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|  | **MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY****AIR QUALITY DIVISION** |  |
| EFFECTIVE DATE: August 27, 2021ISSUED TO**Henry Ford Hospital**State Registration Number (SRN): K1271LOCATED AT2799 West Grand Boulevard, Detroit, Wayne County, Michigan 48202 |
|  |
| **RENEWABLE OPERATING PERMIT**Permit Number: MI-ROP-K1271-2021Expiration Date: August 27, 2026Administratively Complete ROP Renewal Application Due Between February 27, 2025 and February 27, 2026This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, this ROP constitutes the permittee’s authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act. |

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| **SOURCE-WIDE PERMIT TO INSTALL**Permit Number: MI-PTI-K1271-2021This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTl terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act. |

Michigan Department of Environment, Great Lakes, and Energy

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Dr. April Wendling, Detroit District Supervisor **TABLE OF CONTENTS**

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# AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

# A. GENERAL CONDITIONS

## Permit Enforceability

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

## General Provisions

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

## Equipment & Design

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

## Emission Limits

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

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

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

## Testing/Sampling

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

## Monitoring/Recordkeeping

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

## Certification & Reporting

1. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
2. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
3. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
4. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
	1. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
	2. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
	3. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.
5. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
	1. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
	2. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; “based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete.” The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
6. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
7. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
8. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.2 **(R 336.1912)**

## Permit Shield

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

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

1. Nothing in this ROP shall alter or affect any of the following:
	1. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
	2. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
	3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
	4. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
2. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
	1. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
	2. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
	3. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
	4. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
	5. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
3. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

## Revisions

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

## Reopenings

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

## Renewals

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

## Stratospheric Ozone Protection

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

## Risk Management Plan

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

## Emission Trading

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

## Permit to Install (PTI)

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

**Footnotes:**

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

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

# B. SOURCE-WIDE CONDITIONS

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

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

# C. EMISSION UNIT SPECIAL CONDITIONS

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

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

## EMISSION UNIT SUMMARY TABLE

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

| **Emission Unit ID** | **Emission Unit Description****(Including Process Equipment & Control Device(s))** | **Installation****Date/****Modification Date** | **Flexible Group ID** |
| --- | --- | --- | --- |
| EUWPAVGEN8 | A diesel fuel-fired emergency generator rated at 1,500 kW that is located adjacent to the West Pavilion.  | 01-01-1998 | NA |
| EUBUNITGEN | A diesel fuel-fired generator rated at 300 kW located at the B Unit.  | 01-01-1999 | NA |
| EUENGINE10 | A diesel fuel-fired generator with a nameplate capacity of 750 kW and a heat input capacity of 7 MMBTU/hr.  | 01-01-2006 | FGENGINES |
| EUENGINE12 | A diesel fuel-fired generator with a nameplate capacity of 2000 kW and a heat input capacity of 20 MMBTU/hr.  | 08-01-2008 | FGENGINES |
| EUENGINE15 | A 1,474 bhp diesel fuel-fired engine driving a 1,000 kW emergency generator. The engine is a 2014 model year with a displacement of 2.7 liters/cylinder. This generator is located on the roof of the Education and Research (E & R) Building. | 01-01-2015 | NA |
| EUENGINE16 | A 2,937 BHP diesel fuel-fired engine driving a 2,000 kilowatt (kW) emergency generator. The engine is a 2015 model year with a displacement of 4.31 liters/cylinder. This generator is located at the West Clinic Building. | 09-24-2016 | NA |
| EUENGINE17 | A 500 kW diesel fuel-fired fire pump generator located at the guest apartment building.  | 10-01-2016 | FGNSPSENG |
| EUCCEngine1 | A 600 kW Caterpillar diesel fuel-fired emergency generator located at the Brigitte Harris Cancer Pavilion. | 10-01-2019 | FGNSPSENG |
| EUBOILER1 | A 86.4 MMBTU/hr Nebraska natural gas-fired boiler with No.2 fuel oil back-up.  | 05-01-2008 | FGBOILERS |
| EUBOILER2 | A 86.4 MMBTU/hr Nebraska natural gas-fired boiler with No.2 fuel oil back-up.  | 05-01-2008 | FGBOILERS |
| EUBOILER3 | A 86.4 MMBTU/hr Nebraska natural gas-fired boiler with No.2 fuel oil back-up.  | 04-01-2013 | FGBOILERS |

## EUWPAVGEN8

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A diesel fuel-fired emergency generator rated at 1,500 kW that is located adjacent to the West Pavilion.

**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. SO2
 | 0.33 lb/MMBTU heat input2, \* | Hourly | EUWPAVGEN8 | SC V.1,SC VI.2 | **R 336.1205(1)(a) & (3)** |

\* This is equivalent to using distillate oil with 0.30% by weight sulfur content and a heat value of 18,390 BTUs per pound.

**II. MATERIAL LIMIT(S)**

The permittee shall not use more than 58,500 gallons of distillate oil per 12-month rolling time period as determined at the end of each calendar month. A written record of the fuel usage shall be kept on file for a period of at least five years and made available to the AQD upon request.2  **(R 336.1205(1)(a) and (3)**)

2. The permittee shall burn only diesel fuel in the engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(****40 CFR 1090.305)**

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

1. The permittee shall not operate EUWPAVGEN8 for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month. A written log of hours of operation shall be kept on file for a period of at least five years and made available to the AQD upon request.2  **(R 336.205(1)(a) and (3))**
2. The permittee shall operate the emergency generator only at such times when all or a portion of the normal electric power is interrupted, or during periods of maintenance checks and operator training**.**2  **(R 336.1205(1)(a) and (3))**

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

1. The permittee shall equip and maintain EUWPAVGEN8 with a non-resettable hours meter to track the operating hours. **(R 336.1213(3))**

**V. TESTING/SAMPLING**

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

1. Upon request of the AQD District Supervisor, the permittee shall verify SO2 emission rates from EUWPAVGEN8 by testing at the owner’s expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD‑approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.  **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

**VI. MONITORING/RECORDKEEPING**

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

The permittee shall monitor and record, the total hours of operation for EUWPAVGEN8 on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for EUWPAVGEN8 on a 12-month rolling time period as determined at the end of each calendar month, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3))**

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 EUWPAVGEN8, demonstrating that the fuel meets the requirement of SC I.1 and 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. The permittee shall keep all records on file and make them 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 orreceived by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

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

**See Appendix 8**

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

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. SVSTACK | 142 | 552 | **R 336.1201(3)** |

**IX. OTHER REQUIREMENT(S)**

NA

**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).

## EUBUNITGEN

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A diesel fuel-fired generator rated at 300 kW located at the B Unit.

**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. NOx | 13.8 pph2 | Hourly |  EUBUNITGEN | SC V.1 | **R 336.1205****40 CFR 52.21(c) & (d)** |
| 2. NOx | 3.5 tpy2 |  Annually | EUBUNITGEN  | SC V.1,SC VI.1 | **R 336.1205****40 CFR 52.21(c) & (d)** |
| 3. SO2 | 1.0 pph2 | Hourly | EUBUNITGEN  | SC V.1,SC VI.2 | **R 336.1402**  |
| 4. SO2 | 0.25 tpy2 | Annually | EUBUNITGEN | SC V.1,SC VI.1,SC VI.2 | **R 336.1402** |

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel in the engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent.2,a **(40 CFR 1090.305)**

a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined material limit shall be considered compliance with the material limit established by **40 CFR 1090.305**; and also compliance with the material limit established by **R 336.1402(3)**, an additional applicable requirement that has been subsumed within this condition.

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

1. The applicant shall not generate electricity for more than 500 hours per 12-month rolling time period. Every month’s hours of electrical generation for the EU shall be recorded, and the previous 12-month total hourly electrical generation shall be kept on file for a period of five years and made available to the Air Quality Division upon request.2 **(R 336.1205(1)(a))**

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

1. The permittee shall equip and maintain EUBUNITGEN with a non-resettable hours meter to track the operating hours. **(R 336.1213(3))**

**V. TESTING/SAMPLING**

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

1. Upon request of the AQD District Supervisor, the permittee shall verify NOx and SO2 emission rates from EUBUNITGEN by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in:

|  |  |
| --- | --- |
| **Pollutant** | **Test Method Reference** |
| NOx | 40 CFR Part 60, Appendix A |
| SO2 | 40 CFR Part 60, Appendix A |

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

**VI. MONITORING/RECORDKEEPING**

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

The permittee shall monitor and record, the total hours of operation for EUBUNITGEN on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for EUBUNITGEN on a 12-month rolling time period as determined at the end of each calendar month, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3))**

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 EUBUNITGEN, demonstrating that the fuel meets the requirement of SC II.1 and 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. The permittee shall keep all records on file and make them 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 orreceived by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

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

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**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).

## EUENGINE10

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A diesel fuel-fired generator with a nameplate capacity of 750 kW and a heat input capacity of 7 MMBTU/hr.

**Flexible Group ID:** FGENGINES

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel in the engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent.2,a **(40 CFR 1090.305)**

a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined material limit shall be considered compliance with the material limit established by **40 CFR 1090.305**; and also compliance with the material limit established by **R 336.1205(1)(a), R 336.1402, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**, an additional applicable requirement that has been subsumed within this condition.

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

1. The permittee shall operate EUENGINE10 in accordance with its manufacturer’s written instructions or by operating procedures developed by the permittee that are approved by the manufacturer.2 **(R 336.1910)**

2. The permittee shall not operate EUENGINE10 for more than 100 hours per engine per 12-month rolling time period as determined at the end of each calendar month during maintenance checks and readiness testing and not more than a total of 300 hours of operation per rolling 12-month rolling time period as determined at the end of each calendar month.2 **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) and (d))**

3. The permittee shall operate EUENGINE10 in accordance with manufacturer’s recommendations for safe and proper operation to minimize emissions during periods of startup, shutdown and malfunction.2 **(R 336.1912)**

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

1. The permittee shall equip each generator of EUENGINE10 with a non-resettable hour meter to track the number of operating hours.2 **(R 336.1205)**

2. The nameplate capacity from EUENGINE10 shall not exceed 750 kW with heat input of 7 MMBTU/hr.2 **(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))**

The permittee shall monitor the hours of operation of each generator of EUENGINE10 on a monthly basis in a manner that is acceptable to the AQD District Supervisor.2 **(R 336.1205(1)(a) and (3))**

2. The permittee shall keep records of the sulfur content, in percent by weight, of the fuel oil. The permittee shall keep a separate record of the sulfur content for each shipment of fuel oil received. All records shall be kept on file and made available to the Department upon request.2 **(R 336.1205, R 336.1402, 40 CFR 52.21 (c) and (d))**

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 EUENGINE10, 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. The permittee shall keep all records on file and make them 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 orreceived by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

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

**See Appendix 8**

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

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. SVENGINE10
 | 64 x 182 | 13.12 | **R 336.1225,** **40 CFR 52.21 (c) & (d)** |

**IX. OTHER REQUIREMENT(S)**

NA

**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).

## EUENGINE12

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A diesel fuel-fired generator with a nameplate capacity of 2000 kW and a heat input capacity of 20 MMBTU/hr.

**Flexible Group ID:** FGENGINES

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. NOx | 9.2 g/kW-hr2,\* | Hourly | EUENGINE12 | SC V.1 | **40 CFR Part 60, Subpart IIII, 40 CFR 60.4205** |
| 2. NMHC+NOx | 6.4 g/kW-hr | HourlyA | EUENGINE12 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 3. CO | 11.4 g/kW-hr2,\* | Hourly | EUENGINE12 | SC V.1 | **40 CFR Part 60, Subpart IIII, 40 CFR 60.4205** |
| 4. CO | 3.5 g/kW-hr | HourlyA | EUENGINE12 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 5. PM | 0.54 g/kW-hr2,\* | Hourly | EUENGINE12 | SC V.1 | **40 CFR Part 60, Subpart IIII, 40 CFR 60.4205** |
| 6. PM | 0.20 g/kW-hr | HourlyA | EUENGINE12 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |

\* Emission limits are based on a weighted average per the EPA approved performance requirements of 40 CFR Part 60 Subpart IIII.

AThese 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).

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel, in EUENGINE12 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.2,a **(40 CFR 1090.305)**

a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined material limit shall be considered compliance with the material limit established by **40 CFR 1090.305**; and also compliance with the material limit established by **R 336.1205(1)(a), R 336.1402, 40 CFR 60.4207**, an additional applicable requirement that has been subsumed within this condition.

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

The permittee shall operate EUENGINE12 in accordance with its manufacturer’s written instructions or by operating procedures developed by the permittee that are approved by the manufacturer.2 **(40 CFR 60.4211)**

2. The permittee shall not change or revise the operating instructions, procedures or settings for EUENGINE12 unless permitted by the manufacturer in writing.2 **(40 CFR 60.4211)**

3. The permittee shall not operate EUENGINE12 for more than 100 hours per engine per 12-month rolling time period as determined at the end of each calendar month during maintenance checks and readiness testing and not more than a total of 500 hours of operation per rolling 12-month rolling time period as determined at the end of each calendar month.2 **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) and (d))**

4 The permittee shall operate EUENGINE12 in accordance with manufacturer’s recommendations for safe and proper operation to minimize emissions during periods of startup, shutdown and malfunction.2 **(R 336.1912)**

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

1. The permittee shall equip EUENGINE12 with a non-resettable hour meter to track the number of operating hours.2 **(40 CFR 60.4209)**

1. The nameplate capacity from EUENGINE12 shall not exceed 2000 kW with heat input of 20 MMBTU/hr.2 **(R 336.1205(1)(a))**
2. If EUENGINE12 contains a diesel particulate filter to comply with SC I.5 the filter must be installed with a backpressure monitor that notifies the owner/operator when the high backpressure limit of the engine is approached.2 **(40 CFR 60.4209)**

**V. TESTING/SAMPLING**

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

1. If the EUENGINE12 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:
	1. 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 changing emission-related settings in a way that is not permitted by the manufacturer.
	2. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.
	3. 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. **(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 monitor the hours of operation of EUENGINE12 on a monthly basis in a manner that is acceptable to the AQD District Supervisor.2 **(R 336.1205(1)(a) and (3))**

2. The permittee shall keep, in a satisfactory manner, the following records on file and made available to the Department upon request:2 **(40 CFR 60.4211)**

a. Engine certification according to 40 CFR Part 89 or Part 94, as applicable, for the same engine model year and maximum engine power. The engine must be installed and configured according to the manufacturer’s specifications.

b. Records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted correctly and using the same methods specified in 40 CFR Part 60, Subpart IIII.

c. Records of engine manufacturer data indicating compliance with these standards.

d. Records of control device vendor data indicating compliance with these standards, as applicable.

e. Conduct an initial test to demonstrate compliance with the emission standards according to the requirements of 40 CFR 60.4212, as applicable.

1. The permittee shall keep records of the sulfur content, in percent by weight, of the fuel oil. The permittee shall keep a separate record of the sulfur content for each shipment of fuel oil received. All records shall be kept on file and made available to the Department upon request.2 **(R 336.1205, R 336.1402, 40 CFR 52.21 (c) and (d))**
2. 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 EUENGINE12, 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. The permittee shall keep all records on file and make them 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 orreceived by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

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

4. The permittee shall submit a notification specifying whether EUENGINE12 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. **(R 336.1213(3), 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 Diameter / Dimensions****(inches)** | **Minimum Height** **Above Ground****(feet)** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- |
| 1. SVENGINE12 | 182 | 44.92 | **R 336.1225, R 336.2803, R 336.12804, 40 CFR 52.21 (c) & (d)** |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines by the compliance date(s) specified in the standards. **(40 CFR 60 Subparts A and IIII, 40 CFR 63.6590(c))**
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to EUENGINE12. **(40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6585)**

**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).

## EUENGINE15

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A 1,474 bhp diesel fuel-fired engine driving a 1,000 kW emergency generator. The engine is a 2014 model year with a displacement of 2.7 liters/cylinder. This generator is located on the roof of the Education and Research (E & R) Building.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. NMHC + NOx  | 6.4 g/kW-hr2 | HourlyA | EUENGINE15 | SC VI.2 | **40 CFR 60.4202(a)(2) -****Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 1. CO
 | 3.5 g/kW-hr2 | HourlyA | EUENGINE15 | SC VI.2 | **40 CFR 60.4202(a)(2) -****Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 1. PM
 | 0.20 g/kW-hr2 | HourlyA | EUENGINE15 | SC VI.2 | **40 CFR 60.4202(a)(2) -****Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |

AThese 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).

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel, in EUENGINE15 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.2 **(R 336.1205(1)(a) and (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

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

1. The permittee shall not operate EUENGINE15 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) and (b), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) and (d))**

2. The permittee may operate EUENGINE15 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. 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. EUENGINE15may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity.2  **(40 CFR 60.4211(f))**

3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60
Subpart IIII, for the same model year and maximum engine power, the permittee shall meet the following requirements for EUENGINE15:

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 89, 94, and/or 1068, as they apply.

If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine may be considered a non-certified engine.2  **(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 EUENGINE15 and shall, to the extent practicable, maintain and operate each 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 EUENGINE15 with non-resettable hours meters to track the operating hours.2 **(R 336.1205(1)(a) and (3), R 336.1225, 40 CFR 60.4209)**

2. The nameplate capacity of EUENGINE15 shall not exceed 1474 BHP, as certified by the equipment manufacturer.2 **(R 336.1205(1)(a) and (3), 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 EUENGINE15 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 tests shall be conducted according to
40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The 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.Subsequent performance testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first.2  **(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.2 **(R 336.1205(1)(a) and (3), 40 CFR 52.21 (c) and (d))**

2. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that EUENGINE15 meets the applicable requirements contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If EUENGINE15 becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. The permittee shall keep all records on file and make them available to the Department upon request.2 **(40 CFR 60.4211(g))**

3. Starting with the model years in Table 5 to 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall keep records of the operation of EUENGINE15 in emergency and non-emergency service that are recorded through the non-resettable hour meter, on a calendar year basis. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.2 **(40 CFR 60.4211, 40 CFR 60.4214(b))**

4. The permittee shall monitor and record the total hours of operation for EUENGINE15, on a monthly and 12‑month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division.2  **(R 336.1205(1)(a) and (b), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) and (d))**

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 EUENGINE15, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil.2 **(R 336.1205(1)(a) and (3),** **R 336.1402(1), 40 CFR 80.510(b))**

**VII. REPORTING**

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

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

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

 4. The permittee shall submit a notification specifying whether EUENGINE15 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.2 **(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 Diameter / Dimensions****(inches)** | **Minimum Height** **Above Ground****(feet)** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- |
| 1. SVENGINE15 | 162 | 1092 | **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 EUENGINE15.2 **(40 CFR Part 60 Subparts A and IIII, 40 CFR 63.6590(c))**

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 EUENGINE15.2 **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

**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).

## EUENGINE16

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A 2,937 BHP diesel fuel-fired engine driving a 2,000 kilowatt (kW) emergency generator. The engine is a 2015 model year with a displacement of 4.31 liters/cylinder. This generator is located at the West Clinic Building.

**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. NOx | 6.54 g/HP-hr2, a | Hourly | EUENGINE16 | SC VI.2 | **R 336.1205, 40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 2. NMHC+NOx | 6.4 g/kW-hr | HourlyA | EUENGINE16 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 3. CO | 0.54 g/HP-hr2, a | Hourly | EUENGINE16 | SC VI.2 | **R 336.1205, 40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 4. CO | 3.5 g/kW-hr | HourlyA | EUENGINE16 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 5. PM | 0.04 g/HP-hr2, a | Hourly | EUENGINE16 | SC VI.2 | **R 336.1205, 40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 6. PM | 0.20 g/kW-hr | HourlyA | EUENGINE16 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 7. VOC | 0.15 g/HP-hr2, a | Hourly | EUENGINE16 | SC VI.2 | **R 336.1205, 40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |

aCompliance with this limit shall be considered compliance with the limits of 40 CFR 60.4205(b), which has been subsumed under R 336.1205.

AThese 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).

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel, in EUENGINE16 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.2 **(R 336.1205(1)(a) and (3), R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

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

1. The permittee shall not operate EUENGINE16 for more than 472 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 472 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) and (b), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**

2. The permittee may operate EUENGINE16 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. 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. EUENGINE16may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity.2  **(40 CFR 60.4211(f))**

3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60
Subpart IIII, for the same model year and maximum engine power, the permittee shall meet the following requirements for EUENGINE16:

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 89, 94, and/or 1068, as they apply.

If not operating and maintaining the certified engine and control device according to the manufacturer's emission-related written instructions, the engine may be considered a non-certified engine.2  **(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 EUENGINE16 and shall, to the extent practicable, maintain and operate each 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 EUENGINE16 with non-resettable hours meters to track the operating hours.2 **(R 336.1205(1)(a) and (3), R 336.1225, 40 CFR 60.4209)**

2. The nameplate capacity of EUENGINE16 shall not exceed 2,937 BHP, as certified by the equipment manufacturer.2 **(R 336.1205(1)(a) and (3), 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 EUENGINE16 within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engines have 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 tests shall be conducted according to
40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The 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.Subsequent performance testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first.2  **(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.2 **(R 336.1205(1)(a) and (b), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) and (d))**

2. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification documentation indicating that EUENGINE16 meets the applicable requirements contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If EUENGINE16 becomes uncertified then the permittee must also keep records of a maintenance plan and maintenance activities. The permittee shall keep all records on file and make them available to the Department upon request.2 **(40 CFR 60.4211(g))**

3. Starting with the model years in Table 5 to 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall keep records of the operation of EUENGINE16 in emergency and non-emergency service that are recorded through the non-resettable hour meter, on a calendar year basis. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.2 **(40 CFR 60.4211, 40 CFR 60.4214(b))**

4. The permittee shall monitor and record the total hours of operation for EUENGINE16, on a monthly and 12‑month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division.2  **(R 336.1205(1)(a) and (b), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) and (d))**

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 EUENGINE16, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil.2 **(R 336.1205(1)(a) and (3),**
**R 336.1402(1), 40 CFR 80.510(b))**

**VII. REPORTING**

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

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

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

4. The permittee shall submit a notification specifying whether EUENGINE16 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.2 **(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 Diameter / Dimensions****(inches)** | **Minimum Height** **Above Ground****(feet)** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- |
| 1. SVENGINE16 | 162 | 632 | **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 EUENGINE16.2 **(40 CFR Part 60 Subparts A and IIII, 40 CFR 63.6590)**

2.    The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to EUENGINE16.2 **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

**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** |
| --- | --- | --- |
| FGENGINES | Two (2) diesel fuel-fired emergency generators. | EUENGINE10,EUENGINE12 |
| FGBOILERS | Three (3) Nebraska natural gas-fired boilers with No.2 fuel oil back-up located in the powerhouse. | EUBOILER1,EUBOILER2,EUBOILER3 |
| FGNSPSENG | Two (2) diesel fuel-fired emergency generators operating as exempt per Rule 336.1285(2)(g) and subject to 40 CFR 60, Subpart IIII. | EUENGINE17,EUCCEngine1 |

## FGENGINES

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two (2) diesel fuel-fired emergency generators.

**Emission Unit:** EUENGINE10, EUENGINE12

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. NOx
 | 41.1 tpy2 | 12-month rolling time period as determined at the end of each calendar month | FGENGINES | SC VI.1, SC VI.2, SC VI.3, SC VI.4 | **R 336.1205, 40 CFR 52.21 (c) & (d)**  |

The NOx limit is based on the following emission factors(s):

7.97 grams NOx per brake horsepower-hour (g/bhp-hr) and 1135 bhp-hr for EUENGINE10.

7.1 grams NOx per brake horsepower (g/bhp-hr) and 2922 bhp-hr for EUENGINE12.

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate EUENGINE10 for more than 300 hours per 12-month rolling time period as determined at the end of each calendar month.2 **(R 336.1205, R 336.1225, 40 CFR 52.21 (c) and (d))**

2. The permittee shall not operate EUENGINE12 for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month.2 **(R 336.1205, R 336.1225, 40 CFR 52.21 (c) and (d))**

**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))**

The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.2 **(R 336.1205, 40 CFR 52.21 (c) and (d))**

The permittee shall monitor in a satisfactory manner the hours of operation for FGENGINES on a monthly basis.2 **(R 336.1205, R 336.1225, 40 CFR 52.21 (c) and (d))**

3. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NOx emission calculation records for FGENGINES, as required by SC I.1. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1205, 40 CFR 52.21 (c) and (d))**

4. The permittee shall keep, in a satisfactory manner, a written log of the monthly hours of operation of FGENGINES. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1205, R 336.1225, 40 CFR 52.21 (c) and (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 orreceived by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

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

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**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).

## FGBOILERS

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Three (3) Nebraska natural gas-fired boilers with No.2 fuel oil back-up located in the powerhouse.

**Emission Unit:** EUBOILER1, EUBOILER2, EUBOILER3

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. NOx
 | 35.4 tpy2, \* | 12-month rolling time period as determined at the end of each calendar month | FGBOILERS | SC VI.3, SC VI.4 | **R 336.1205, 40 CFR 52.21 (c) & (d)** |

\* The NOx limit is based on an emission factor of 0.107 pounds NOx per MMBtu of fuel oil used and 0.039 pounds NOx per MMBtu of natural gas used.

1. Visible emissions from FGBOILERS, when firing fuel oil, shall not exceed 20 percent opacity except as specified in the federal Standards of Performance for New Stationary Sources, 40 CFR Part 60.43c(c).2 **(40 CFR Part 60 Subparts A and Dc)**

**II. MATERIAL LIMIT(S)**

1. The fuel oil usage for FGBOILERS shall not exceed 1,234,000 gallons per 12-month rolling time period, nor shall the natural gas usage for FGBOILERS exceed 1,515,480,000 cubic feet per 12‑month rolling time period.2 **(R 336.1205, R 336.1225, 40 CFR 52.21 (c) and (d))**

2. The permittee shall burn only diesel fuel oil in FGBOILERS with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent.2,a **(40 CFR 1090.305)**

a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined material limit shall be considered compliance with the material limit established by **40 CFR 1090.305**; and also compliance with the material limit established by **R 336.1205, 40 CFR 60.42c(d)**, an additional applicable requirement that has been subsumed within this condition.

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

1. The permittee shall develop a malfunction abatement plan (MAP) as described in Rule 911(2), for FGBOILERS. The MAP shall be submitted within 180 days of permit issuance, and implemented and maintained. The MAP shall, at a minimum, specify the following:
	1. 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.
	2. 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.
	3. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

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

1. The permittee shall not burn any liquid fuel for periodic testing, maintenance, or operator training exceeding a combined total of 48 hours during any calendar year based on a 12-month rolling time period as determined at the end of each calendar month for each boiler in FGBOILERS. **(R 336.1213(2)(d))**

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

NA

**V. TESTING/SAMPLING**

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

1. Upon request of the AQD District Supervisor, the permittee shall verify NOx emission rates from FGBOILERS by testing at the owner’s expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD‑approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **(R 336.1213(3))**

2. The permittee shall monitor in a satisfactory manner the natural gas and fuel oil usage from FGBOILERS on a monthly basis.2 **(R 336.1205, R 336.1225, 40 CFR 52.21 (c) and (d))**

3.The permittee shall keep, in a satisfactory manner, monthly natural gas and fuel oil usage records for FGBOILERS. All records shall be kept on file and made available to the Department upon request.2 **(R 336.1205, R 336.1225, 40 CFR 52.21 (c) and (d)), 40 CFR 60.48c(g))**

1. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NOx emission calculation records for FGBOILERS, as required by SC I.1. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1205, 40 CFR 52.21 (c) and (d))**
2. The permittee shall keep, in a satisfactory manner, fuel oil supplier certification for each delivery of fuel oil. The certification shall include the name of the fuel oil supplier and a statement from the fuel oil supplier that the fuel oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.2 **(R 336.1205, 40 CFR 60.48c(f))**
3. 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 FGBOILERS, 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. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3))**
4. The permittee shall perform and document non-certified visible emissions observations on a daily basis when operating, if burning fuel oil in FGBOILERS.  If during the observation there are any visible emissions detected, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point.  Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions in excess of 20% opacity observed, and any corrective actions taken 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 orreceived by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

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

**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. SVBOILERS
 | 962 | 75.82 | **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 Dc, as they apply to FGBOILERS. **(40 CFR Part 60 Subparts A and Dc)**

**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).

## FGNSPSENG

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two (2) diesel fuel-fired emergency generators operating as exempt per Rule 336.1285(2)(g) and subject to 40 CFR 60, Subpart IIII.

**Emission Unit:** EUENGINE17, EUCCEngine1

**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 | Hourly | EUENGINE17 | SC VI.2 | **40 CFR 60.4205(c) - Table 4 of 40 CFR 60, Subpart IIII** |
| 2. NMHC + NOx | 6.4 g/kW-hr | HourlyA | EUCCEngine1 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 3. CO | 3.5 g/kW-hr | HourlyA | EUCCEngine1 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |
| 4. PM | 0.20 g/kW-hr | Hourly | EUENGINE17 | SC VI.2 | **40 CFR 60.4205(c) - Table 4 of 40 CFR 60, Subpart IIII** |
| 5. PM | 0.20 g/kW-hr | HourlyA | EUCCEngine1 | SC VI.2 | **40 CFR 60.4202(a)(2) - Table 1 of 40 CFR 89.112,****40 CFR 60.4205(b)** |

AThese 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).

**II. MATERIAL LIMIT(S)**

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

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

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

2. The permittee may operate each engine in FGNSPSENG up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f)(3))**

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 in FGNSPSENG:

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 89, 94 and/or 1068, as they apply to the engine.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer’s emission-related written instructions, the engine will be considered a non-certified engine. **(40 CFR 60.4211(a) and (c))**

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

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

1. The permittee shall equip and maintain each engine in FGNSPSENG with non-resettable hours meters to track the operating hours. **(40 CFR 60.4209)**

**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 FGNSPSENG 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:

1. 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 changing emission-related settings in a way that is not permitted by the manufacturer.
2. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.
3. 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. **(40 CFR 60.4211(g)(2) and (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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**

2. The permittee shall keep, in a satisfactory manner, the following records for each engine in FGNSPSENG:

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. **(40 CFR 60.4211)**

3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine in FGNSPSENG:

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.3.

b. For each uncertified engine: The permittee shall keep records of a maintenance plan, as required by SC III.4, and maintenance activities.

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

4. The permittee shall monitor and record, the total hours of operation for each engine in FGNSPSENG 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 FGNSPSENG, 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 FGNSPSENG, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(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 FGNSPSENG, 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. **(40 CFR 60.4207(b), 40 CFR 1090.305)**

**VII. REPORTING**

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

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

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

4. The permittee shall submit a notification specifying whether each engine in FGNSPSENG 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. **(R 336.1213(3), 40 CFR Part 60, Subpart IIII)**

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and IIII, as they apply to each engine in FGNSPSENG. **(40 CFR Part 60, Subparts A and IIII, 40 CFR 63.6590(c))**

2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each engine in FGNSPSENG. **(40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6585)**

**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).

# 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 | CO2e | Carbon Dioxide Equivalent |
| CEMS | Continuous Emission Monitoring System | dscf | Dry standard cubic foot |
| CFR | Code of Federal Regulations | dscm | Dry standard cubic meter |
| COM | Continuous Opacity Monitoring | °F | Degrees Fahrenheit |
| Department/department | Michigan Department of Environment, Great Lakes, and Energy | gr | Grains |
| HAP | Hazardous Air Pollutant |
| EGLE | Michigan Department of Environment, Great Lakes, and Energy | Hg | Mercury |
| hr | Hour |
| EU | Emission Unit | HP | Horsepower |
| FG | Flexible Group | H2S | Hydrogen Sulfide |
| GACS | Gallons of Applied Coating Solids | kW | Kilowatt |
| GC | General Condition | lb | Pound |
| GHGs | Greenhouse Gases | m | Meter |
| HVLP | High Volume Low Pressure\* | mg | Milligram |
| ID | Identification  | mm | Millimeter |
| IRSL | Initial Risk Screening Level | MM | Million |
| ITSL | Initial Threshold Screening Level | MW | Megawatts |
| LAER | Lowest Achievable Emission Rate | NMOC | Non-methane Organic Compounds |
| MACT | Maximum Achievable Control Technology | NOx | Oxides of Nitrogen |
| MAERS | Michigan Air Emissions Reporting System | ng | Nanogram |
| MAP | Malfunction Abatement Plan | PM | Particulate Matter |
| MSDS | Material Safety Data Sheet | PM10 | Particulate Matter equal to or less than 10 microns in diameter |
| NA | Not Applicable |
| NAAQS | National Ambient Air Quality Standards | PM2.5 | Particulate Matter equal to or less than 2.5microns in diameter |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | pph | Pounds per hour |
| ppm | Parts per million |
| NSPS | New Source Performance Standards | ppmv | Parts per million by volume |
| NSR | New Source Review | ppmw | Parts per million by weight |
| PS | Performance Specification | % | Percent |
| PSD | Prevention of Significant Deterioration | psia | Pounds per square inch absolute |
| PTE | Permanent Total Enclosure | psig | Pounds per square inch gauge |
| PTI | Permit to Install | scf | Standard cubic feet |
| RACT | Reasonable Available Control Technology | sec | Seconds |
| ROP | Renewable Operating Permit | SO2 | Sulfur Dioxide |
| SC | Special Condition | TAC | Toxic Air Contaminant |
| SCR | Selective Catalytic Reduction | Temp | Temperature |
| SNCR | Selective Non-Catalytic Reduction | THC | Total Hydrocarbons |
| SRN | State Registration Number | tpy | Tons per year |
| TEQ | Toxicity Equivalence Quotient | µg | Microgram |
| USEPA/EPA | United States Environmental Protection Agency | µm | Micrometer or Micron |
| VOC | Volatile Organic Compounds |
| VE | Visible Emissions | yr | Year |

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

## Appendix 2. Schedule of Compliance

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

## Appendix 3. Monitoring Requirements

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

## Appendix 4. Recordkeeping

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

## Appendix 5. Testing Procedures

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-K1271-2012. 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-K1271-2012 is being reissued as Source-Wide PTI No. MI-PTI-K1271-2021.

|  |  |  |  |
| --- | --- | --- | --- |
| **Permit to Install Number** | **ROP Revision****Application Number** | **Description of Equipment or Change** | **Corresponding Emission Unit(s) or****Flexible Group(s)** |
| 179-14 | NA | 1000 kW diesel fuel-fired emergency generator on the roof of E&R building. | EUENGINE15 |
| 224-15 | NA | 2000 kW diesel fuel-fired emergency generator in the west clinic. | EUENGINE16 |

## 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.