Street, Marquette, Marquette County, Michigan 49855

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-P0668-2019

Expiration Date: October 1, 2024

Administratively Complete ROP Renewal Application Due Between April 1, 2023 and April 1, 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-P0668-2019

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

Ed Lancaster, Marquette District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	3
A. GENERAL CONDITIONS	4
A. GENERAL CONDITIONS. Permit Enforceability. General Provisions. Equipment & Design Emission Limits. Testing/Sampling Monitoring/Recordkeeping. Certification & Reporting. Permit Shield Revisions. Reopenings. Renewals. Stratospheric Ozone Protection Risk Management Plan. Emission Trading. Permit to Install (PTI).	
B. SOURCE-WIDE CONDITIONS	
C. EMISSION UNIT SPECIAL CONDITIONS	15
EMISSION UNIT SUMMARY TABLE EUEDG EUNGENGINE	15 16
D. FLEXIBLE GROUP SPECIAL CONDITIONS	
FLEXIBLE GROUP SUMMARY TABLE FGNGOP FGDIESELOP E. NON-APPLICABLE REQUIREMENTS	21 22 27
Appendix 1. Acronyms and Abbreviations Appendix 2. Schedule of Compliance Appendix 3. Monitoring Requirements Appendix 4. Recordkeeping	34 34
Appendix 5. Testing Procedures Appendix 6. Permits to Install Appendix 7. Emission Calculations	34 34 34
Appendix 8. Reporting	35

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

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

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

Monitoring/Recordkeeping

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

Certification & Reporting

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

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

- 38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
- 39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
 - 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.² (**R 336.1201(1)**)
- 44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² (R 336.1201(8), Section 5510 of Act 451)
- 45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² (R 336.1219)
- 46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² (R 336.1201(4))

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

DESCRIPTION

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

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	NOx	222 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE-WIDE	SC VI. 6	R 336.1205(1)(a) & (3)
2.	VOC	218 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE-WIDE	SC VI. 6	R 336.1205(1)(a) & (3)
3.	Individual HAP	8.9 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE-WIDE	SC VI. 6	R 336.1205(1)(a) & (3)
4.	Aggregate HAP	22.4 tpy ²	12-month rolling time period as determined at the end of each calendar month	SOURCE-WIDE	SC VI. 6	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EUENGINE01, EUENGINE02, and EUENGINE03 while firing fuel oil for more than 6,000 total hours combined per year on a 12-month rolling time period basis as determined at the end of each calendar month. This restriction does not include fuel oil used as a pilot fuel for natural gas combustion, where FGNGOP is the applicable flexible group.² (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))
- Total startups for all units in FGNGOP and FGDIESELOP combined is limited to 4,380 startup events per year on a 12-month rolling time period basis as determined at the end of each calendar month. Of the 4,380 events, the startups for EUENGINE01, EUENGINE02, and EUENGINE03 combined is further restricted in SC III.3.² (R 336.1205(1)(a) & (3), R 336.1225)
- 3. Startup for EUENGINE01, EUENGINE02, and EUENGINE03combined is limited to 825 startup events while firing fuel oil per year on a 12-month rolling time period basis as determined at the end of each calendar month. Of the 825 events, the cold startups while firing fuel oil for EUENGINE01, EUENGINE02, and EUENGINE03 combined shall not exceed 375 cold startup events while firing fuel oil per year on a 12-month rolling time period basis as determined at the end of each calendar month. Startup events while firing fuel oil per year on a 12-month rolling time period basis as determined at the end of each calendar month, where a cold startup is defined as a startup following a minimum of 24 hours of non-operation of the engine.² (R 336.1205(1)(a) & (3), R 336.1225)

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

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 complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (**R 336.1205(1)(a)**)
- 2. The permittee shall monitor and record, in a satisfactory manner, the total hours of operation when firing fuel oil in EUENGINE01, EUENGINE02, and EUENGINE03 on a monthly basis. The permittee shall calculate and keep, in a satisfactory manner, the total hours of operation when firing fuel oil for EUENGINE01, EUENGINE02, and EUENGINE03 combined on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file at the facility in a manner acceptable to the AQD District Supervisor and make them available to the Department upon request.² (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))
- 3. The permittee shall monitor and record, in a satisfactory manner, the number of total startup events for each unit in FGNGOP and each unit in FGDIESELOP on a monthly basis. The permittee shall calculate and keep, in a satisfactory manner, the total number of startup events for FGNGOP and FGDIESELOP combined on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² (R 336.1205(1)(a) & (3), R 336.1225)
- 4. The permittee shall monitor and record, in a satisfactory manner, the number of total startup events when firing fuel oil and the number of total cold startup events when firing fuel oil in EUENGINE01, EUENGINE02, and EUENGINE03 on a monthly basis. The permittee shall calculate and keep, in a satisfactory manner, the total number of startup events for EUENGINE01, EUENGINE02, and EUENGINE03 combined and the total number of cold startup events for EUENGINE01, EUENGINE02, and EUENGINE03 combined on a monthly and 12-month rolling time period basis. The permittee shall keep all records on file at the facility in a manner acceptable to the AQD District Supervisor and make them available to the Department upon request.² (R 336.1205(1)(a) & (3))
- 5. The permittee shall keep, in a satisfactory manner, all records required to perform facility-wide NO_x, VOC, and individual HAP calculations. This may include, but is not limited to:
 - a. Hours of operation.
 - b. Fuel use.
 - c. Documentation of guaranteed emission rates.
 - d. Documentation of stack test results used in calculating emissions.
 - e. Contemporaneous records of whether each engine is operated as a natural gas-fired engine or diesel-fired engine.

The permittee shall keep all records on file at the facility and make them available to the Department upon request.² (R 336.1205(1)(a) & (3), R 336.1213(3)(b)&(8)(a)

6. The permittee shall calculate and keep, in a satisfactory manner, monthly and 12-month rolling time period NO_x, VOC, individual HAP, and aggregate HAPs emission calculation records for Source-Wide. The permittee shall calculate monthly NO_x, VOC, individual HAP, and aggregate HAPs emissions for Source-Wide by using the calculation methodology of multiplying the fuel usage by default emission factors or the most recent tested values. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² (R 336.1205(1)(a) & (3))

VII. <u>REPORTING</u>

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

ROP No: MI-ROP-P0668-2019 Expiration Date: October 1, 2024 PTI No: MI-PTI-P0668-2019

- 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's District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

C. EMISSION UNIT SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUENGINE01	Dual fuel-fired (natural gas and fuel oil) Wärtsilä 18V50DF, 4 Stroke, Lean Burn, nominal 17 MW (173 MMBTU/HR when firing natural gas as primary fuel, 154 MMBTU/HR when firing fuel oil as primary fuel), Reciprocating Internal Combustion Engine used for electricity generation. The engine is equipped with Selective Catalytic Reduction (SCR) and oxidation catalyst for control.	08/25/2017	FGNGOP FGDIESELOP
EUENGINE02	Dual fuel-fired (natural gas and fuel oil) Wärtsilä 18V50DF, 4 Stroke, Lean Burn, nominal 17 MW (173 MMBTU/HR when firing natural gas as primary fuel, 154 MMBTU/HR when firing fuel oil as primary fuel), Reciprocating Internal Combustion Engine used for electricity generation. The engine is equipped with SCR and oxidation catalyst for control.	08/25/2017	FGNGOP FGDIESELOP
EUENGINE03	Dual fuel-fired (natural gas and fuel oil) Wärtsilä 18V50DF, 4 Stroke, Lean Burn, nominal 17 MW (173 MMBTU/HR when firing natural gas as primary fuel, 154 MMBTU/HR when firing fuel oil as primary fuel), Reciprocating Internal Combustion Engine used for electricity generation. The engine is equipped with SCR and oxidation catalyst for control.	08/25/2017	FGNGOP FGDIESELOP
EUEDG	A 400-kilowatt (kW) emergency diesel-fired generator. The engine is used to supply power to the Wärtsilä engine auxiliary equipment during an interruption of the electrical power supply.	08/25/2017	NA
EUNGENGINE	An existing emergency generator firing natural gas or propane, which is subject to the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ.	11/01/2006	NA

EUEDG EMISSION UNIT CONDITIONS

DESCRIPTION

A 400 kW emergency diesel-fired generator. The engine is used to supply power to the Wärtsilä engine auxiliary equipment during an interruption of the electrical power supply.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	NMHC + NOx	4.0 g/kW-hr ²	Hourly	EUEDG	SC III.4 SC V.1	40 CFR 60.4205(b)
2.	CO	3.5 g/kW-hr ²	Hourly	EUEDG	SC III.4 SC V.1	40 CFR 60.4205(b)
3.	PM	0.2 g/kW-hr ²	Hourly	EUEDG	SC III.4 SC V.1	40 CFR 60.4205(b)

II. MATERIAL LIMIT(S)

1. The permittee shall burn only ultra-low diesel fuel, in EUEDG with a maximum sulfur content of 15 ppm (0.0015 %) by weight and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume.² (40 CFR 60.4207(b))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EUEDG for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month.² (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))
- 2. In order to be considered an emergency generator, the permittee must operate EUEDG according to the requirements below. Any operation other than this is prohibited. If not operated according to these requirements, then the engine must meet all requirements in 40 CFR Part 60, Subpart IIII for non-emergency engines:
 - a. The permittee may operate EUEDG for any combination of the purposes specified in SC III.2.a.i through a.iii below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by SC III.2.b counts as part of this 100 hours per calendar year.
 - i. EUEDG 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. ² (40 CFR 60.4211(f))
- 3. The permittee shall do all the following, except as permitted in SC III.5, SC V.1, and SC VI.3:
 - a. Operate and maintain EUEDG and control device (if any) according to the manufacturer's emission-related written instructions;
 - b. Change only those emissions-related settings that are permitted by the manufacturer; and

- c. Meet the requirements of 40 CFR parts 89 and/or 1068 as it applies to EUEDG.² (40 CFR 60.4211(a))
- 4. Except as allowed in SC III.5, SC V.1, and SC VI.3, the permittee shall not operate EUEDG unless the engine is certified by the manufacturer to meet the applicable emission standards specified in §60.4205(b), which references §60.4202(a)(2), for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. The engine must be installed and configured according to the manufacturer's specifications.² (40 CFR 60.4211(c))
- 5. If the permittee purchases a non-certified engine, does not install, configure, operate and maintain EUEDG and control device(s), if any, according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, compliance must be demonstrated by keeping a maintenance plan and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.² (40 CFR 60.4211(g)(3))

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

1. The permittee shall equip and maintain EUEDG with a non-resettable hours meter to track the operating hours.² (R 336.1205(1)(a), R 336.1225, 40 CFR 60.4209)

V. <u>TESTING/SAMPLING</u>

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

- 1. If the permittee purchases a non-certified engine, does not install, configure, operate and maintain EUEDG and control device(s), if any, according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, compliance shall be demonstrated by conducting an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the change in emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter, to demonstrate compliance with the applicable emission standards. The performance tests shall be conducted according to 40 CFR 60.4212.² (40 CFR 60.4211(g)(3), 40 CFR 60.4212)
- 2. 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))

- 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 EUEDG, 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.² (40 CFR 60.4207(b))
- 2. The permittee shall monitor and record, in a satisfactory manner, the total hours of operation for EUEDG, on a monthly and 12-month rolling time period basis, and the hours of operation during non-emergency operation for EUEDG, on a calendar year time period basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of EUEDG, including what classified the operation as emergency and how many hours are spent for non-emergency operation.² (R 336.1205(1)(a) & (3), 40 CFR 60.4211, 40 CFR 60.4214)
- 3. If the permittee does not install, configure, operate and maintain EUEDG and control device(s), if any, according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, a maintenance plan and records of conducted maintenance shall be kept in accordance with 40 CFR 63.4211(g)(3).² (40 CFR 60.4211(g)(3))

VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. If testing is required, no less than 30 days prior to testing, the permittee must submit a complete stack-testing plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.2001, 40 CFR 60.8)

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-EUEDG	8 ²	20 ²	R 336.1225

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all provisions of the federal standards of Performance for new Stationary Sources as specified in 40 CFR Part 60, Subparts A & IIII, as they apply to EUEDG.² (40 CFR Part 60, Subparts A and IIII)
- 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 EUEDG.² (40 CFR Part 63, Subparts A and ZZZZ)

Footnotes:

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

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

EUNGENGINE EMISSION UNIT CONDITIONS

DESCRIPTION

An existing emergency generator firing natural gas and propane, which is subject to the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the emergency generator EUNGENGINE for emergency use only, except for 100 hours per calendar year for maintenance checks and readiness testing. **(40 CFR 60.4243(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in EUNGENGINE with a non-resettable hour meter to track the operating hours. (R 336.1213(3)(b)(ii))

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 hours of operation of EUNGENGINE, on a monthly and 12-month rolling time period basis, including how many hours are spent for emergency operation, what classified the operation as emergency, and how many hours are spent for non-emergency operation. Records shall be kept in a manner that is acceptable to the AQD District Supervisor. (R 336.1213(3)(b)(ii))

VII. <u>REPORTING</u>

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

ROP No: MI-ROP-P0668-2019 Expiration Date: October 1, 2024 PTI No: MI-PTI-P0668-2019

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)

 The permittee shall comply with all applicable provisions of the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ and National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines.² (40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)

Footnotes:

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGNGOP	This flexible group consists of the Wärtsilä 18V50DF Engines while firing natural gas as the primary fuel. The terms and conditions of FGNGOP are triggered only when less than 2% of the fuel fired in each engine in FGNGOP on an annual average is fuel oil, such that the engines meet the definition of a spark ignition engine.	EUENGINE01 EUENGINE02 EUENGINE03
FGDIESELOP	This flexible group consists of the Wärtsilä 18V50DF Engines while firing fuel oil as the primary fuel. The terms and conditions of FGDIESELOP are triggered only when equal to or greater than 2 % of the fuel fired in each engine in FGDIESELOP on an annual average is fuel oil, such that the engines meet the definition of a compression ignition engine.	EUENGINE01 EUENGINE02 EUENGINE03

FGNGOP FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group consists of the Wärtsilä 18V50DF Engines while firing natural gas as the primary fuel. The terms and conditions of FGNGOP are triggered only when less than 2 % of the fuel fired in each engine in FGNGOP on an annual average is fuel oil, such that the engines meet the definition of a spark ignition engine.

Emission Units: EUENGINE01, EUENGINE02, EUENGINE03

POLLUTION CONTROL EQUIPMENT

SCR for NO_x control and oxidation catalyst for VOC and CO control.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operatin	Equipment	Monitoring/ Testing	Underlying Applicable Requirements
			g Scenario		Method	-
1.	NOx	3.3 pph excluding startup and shutdown ²	Hourly	Each engine in FGNGOP	SC V.1	R 336.1205(1)(a) & (3) 40 CFR 52.21(c) & (d)
2.	NOx	1.0 g/hp-hr or 82 ppmvd @15%O ₂ ²	Hourly	Each engine in FGNGOP	SC III.3 SC V.2	40 CFR 60.4233(e) Table 1 of 40 CFR Part 60, Subpart JJJJ
3.	CO	5.0 pph excluding startup and shutdown ²	Hourly	Each engine in FGNGOP	SC V.1	R 336.1205(1)(a) & (3)
4.	CO	2.0 g/hp-hr or 270 ppmvd @15%O2 ²	Hourly	Each engine in FGNGOP	SC III.3 SC V.2	40 CFR 60.4233(e) Table 1 of 40 CFR Part 60, Subpart JJJJ
5.	VOC ^A	0.7 g/hp-hr or 60 ppmvd @15%O2 ²	Hourly	Each engine in FGNGOP	SC III.3 SC V.2	40 CFR 60.4233(e) Table 1 of 40 CFR Part 60, Subpart JJJJ
6.	VOC ^B	16.5 pph excluding startup and shutdown ²	Hourly	Each engine in FGNGOP	SC V.3	R 336.1205(1)(a) & (3) R 336.1702(a)
7.	Formaldehyde	0.648 pph excluding startup and shutdown ²		Each engine in FGNGOP	SC V.3	R 336.1205(1)(a) & (3) R 336.1224 R 336.1225

ppmvd = parts per million by volume at 15 % oxygen and on a dry gas basis

^A Per footnote "d" of Table 1 of 40 CFR Part 60, Subpart JJJJ, when calculating emissions of VOCs, emissions of formaldehyde should not be included.

^B This emission limit is for all VOCs and the compliance demonstration must include formaldehyde.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain each unit in FGNGOP such that it meets the emission limits in SC I.2, SC I.4, and SC I.5 over the entire life of the engine.² (40 CFR 60.4234)

- 2. The permittee shall submit, implement, and maintain an updated malfunction abatement plan (MAP) as described in Rule 911(2) for each unit in FGNGOP. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

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

- 3. If the permittee is demonstrating compliance with the emission standards in 40 CFR 60.4233(e) by purchasing a certified engine, compliance shall be demonstrated according to the following:
 - a. The engine shall be certified for the for the same model year; and
 - b. The certified engine and control device shall be operated and maintained according to the manufacturer's emission-related written instructions. The applicable requirements in 40 CFR Part 1068, Subparts A-D shall be met. If the engine settings are adjusted according to and consistent with the manufacturer's instructions, the engine will not be considered out of compliance.² (40 CFR 60.4243(b)(1))
- 4. If the permittee has purchased a non-certified engine or purchased a certified engine which was not operated and maintained as specified, for units in FGNGOP, the permittee shall keep a maintenance plan and to the extent practicable, maintain and operate the unit(s) in a manner consistent with good air pollution control practice for minimizing emissions.² (40 CFR 60.4243(b)(2))

IV. DESIGN/EQUIPMENT PARAMETER(S)

 The permittee shall not operate FGNGOP unless SCR and an oxidation catalyst are installed, maintained, and operated in a satisfactory manner, for each unit in FGNGOP. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for each unit in FGNGOP as required in SC III.3.² (R 336.1205(1)(a) & (3), R 336.1910, 40 CFR 52.21(c) & (d))

V. TESTING/SAMPLING

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

Within five years of the previous acceptable verification of emission rates, the permittee shall verify NO_x and CO
pph emission rates from each unit in FGNGOP by testing at owner's expense, in accordance with Department
requirements. Upon approval of the AQD District Supervisor, subsequent testing may be conducted upon a
representative engine in FGNGOP. However, the permittee shall not test the same representative unit in
subsequent tests unless approved or requested by the AQD District Supervisor. Testing shall be performed using
an approved EPA Method listed below.

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
CO	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.² (R 336.1205(1)(a) & (3), R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))

- 2. If the permittee purchases a non-certified engine or a certified engine that is not operated and maintained according to the manufacturer's written emissions-related instructions, the permittee shall:
 - a. Conduct an initial performance test within one year after startup of the engine.
 - b. Conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance, unless an alternative schedule is approved.
 - c. The performance tests shall be conducted according to 40 CFR 60.4244 and Table 2 of 40 CFR Part 60, Subpart JJJJ.
 - d. If testing to quantify VOC emissions is performed using test methods based on VOC speciation, then a list of required VOCs must be approved by the AQD and must include, at a minimum, the following air contaminants: propane, butane, pentane, hexane, ethene, propene, butene, acetaldehyde, acrolein, propanol, acetylene, methanol, benzene, 1-butene, ethylene, and propylene.

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 permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.2001, 40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, 40 CFR 60.4245(d), Table 2 of 40 CFR Part 60, Subpart JJJJ)

3. The permittee shall verify VOC and formaldehyde pph emission rates from each unit in FGNGOP by testing at owner's expense, in accordance with Department requirements at least once every five years. Upon approval of the AQD District Supervisor, subsequent testing may be conducted upon a representative engine in FGNGOP. However, the permittee shall not test the same representative unit in subsequent tests unless approved or requested by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed below.

Pollutant	Test Method Reference	
VOCs	40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A	
HAPs	40 CFR Part 63, Appendix A	

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. Any test method(s) used must properly account for VOC emissions, which at a minimum, must include the following air contaminants: propane, butane, pentane, hexane, ethene, propene, butene, formaldehyde, acetaldehyde, acrolein, propanol, acetylene, methanol, benzene, 1-butene, ethylene, and propylene. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.1902, 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 keep, in a satisfactory manner, records of testing required in SC V.2 or manufacturer's certification and maintenance records documenting that each unit in FGNGOP meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60,

Subpart JJJJ. The permittee shall keep all records on file and make them available to the Department upon request.² (40 CFR 60.4245)

- 2. The permittee shall keep records of the following information for each unit in FGNGOP:
 - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.
 - b. Maintenance conducted on each unit in FGNGOP. The records shall adequately demonstrate compliance with either condition SC III.3 or SC III.4 above.
 - c. If each unit in FGNGOP is a certified engine, documentation from the manufacturer that each unit in FGNGOP is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
 - d. If a unit(s) in FGNGOP is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that each unit in FGNGOP meets the emission standards.² (40 CFR 60.4243(b)(1), 40 CFR 60.4245(a))
- The permittee shall calculate and keep, in a satisfactory manner, records of the parts diesel fuel to parts total fuel on an energy equivalent basis each calendar year for EUENGINE01, EUENGINE02, and EUENGINE03.² (40 CFR Part 60, Subparts IIII & JJJJ)

VII. <u>REPORTING</u>

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-EUENGINE01	64 ²	70 ²	R 336.1225
2. SV-EUENGINE02	64 ²	70 ²	R 336.1225

70²

R 336.1225

64²

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

IX. OTHER REQUIREMENT(S)

3. SV-EUENGINE03

- The terms and conditions of FGNGOP are triggered only when less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis is fired in EUENGINE01, EUENGINE02, or EUENGINE03 on an annual average basis as determined each calendar year, such that the engines meet the definition of a spark ignition engine.² (40 CFR 60.4248)
- 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 JJJJ, as they apply to each unit in FGNGOP.² (40 CFR Part 60, Subparts A and JJJJ)

- 3. 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 each unit in FGNGOP.² (40 CFR Part 63, Subparts A and ZZZZ)
- 4. The permittee shall comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt from the Acid Rain Program under 40 CFR 72.7. (40 CFR 72.7(f)(1)(i))
- 5. If a unit becomes no longer exempt from the Acid Rain Program under 40 CFR 72.7, the designated representative shall submit a complete Acid Rain permit application no later than 60 days after the first date on which the unit is no longer exempt. (40 CFR 72.7(f)(4)(ii))

Footnotes:

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

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

FGDIESELOP FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group consists of the Wärtsilä 18V50DF Engines while firing fuel oil as the primary fuel. The terms and conditions of FGDIESELOP are triggered only when equal to or greater than 2 % of the fuel fired in each engine in FGDIESELOP on an annual average is fuel oil, such that the engines meet the definition of a compression ignition engine.

Emission Units: EUENGINE01, EUENGINE02, EUENGINE03

POLLUTION CONTROL EQUIPMENT

SCR for NO_x control and oxidation catalyst for VOC and CO control.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	NOx	21 pph excluding startup and shutdown ²	Hourly	Each engine in FGDIESELOP	SC V.1	R 336.1205(1)(a) & (3) 40 CFR 52.21(c) & (d)
2.	NOx	2.58 g/kW-hr ^{C,2}	Hourly	Each engine in FGDIESELOP	SC V.2 SC V.3	40 CFR 60.4204(c)(3)(ii)
3.	PM	0.15 g/kW-hr ²	Hourly	Each engine in FGDIESELOP	SC V.2 SC V.3	40 CFR 60.4204(c)(4)
4.	SO ₂	7.8 pph excluding startup and shutdown ²	Hourly	Each engine in FGDIESELOP	SC II.1 SC VI.2	R 336.1205(1)(a) & (3) 40 CFR 52.21(c) & (d)

^c This is from the equation 9 x n^{-0.20} required in 40 CFR 60.4204(c)(3)(ii), where n is the maximum engine speed. 514 rpm was used as the maximum engine speed based upon manufacturer specifications.

II. MATERIAL LIMIT(S)

1. The permittee shall burn only fuel oil, in FGDIESELOP with a maximum sulfur content of 500 ppm (0.05 %) by weight.² (R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), 40 CFR 60.4207(d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall operate and maintain each unit in FGDIESELOP such that it meets the emission limits in SC I.2 and I.3 over the entire life of the engine.² (40 CFR 60.4206)
- 2. The permittee shall submit, implement, and maintain an updated MAP as described in Rule 911(2). The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.

c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

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

- 3. The permittee shall do all the following, except as permitted in SC III.6, SC V.2, and SC VI.4:
 - a. Operate and maintain each engine and control device (if any) in FGDIESELOP according to the manufacturer's emission-related written instructions;
 - b. Change only those emissions-related settings that are permitted by the manufacture;
 - c. Meet the requirements of 40 CFR Parts 89, 94, and/or 1068, as they apply.² (40 CFR 60.4211(a))
- 4. If the permittee does not install, configure, operate and maintain each unit of FGDIESELOP and control device(s), if any, according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, compliance must be demonstrated by keeping a maintenance plan and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.² (40 CFR 60.4211(g)(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall equip and maintain each unit in FGDIESELOP with non-resettable hours meters to track the operating hours.² (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))
- 2. The permittee shall not operate FGDIESELOP unless SCR and an oxidation catalyst are installed, maintained, and operated in a satisfactory manner, for each unit in FGDIESELOP. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for each unit in FGDIESELOP as required in SC III.2.² (R 336.1205(1)(a) & (3), R 336.1225, R 336.1910, 40 CFR 52.21(c) & (d))

V. TESTING/SAMPLING

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

1. Within five years of the previous acceptable verification of emission rates, the permittee shall verify NO_x pph emission rates from each unit in FGDIESELOP by testing at owner's expense, in accordance with Department requirements. Upon approval of the AQD District Supervisor, subsequent testing may be conducted upon a representative engine in FGDIESELOP. However, the permittee shall not test the same representative unit in subsequent tests unless approved or requested by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed below.

Pollutant	Test Method Reference	
NOx	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.² (R 336.1205(1)(a) & (3), R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))

2. The permittee shall demonstrate compliance with the emission standards specified in §60.4204(c) for each unit of FGDIESELOP by doing all of the following:

- a. Conducting an initial performance test to demonstrate initial compliance with the emission standards according to test methods in 40 CFR 60.4213.
- b. Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in SC V.1.b.i through b.v below:
 - i. Identification of the specific parameters you propose to monitor continuously;
 - ii. A discussion of the relationship between these parameters and NO_x and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_x and PM emissions;
 - iii. A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
 - iv. A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
 - v. A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
- Conducting annual performance tests to demonstrate continuous compliance with the emission standards according to test methods in 40 CFR 60.4213, unless an alternative schedule is approved.²
 (40 CFR 60.4204(c), 40 CFR 60.4211(d))
- 3. If the permittee does not install, configure, operate and maintain each unit of FGDIESELOP and control device(s), if any, according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, compliance shall be demonstrated by conducting 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. The permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter, to demonstrate compliance with the applicable emission standards. The performance tests shall be conducted according to 40 CFR 60.4213.² (40 CFR 60.4211(g)(3))
- 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 and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (**R 336.1205(1)(a)**)
- 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 FGDIESELOP, demonstrating that the fuel sulfur content meets the requirement of SC II.1 and 40 CFR 60.4207(d). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil.² (R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), 40 CFR 60.4207(d))
- 3. If the permittee does not install, configure, operate and maintain each unit of FGDIESELOP and control device(s), if any, according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, a maintenance plan and records of conducted maintenance shall be kept in accordance with 40 CFR 63.4211(g)(3).² (40 CFR 60.4211(g)(3))
- 4. The permittee shall keep records of the following information for each unit in FGDIESELOP:
 - a. All notifications submitted to comply with 40 CFR Part 60, Subpart IIII and all documentation supporting any notification.
 - b. Maintenance conducted on each unit in FGDIESELOP. The records shall adequately demonstrate compliance with either condition SC III.5 or SC III.6 above.

- c. If each unit in FGDIESELOP is a certified engine, documentation from the manufacturer that each unit in FGDIESELOP is certified to meet the emission standards.
- d. If a unit(s) in FGDIESELOP is not a certified engine or is a certified engine operating in a non-certified manner, documentation that each unit in FGDIESELOP meets the emission standards.²
 (40 CFR 60.4214(a)(2))
- The permittee shall calculate and keep, in a satisfactory manner, records of the parts diesel fuel to parts total fuel on an energy equivalent basis each calendar year for EUENGINE01, EUENGINE02, and EUENGINE03.² (40 CFR Part 60, Subparts IIII & JJJJ)

VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-EUENGINE01	64 ²	70 ²	R 336.1225
2. SV-EUENGINE02	64 ²	70 ²	R 336.1225
3. SV-EUENGINE03	64 ²	70 ²	R 336.1225

IX. OTHER REQUIREMENT(S)

- 1. The terms and conditions of FGDIESELOP are triggered only when equal to or greater than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis is fired in EUENGINE01, EUENGINE02, or EUENGINE03 on an annual average basis as determined each calendar year, such that the engines meet the definition of a compression ignition engine.² (40 CFR 60.4219)
- The permittee shall comply with all provisions of the federal standards of Performance for new Stationary Sources as specified in 40 CFR Part 60, Subparts A & IIII, as they apply to FGDIESELOP.² (40 CFR Part 60, Subparts A & IIII)
- 3. 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 FGDIESELOP.² (40 CFR Part 63, Subparts A & ZZZZ)
- 4. The permittee shall comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt from the Acid Rain Program under 40 CFR 72.7. (40 CFR 72.7(f)(1)(i))

ROP No: MI-ROP-P0668-2019 Expiration Date: October 1, 2024 PTI No: MI-PTI-P0668-2019

5. If a unit becomes no longer exempt from the Acid Rain Program under 40 CFR 72.7, the designated representative shall submit a complete Acid Rain permit application no later than 60 days after the first date on which the unit is no longer exempt. (40 CFR 72.7(f)(4)(ii))

Footnotes:

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

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

ROP No: MI-ROP-P0668-2019 Expiration Date: October 1, 2024 PTI No: MI-PTI-P0668-2019

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	F	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	со	Carbon Monoxide		
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent		
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot		
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter		
СОМ	Continuous Opacity Monitoring	°F	Degrees Fahrenheit		
Department/	Michigan Department of Environment,	gr	Grains		
department	Great Lakes, and Energy	НАР	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_2S	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	NMO	Non-methane Organic Compounds		
		С			
MACT	Maximum Achievable Control Technology	NOx	Oxides of Nitrogen		
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram		
MAP	Malfunction Abatement Plan	PM	Particulate Matter		
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10 microns in diameter		
NA	Not Applicable				
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter		
NESHAP	National Emission Standard for	pph	Pounds per hour		
NODO	Hazardous Air Pollutants	ppm	Parts per million		
NSPS	New Source Performance Standards New Source Review	ppmv	Parts per million by volume		
NSR		ppmw %	Parts per million by weight		
PS PSD	Performance Specification		Percent		
	Prevention of Significant Deterioration	psia	Pounds per square inch absolute		
PTE	Permanent Total Enclosure Permit to Install	psig	Pounds per square inch gauge		
PTI		scf	Standard cubic feet		
RACT	Reasonable Available Control Technology	sec	Seconds		
ROP	Renewable Operating Permit	SO ₂	Sulfur Dioxide		
SC	Special Condition	TAC	Toxic Air Contaminant		
SCR	Selective Catalytic Reduction	Temp	Temperature		
SNCR	Selective Non-Catalytic Reduction	THC	Total Hydrocarbons		
SRN	State Registration Number	tpy	Tons per year		
	Toxicity Equivalence Quotient	μg	Microgram		
USEPA/EPA	United States Environmental Protection	μm	Micrometer or Micron		
		VOC	Volatile Organic Compounds		
VE	Visible Emissions	yr	Year		

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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 Permit to Install and/or Operate, that relates to the identified emission units or flexible groups as of the effective date of this ROP. This includes all Permits to Install and/or Operate that are hereby incorporated into Source-Wide PTI No. MI-PTI-P0668-2019. PTIs issued after the effective date of this ROP, including amendments or modifications, will be identified in Appendix 6 upon renewal.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
204-15A	Three Dual fuel-fired (natural gas and fuel oil) Wärtsilä Reciprocating Internal Combustion Engines used for electricity generation and a 400 kW emergency diesel-fired generator.	EUEDG FGNGOP FGDIESELOP

Appendix 7. Emission Calculations

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

Appendix 8. 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.