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

EFFECTIVE DATE: February 18, 2022

ISSUED TO

FCA US LLC - Trenton Engine Complex

State Registration Number (SRN): B3350

LOCATED AT

2300 Van Horn Road, Trenton, Wayne County, Michigan 48183

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B3350-2022

Expiration Date: February 18, 2027

Administratively Complete ROP Renewal Application Due Between August 18, 2025 and August 18, 2026

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B3350-2022

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

Michigan Department of Environment, Great Lakes, and Energy

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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 stateonly 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.

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A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

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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)(q))
- 8. This ROP does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

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Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. (R 336.1213(3)(b))

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

Certification & Reporting

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

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22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**

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

Permit Shield

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

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

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

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d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))

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

Revisions

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

Reopenings

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

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Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

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Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² (R 336.1201(1))

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

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).

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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.

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SOURCE-WIDE CONDITIONS

DESCRIPTION

All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

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

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	CO	271.4 tpy ²	12-month rolling time period as determined at the end of each calendar month.	Source-Wide	SC VI.1	R336.1205
2.	NOx	93.8 tpy ²	12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC VI.1	R336.1205

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall calculate CO and NOx annual emission rates from the stationary source in tons per year, based on a 12-month rolling time period, as determined at the end of each calendar month.² (R 336.1205)

VII. REPORTING

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

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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 calculate CO and NOx annual emission rates from the stationary source in tons per year, based on a 12-month rolling time period, as determined at the end of each calendar month. (R 336.1205)

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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).

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C. EMISSION UNIT SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-YARD	Fugitive dust sources at the Trenton Engine Complex that include: plant roadways, plant yard, material storage piles, and material handling operations.	01-01-1953	NA
EU- CRANK_GALLERY_ E-11	Wet machining of cranks located in column E- 11 and handling of chips produced by the machining operations; including associated exhaust systems and common wet mist collector.	01-01-2008	FG-WETMACHINE
EU- BLOCK_GALLERY_ C-11	Wet machining of engine blocks located in column C-11 and handling of chips produced by the machining operations; including associated exhaust systems and common wet mist collector.	01-01-2008	FG-WETMACHINE
EU- HEAD_GALLERY_L- 12	Wet machining of heads located in column L- 12 and handling of chips produced by the machining operations; including associated exhaust systems and common wet mist collector.	01-01-2008	FG-WETMACHINE
EU-HOT_TEST1	Natural gas-fired engine test stand. (PTI No. 179-99E)	10-01-2008	FG-HOT_TEST
EU-HOT_TEST2	Natural gas-fired engine test stand. (PTI No. 179-99E)	10-01-2008	FG-HOT_TEST
EU-DYNO1	Existing engine dynamometer test cell burning unleaded gasoline. Located at the Trenton South Plant.	09-14-2011	FG-DYNOS
EU-DYNO2	Existing engine dynamometer test cell burning unleaded gasoline. Located at the Trenton South Plant.	09-14-2011	FG-DYNOS
EU-DYNO3	Existing engine dynamometer test cell burning unleaded gasoline. Located at the Trenton South Plant.	09-14-2011	FG-DYNOS
EU-DYNO4	Existing engine dynamometer test cell burning unleaded gasoline. Located at the Trenton South Plant.	04-30-2013	FG-DYNOS
EU-DYNO5	Existing engine dynamometer test cell burning unleaded gasoline. Located at the Trenton South Plant.	04-30-2013	FG-DYNOS

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-BOILER1	60 MMBTU/hr natural gas-fired boiler. Located at the Trenton Engine Plant.	01-01-1953	FG-BLR1&BLR5 FG-COMBUSTION
EU-BOILER5	180 MMBTU/hr natural gas-fired boiler. Located at Trenton Engine Plant.	01-01-1969	FG-BLR1&BLR5 FG-COMBUSTION
EU-COMBUSTION	Miscellaneous combustion equipment including: direct fired burners for supply fans, heating and ventilation units, unit heaters, door heaters, strand type air houses, hot water generators and steam generators (each is burning natural gas and rated at less than 10 MMBtu/hr of heat input). Located at the Trenton Engine Plant and Trenton South Plant.	01-01-1999	FG-COMBUSTION
EU-FIRE_PUMP1	137 HP diesel fueled emergency fire pump.	11-01-1987	FG-EMERG-RICE-CI
EU-FIRE_PUMP2	276 HP diesel fueled emergency fire pump.	01-01-1989	FG-EMERG-RICE-CI
EU-EMENG_IWTP	170 HP gasoline fueled emergency engine located in the Industrial Wastewater Treatment Plant (IWTP)	01-01-1966	FG-EMERG-RICE-SI
EU-GAS_TANK1	560 gallon steel gasoline storage tank	01-01-1953	FG-GAS_DISP
EU-GAS_TANK2	3,000 gallon steel/concrete gasoline storage tank.	01-01-2002	FG-GAS_DISP
EU-RULE331_ WETMACHINE	Various machining operations including grinding, boring, etc. utilizing various cutting oils and coolants. The processes are maintained with oil mist collectors and are exempt from permit to install (R336.1201) requirements by R336.1285(2)(I)(vi), but are subject to R336.1331.	10-01-2008	FG-OTHER MACHINING LINES
EU-RULE331_ DRYMACHINE	Various machining operations including grinding, boring, etc. The processes are maintained with PM filtration systems and are exempt from permit to install (R336.1201) requirements by R336.1285(2)(I)(vi) but are subject to R336.1331.	10-01-2008	FG-OTHER MACHINING LINES
EU-PROD_INKS	Production marking ink.	01-01-1953	FG-RULE 290
EU-ADHESIVE	Adhesives applied to various production parts.	01-01-1953	FG-RULE 290
EU-METHANOL	Methanol used for cleaning purposes in laboratory and on machine gages.	01-01-1953	FG-RULE 290
EU-IPA	Isopropyl alcohol used for cleaning engines prior to adhesive application.	10-01-2008	FG-RULE 290

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EU-YARD EMISSION UNIT CONDITIONS

DESCRIPTION

Fugitive dust sources at the Trenton Engine Complex that include: plant roadways, plant yard, material storage piles, and material handling operations.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

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

1. Visible emissions from all truck traffic, operated in conjunction with EU-YARD, shall not exceed 5 percent opacity.² (R 336.1301, R 336.1371, R 324.5524)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate EU-YARD in compliance with the approved continuous fugitive emissions control plan for all plant roadways, the plant yard, all material storage piles, and all material handling operations.² (R 336.1371, R 324.5524)

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))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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

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See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

¹This 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).

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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	Flexible Group Description	Associated
FG-	Wet machining of cranks, heads, and blocks, and handling of chips	Emission Unit IDs EU-CRANK
WETMACHINE	produced by the machining operations. Machining operations include grinding, boring, etc. utilizing various cutting oils and coolants. The processes are maintained with oil mist collectors that vent to the outside atmosphere.	GALLERY_E-11, EU-BLOCK_ GALLERY_C-11, EU-HEAD_ GALLERY_L-12
FG-HOT_TEST	Two natural gas-fired engine test stands. (PTI No. 179-99E)	EU-HOT_TEST1, EU-HOT_TEST2
FG-DYNOS	Five (5) dynamometer engine test cells burning unleaded gasoline (Trenton South Plant).	EU-DYNO1, EU-DYNO2, EU-DYNO3, EU-DYNO4, EU-DYNO5
FG- COMBUSTION	Boilers 1 and 5 and miscellaneous combustion equipment including: direct fired burners for supply fans, heating and ventilation units, unit heaters, door heaters, strand type air houses, hot water generators and steam generators (each is burning natural gas and rated at less than 10 MMBtu/hr of heat input).	EU-BOILER1, EU-BOILER5, EU-COMBUSTION
FG- BLR1&BLR5	Two natural gas-fired boilers rated at 60 MMBTU/hr and 180 MMBTU/hr.	EU-BOILER1, EU-BOILER5
FG-GAS-DISP	This flexible group includes existing and new/reconstructed stationary gasoline dispensing facilities (GDFs) located at an area source of hazardous air pollutants (HAPs) that have a maximum monthly gasoline throughput of one of the following	EU-GAS_TANK1, EU-GAS_TANK2
	 Less than 10,000 gallons At least 10,000 gallons and no more than 100,000 gallons 	
	GDF means any stationary source which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine use solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.	

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Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-EMERG- RICE-CI	40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at an area source of HAP emissions, existing emergency, compression ignition (CI) RICE equal to or less than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006.	EU-FIRE_PUMP1, EU-FIRE_PUMP2
FG-EMERG- RICE-SI	40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at an area source of HAP emissions, existing emergency, spark ignition (SI) RICE equal to or less than 500 bhp. A RICE is existing if the date of installation is before June 12, 2006.	EU-EMENG_IWTP
FG-OTHER MACHINING LINES	Particulate emission units that are exempt from permit to install (R336.1201) requirements by R336.1285(2)(I)(vi), but subject to R336.1331 requirements.	EU-RULE331_ DRYMACHINE, EU-RULE331_ WETMACHINE
FG-RULE 290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.	EU-PROD_INKS, EU-ADHESIVE, EU-METHANOL, EU-IPA

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FG-WETMACHINE FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Wet machining of cranks, heads, and blocks, and handling of chips produced by the machining operations. Machining operations include grinding, boring, etc. utilizing various cutting oils and coolants. The processes are maintained with oil mist collectors that vent to the outside atmosphere.

Emission Unit: EU-CRANK_GALLERY_E-11, EU-BLOCK_GALLERY_C-11, EU-HEAD_GALLERY_L-12

POLLUTION CONTROL EQUIPMENT

The processes are maintained with oil mist collectors.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.0018 grains per dscf ²	Instantaneous	FG-WETMACHINE	SC VI	R 336.1331
2.	PM10	1.21 pph ²	Instantaneous	FG-WETMACHINE	SC VI	R 336.1331

^{3.} The visible emissions from FG-WETMACHINE shall not exceed a six-minute average of 5 percent opacity.² (R 336.1301)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FG-WETMACHINE unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the oil mist collectors, has been submitted within 45 days of permit issuance, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1910, R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FG-WETMACHINE unless the oil mist collectors are installed, maintained, and operated in a satisfactory manner. ² (R 336.1301, R 336.1301)

V. TESTING/SAMPLING

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

See Appendix 5

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VI. MONITORING/RECORDKEEPING

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

1. Permittee shall keep a record indicating the particulate control device name and manufacturer's recommended filter change schedule.² (R 336.1301, R 336.1331, R 336.1910)

- 2. The permittee shall keep a record the following: (R 336.1301, R 336.1331, R 336.1910)
 - a. Control equipment (oil mist collector) Identification
 - b. Date of inspection
 - c. Maintenance activities conducted (e.g. filter replacements)

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SVCRANKFILTERGALLERY	25.2 ²	45 ²	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2.	SVBLOCKFILTERGALLERY	25.2 ²	45 ²	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3.	SVHEADFILTERGALLERY	25.2 ²	45 ²	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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).

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FG-HOT_TEST FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two natural gas-fired engine test stands. (PTI No. 179-99E)

Emission Unit: EU-HOT_TEST1, EU-HOT_TEST2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	NOx	1.42 tpy ^{2, 3}	12-month rolling time period as determined at the end of each calendar month	F(==H()) F \ \	SC VI.1, VI.2	R 336.1205

II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1	. Natural gas		12-month rolling time period as determined at the end of each calendar month		SC IV.1, VI.1	R 336.1205

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas usage for FG-HOT TEST on a monthly basis.² (R 336.1205 (1)(a) and (b), R 336.1225)

V. TESTING/SAMPLING

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

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month natural gas use records for FG-HOT_TEST. All records shall be kept on file for a period of at least five years and made available to the Department upon request. ² (R 336.1205 (1)(a) and (b), R 336.1225)

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2. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NOx emission records for FG-HOT_TEST. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1205 (1)(a) and (b), R 336.1225)

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-HOT_TEST1	12 ²	40 ²	40 CFR 52.21 (c) & (d)
2. SV-HOT_TEST2	12 ²	40 ²	40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

- 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).
- ³ The NOx limit is based on an emission factor of 2,840 lbs NOx per MMcf of natural gas used.

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FG-DYNOS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Five (5) dynamometer engine test cells burning unleaded gasoline (Trenton South Plant).

Emission Unit: EU-DYNO1, EU-DYNO2, EU-DYNO3, EU-DYNO4, and EU-DYNO5

POLLUTION CONTROL EQUIPMENT

No control

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable
						Requirements
1.	CO	3.12 lb/gal ²	Hourly	FG-DYNOS	SC V.1, V.2	R 336.1205
2.	CO	210.6 tpy ²	12-month rolling time period	FG-DYNOS	SC VI.2	R 336.1205,
			as determined at the end of			R 336.2804,
			each calendar month.			40 CFR 52.21 (d)
3.	NOx	0.300 lb/gal ²	Hourly	FG-DYNOS	SC V.1, V.2	R 336.1205
4.	NOx	20.25 tpy ²	12-month rolling time period	FG-DYNOS	SC VI.2	R 336.1205
			as determined at the end of			R 336.2803,
			each calendar month.			R 336.2804
						40 CFR 52.21 (c)
						& (d)

II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Unleaded Gasoline	48 gallons per hour ²	Hourly	FG-DYNOS	SC VI.3	R 336.1205(1)(a), R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2.	Unleaded Gasoline	135,000 gallons per year ²	12-month rolling time period as determined at the end of each calendar month	FG-DYNOS	SC VI.2	R 336.1205(1)(a), R 336.1225

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate more than five (5) dynamometer engine test cells at one time.² (R 336.1205, R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 2. The permittee shall burn only unleaded gasoline in FG-DYNOS.² (R 336.1205(1)(a))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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V. TESTING/SAMPLING

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

 The permittee shall verify pound per gallon CO and NOx emission rates from one of the following dynamometer engine test cells: EU-DYNO1, EU-DYNO2, EU-DYNO3, EU-DYNO4, or EU-DYNO5, by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
CO	40 CFR Part 60, Appendix A
NOx	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)

- 2. Within 180 days of the effective date of MI-PTI-B3350-2022, the permittee shall verify the pound per gallon CO and NOx emission rates from one of the following dynamometer engine test cells: EU-DYNO1, EU-DYNO2, EU-DYNO3, EU-DYNO4, or EU-DYNO5. Thereafter, the permittee shall verify the pound per gallon CO and NOx emission rates from one of the following dynamometer engine test cells: EU-DYNO1, EU-DYNO2, EU-DYNO3, EU-DYNO4, or EU-DYNO5, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 2. The permittee shall keep the following information on a monthly basis for FG-DYNOS:
 - a) A record of the days of operation.
 - b) Gallons of unleaded gasoline used per month and 12-month rolling time period.
 - c) CO emission calculations determining the monthly emission rate in tons per calendar month.
 - d) CO emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e) NOx emission calculations determining the monthly emission rate in tons per calendar month.
 - f) NOx emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

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3. The permittee shall keep, in a satisfactory manner, hourly unleaded gasoline use calculation records for FG-DYNOS, as required SC II 1. The permittee shall calculate the hourly unleaded gasoline usage rate based upon monthly recordkeeping, prorated to an hourly rate. Should the prorated hourly rate exceed 90 percent of the hourly limit, the permittee shall commence hourly recordkeeping for a minimum of two months until the hourly rate falls below 90 percent of the hourly limit. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. (R 336.1213, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-DYNO1	33.02	35.42	R 336.1225, R 336.2803 R 336.2804, 40 FR 52.21 (c) & (d)
2. SV-DYNO2	33.02	35.42	R 336.1225, R 336.2803 R 336.2804, 40 FR 52.21 (c) & (d)
3. SV-DYNO3	33.02	35.42	R 336.1225, R 336.2803 R 336.2804, 40 FR 52.21 (c) & (d)
4. SV-DYNO4	33.02	35.42	R 336.1225, R 336.2803 R 336.2804, 40 FR 52.21 (c) & (d)
5. SV-DYNO5	33.02	35.42	R 336.1225, R 336.2803 R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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).

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FG-COMBUSTION FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Boilers 1 and 5 and miscellaneous combustion equipment including: direct fired burners for supply fans, heating and ventilation units, unit heaters, door heaters, strand type air houses, hot water generators and steam generators (each is burning natural gas and rated at less than 10 MMBtu/hr of heat input).

Emission Unit: EU-BOILER1, EU-BOILER5, and EU-COMBUSTION

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	72.14 tons per year ²	12-month rolling time period as determined at the end of each calendar month	FG-COMBUSTION	SC VI.3	R 336.1205(1)
2. CO	60.60 tons per year ²	12-month rolling time period as determined at the end of each calendar month	FG-COMBUSTION	SC VI.3	R 336.1205(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas		12-month rolling time period as determined at the end of each calendar month		SC VI.2	R 336.1205(1)(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall burn only natural gas in FG-COMBUSTION, with the exception of FG-BLR1&BLR5.² (R 336.1205)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any

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monitoring/recordkeeping special condition.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

- 2. The permittee shall monitor and record the monthly natural gas usage, in a manner acceptable to the AQD District Supervisor. All records shall include the amount of natural gas used, in cubic feet, on a calendar month basis and a 12-month rolling time period basis. The records must indicate the total amount of natural gas used in FG-COMBUSTION and the heat value of natural gas used, in Btu per cubic feet. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² (R 336.1205(1))
- 3. The permittee shall calculate PM, SO₂, NOx, and CO emission rates for each calendar month using the methods detailed in Appendix 7. All data shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request.² (R 336.1205(1), R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

See Appendix 7

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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).

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FG-BLR1&BLR5 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two natural gas-fired boilers rated at 60 MMBTU/hr and 180 MMBTU/hr.

Emission Unit: EU-BOILER1 and EU-BOILER5

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. CO (burning natural gas)	0.084 lb/MMBtu/hr ²	Hourly	EU-BOILER1 EU-BOILER5	SC V.1, V.2	R 336.1205(1)
2. NOx (burning natural gas)	0.10 lb/MMBtu/hr ²	Hourly	EU-BOILER1	SC V.1, V.2	R 336.1205(1)
3. NOx (burning natural gas)	0.28 lb/MMBtu/hr ²	Hourly	EU-BOILER5	SC V.1, V.2	R 336.1205(1)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall verify CO and NOx emission rates from FG-BLR1&BLR5 while combusting natural gas by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
CO	40 CFR Part 60, Appendix A
NOx	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

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AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)

- 2. Within 365 days of the effective date of MI-PTI-B3350-2022, the permittee shall verify the CO and NOx emission rates from FG-BLR1&BLR5 while combusting natural gas. Thereafter, the permittee shall verify the CO and NOx emission rates from FG-BLR1&BLR5, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.2 (R 336.1205, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 2. The permittee shall monitor and record monthly the natural gas usage, in a manner acceptable to the AQD District Supervisor. All records shall include the amount of natural gas used, in cubic feet, on a calendar month basis and 12-month rolling time period basis. The records must indicate the total amount of natural gas used in FG-BLR1&BLR5 and the heat value of natural gas used, in Btu per cubic feet. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² (R 336.1205(1))

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BLR1	66 ²	842	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SV-BLR5	66 ²	842	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

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IX. OTHER REQUIREMENT(S)

NA

- 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).

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FG-GAS-DISP FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group includes existing and new/reconstructed stationary gasoline dispensing facilities (GDFs) located at an area source of hazardous air pollutants (HAPs) that have a maximum monthly gasoline throughput of one of the following

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

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

Emission Unit: EU-GAS TANK1, EU-GAS TANK2

POLLUTION CONTROL EQUIPMENT

NA

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

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. Required measures for a gasoline dispensing facility (GDF) with Monthly Throughput <10,000 gallons
 - a. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. (40 CFR 63.11116(a))
 - b. The permittee shall minimize gasoline spills. (40 CFR 63.11116(a)(1))
 - c. Spills shall be cleaned up as expeditiously as practicable. (40 CFR 63.11116(a)(2))
 - d. Permittee shall cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. (40 CFR 63.11116(a)(3))
 - e. Permittee shall minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. (40 CFR 63.11116(a)(4))
- 2. Required Measures for GDF with Monthly Throughput >10,000 gallons and <100,000
 - a. Must comply with the requirements for GDF facilities with monthly throughput <10,000 gallons. (40 CFR 63.11117(a))
 - b. Must only load gasoline into storage tanks by utilizing submerged filling. (40 CFR 63.11117(b))

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c. Fill pipes not meeting the submerge pipe specifications are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation for such demonstration must be made available for inspection. (40 CFR 63.11117(b)(3))

d. Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements. (40 CFR 63.11117(c))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

There are no testing requirements for GDFs with monthly throughput <10,000 gallons or <100,000 gallons. **(40 CFR 63.11120)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep records of the monthly throughput of gasoline through FG-GAS-DISP. Records of the monthly throughput must be available within 24 hours of a request by the administrator to document your gasoline throughput. (40 CFR 63.11116(b), 40 CFR 63.11117(d))

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. At the time you become subject to the requirements of SC III.2, the permittee must submit an Initial Notification that you are subject to this subpart unless you meet the requirements in SC VII.6 below. The initial notification must contain the following information:
 - a. The name and address of the owner and the operator.
 - b. The address (i.e., physical location) of the GDF.
 - c. A statement that the notification is being submitted in response to this subpart (Gasoline Distribution Area MACT, 40 CFR 63 Subpart CCCCCC) and identifying the requirements in paragraphs (a), (b), and (c)(1) or paragraph (c)(2) of §63.11117 that apply to you.

The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in 40 CFR 63.13. (40 CFR 63.11124(a)(1))

- 5. If you are subject to the requirements of SC III.2, the permittee shall submit a Notification of Compliance Status to the applicable USEPA Regional Office and the delegated state authority, as specified in 40 CFR 63.13, within 60 days of the applicable compliance date specified in §63.11113, unless you meet the requirements in SC VII.6 below. 40 CFR 63.11124(a)(2))
- 6. If prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under SC VII.4 or SC VII.5 listed above. (40 CFR 63.11117(a)(3))

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VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. Permittee shall comply with all applicable provisions of the Gasoline Distribution MACT as specified in 40 CFR 63 Subpart CCCCCC. (40 CFR 63 Subpart CCCCCC)

¹This 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).

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FG-EMERG-RICE-CI FLEXIBLE GROUP CONDITIONS

DESCRIPTION

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at an area source of HAP emissions, existing emergency, compression ignition (CI) RICE equal to or less than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006.

Emission Unit: EU-FIRE_PUMP1, EU-FIRE_PUMP2

POLLUTION CONTROL EQUIPMENT

NA

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

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel in each 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 63.6604(b), 40 CFR 80.510(b))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must comply with the requirements in Item 4 of Table 2d of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FG-EMERG-RICE-CI as specified in the following:
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2;
 - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law or which the risk was deemed unacceptable. (40 CFR 63.6603(a), 40 CFR Part 63, Subpart ZZZZ, Table 2d.4)

- 2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1. (40 CFR 63.6625(i))
- 3. The permittee shall operate and maintain each engine in FG-EMERG-RICE-CI and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent

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with good air pollution control practice for minimizing emissions. (40 CFR 63.6605, 40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)

- 4. For each engine in FG-EMERG-RICE-CI, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. (40 CFR 63.6625(h))
- 5. The permittee may operate each engine in FG-EMERG-RICE-CI 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 63.6640(f)(2))
- 6. Each engine in FG-EMERG-RICE-CI may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in SC III.5. The 50 hours per calendar year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(4))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FG-EMERG-RICE-CI with non-resettable hours meters to track the operating hours. (40 CFR 63.6625(f))

V. TESTING/SAMPLING

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

1. If using the oil analysis program, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30% of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))

VI. MONITORING/RECORDKEEPING

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

- 1. For each engine in FG-EMERG-RICE-CI, the permittee shall keep in a satisfactory manner the following:
 - a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted.
 - b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment,
 - c. Records of performance tests and performance evaluations,

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d. Records of all required maintenance performed on the air pollution control and monitoring equipment,

e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(a), 40 CFR 63.6660)

- 2. For each engine in FG-EMERG-RICE-CI, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or of a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart **ZZZZ**, Table 6.9)
- 3. For each engine in FG-EMERG-RICE-CI, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(e), 40 CFR 63.6660)
- 4. The permittee shall monitor and record, the total hours of operation for each engine in FG-EMERG-RICE-CI 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 each engine in FG-EMERG-RICE-CI 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, including what classified the operation as emergency and how many hours are spent for emergency operation. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(f), 40 CFR 63.6660)
- 5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FG-EMERG-RICE-CI, demonstrating that the fuel meets the requirement of SC II.1. 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. (40 CFR 80.510(b))
- 6. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). (40 CFR 63.6660(a))
- 7. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.6660(b))

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit to the AQD District Supervisor, a semiannual compliance report, as specified in 40 CFR 63.6650, which contains all deviations during the reporting period from the operating limitations specified in SC III.1. If there are no deviations from any applicable emission limitations or operating limitations, the report shall contain a statement that there were no deviations during the reporting period. The first report shall cover

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the period beginning on the applicable compliance date specified in 40 CFR 63.6595 and ending on June 30 (postmarked or delivered by July 31) or December 31 (postmarked or delivered by January 31), whichever date is the first date following the end of the first calendar half after the applicable compliance date. Each subsequent report must cover the semiannual period from January 1 through June 30, or from July 1 through December 31. The subsequent reports must be postmarked or delivered by July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period, except as allowed in 40 CFR 63.6650(b)(5). The compliance report must also contain the following information, as specified in 40 CFR 63.6650(c) and (d):

- a. Company name and address.
- b. Certification of the report by a responsible official.
- c. Date of report and beginning and ending dates of the reporting period.
- d. The number of malfunctions, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused the operating limitations specified in SC III.1 to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.
- e. The total operating time of the RICE at which the deviation occurred during the reporting period.
- The number, duration, and cause of deviations and the corrective action taken.

A copy of the compliance report shall be kept on file for a period of at least five years (at least two years at the site) and made available to the Department upon request. (40 CFR 63.6640(b), 40 CFR 63.6650(b), (c), and (d), 40 CFR 63.6660)

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. (40 CFR Part 63, Subparts A and ZZZZ)

Footnotes:

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

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FG-EMERG-RICE-SI FLEXIBLE GROUP CONDITIONS

DESCRIPTION

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at an area source of HAP emissions, existing emergency, spark ignition (SI) RICE equal to or less than 500 bhp. A RICE is existing if the date of installation is before June 12, 2006.

Emission Unit: EU-EMERG_IWTP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must comply with the requirements in Item 5 of Table 2d of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FG-EMERG-RICE-SI as specified in the following:
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2:
 - b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice standard can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. (40 CFR 63.6603(a), 40 CFR Part 63, Subpart ZZZZ, Table 2d.5)

- 2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1. (40 CFR 63.6625(j))
- 3. The permittee shall operate and maintain each engine in FG-EMERG-RICE-SI and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6605, 40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)

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4. For each engine in FG-EMERG-RICE-SI, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. (40 CFR 63.6625(h))

- 5. The permittee may operate each engine in FG-EMERG-RICE-SI 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, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2))
- 6. Each engine in FG-EMERG-RICE-SI may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in SC III.5. 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 power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(4))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FG-EMERG-RICE-SI with non-resettable hours meters to track the operating hours. (40 CFR 63.6625(f))

V. TESTING/SAMPLING

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

1. If using the oil analysis program, the permittee must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))

VI. MONITORING/RECORDKEEPING

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

- 1. For each engine in FG-EMERG-RICE-SI, the permittee shall keep in a satisfactory manner the following:
 - a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted.
 - b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment,
 - c. Records of performance tests and performance evaluations,
 - d. Records of all required maintenance performed on the air pollution control and monitoring equipment,

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e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(a), 40 CFR 63.6660)

- 2. For each engine in FG-EMERG-RICE-SI, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or of a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)
- 3. For each engine in FG-EMERG-RICE-SI, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(e), 40 CFR 63.6660)
- 4. The permittee shall monitor and record, the total hours of operation for each engine in FG-EMERG-RICE-SI 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 each engine in FG-EMERG-RICE-SI 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, including what classified the operation as emergency and how many hours are spent for emergency operation. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(f), 40 CFR 63.6660)
- 5. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). (40 CFR 63.6660(a))
- 6. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.6660(b))

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit to the AQD District Supervisor, a semiannual compliance report, as specified in 40 CFR 63.6650, which contains all deviations during the reporting period from the operating limitations specified in SC III.1. If there are no deviations from any applicable emission limitations or operating limitations, the report shall contain a statement that there were no deviations during the reporting period. The first report shall cover the period beginning on the applicable compliance date specified in 40 CFR 63.6595 and ending on June 30 (postmarked or delivered by July 31) or December 31 (postmarked or delivered by January 31), whichever date is the first date following the end of the first calendar half after the applicable compliance date. Each subsequent report must cover the semiannual period from January 1 through June 30, or from July 1 through December 31. The subsequent reports must be postmarked or delivered by July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period, except as allowed in 40 CFR 63.6650(b)(5). The compliance report must also contain the following information, as specified in 40 CFR 63.6650(c) and (d):

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- a. Company name and address.
- b. Certification of the report by a responsible official.
- c. Date of report and beginning and ending dates of the reporting period.
- d. The number of malfunctions, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused the operating limitations specified in SC III.1 to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.
- e. The total operating time of the RICE at which the deviation occurred during the reporting period.
- The number, duration, and cause of deviations and the corrective action taken.

A copy of the compliance report shall be kept on file for a period of at least five years (at least two years at the site) and made available to the Department upon request. (40 CFR 63.6640(b), 40 CFR 63.6650(b), (c), and (d), 40 CFR 63.6660)

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. (40 CFR Part 63, Subparts A and ZZZZ)

Footnotes:

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

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

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FG-OTHER MACHINING LINES FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Particulate emission units that are exempt from permit to install (R336.1201) requirements by R336.1285(2)(I)(vi), but subject to R336.1331 requirements.

Emission Unit: EU-RULE331_WETMACHINE, EU-RULE331_DRYMACHINE

POLLUTION CONTROL EQUIPMENT

Oil mist collectors for EU-RULE331_WETMACHINE PM filtration systems for EU-RULE331_DRYMACHINE

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1	. Particulate	0.1 pounds	Per 1000 pounds of	EU-RULE331_DRYMACHINE	SC VI	R336.1331
	Matter (PM)		exhaust gases	EU-RULE331_WETMACHINE		
			calculated on a dry	_		
			basis			

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

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

- 1. Permittee shall not operate the FG-OTHER MACHINING LINES exhaust systems unless the associated particulate control equipment is installed and operating properly. (R336.1910)
- 2. The permittee shall not operate FG-OTHER MACHINING LINES unless the approved malfunction abatement plan, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. (R336.1213(3))

V. TESTING/SAMPLING

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

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall implement and maintain a routine check to ensure proper operation of the control equipment for each emission per the approved malfunction abatement plan. Any maintenance activity performed on the control device shall be recorded and kept on file which will be available to AQD upon request. (R336.1213(3))
- 2. Permittee shall keep an updated record of all emission units subject to R 336.1331(a). (R 336.1213(3))

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3. The permittee shall maintain on file a calculation which demonstrates that compliance with the particulate limit can be achieved. (R 336.1213(3))

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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).

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FG-RULE 290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

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

Emission Units installed prior to December 20, 2016: EU-PROD_INKS, EU-ADHESIVE, EU-METHANOL, EU-IPA

POLLUTION CONTROL EQUIPMENT

NA

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

- 1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. (R 336.1290(2)(a)(i))
- 2. Any emission unit for which CO2 equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: (R 336.1290(2)(a)(ii))
 - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. (R 336.1290(2)(a)(ii)(A))
 - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. (R 336.1290(2)(a)(ii)(B))
 - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. (R 336.1290(2)(a)(ii)(C))
 - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. (R 336.1290(2)(a)(ii)(D))
 - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. (R 336.1290(2)(a)(ii)(E))
- 3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: (R 336.1290(2)(a)(iii))
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. (R 336.1290(2)(a)(iii)(A))

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b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. (R 336.1290(2)(a)(iii)(B))

c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. (R 336.1290(2)(a)(iii)(C))

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. (R 336.1290)
- 2. The following requirements apply to emission units installed <u>on or after</u> December 20, 2016, utilizing control equipment:
 - b. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: (R 336.1290(2)(b)(i), R 336.1910)
 - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
 - ii. Wet scrubbers equipped with a liquid flow rate monitor.
 - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
 - c. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate.
 (R 336.1290(2)(b)(ii), R 336.1910)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. (R 336.1213(3))
 - a. Records identifying each air contaminant that is emitted. (R 336.1213(3))
 - b. Records identifying if each air contaminant is controlled or uncontrolled. (R 336.1213(3))
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. (R 336.1213(3))
 - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). (R 336.1213(3))

e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in enough detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed <u>on or after</u> December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor.

(R 336.1213(3), R 336.1290(2)(d))

- f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. (R 336.1213(3), R 336.1290(2)(e))
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. (R 336.1213(3))
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. (R 336.1290(2)(c), R 336.1213(3))
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. (R 336.1213(3))
- 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. (R 336.1213(3))

See Appendix 4

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

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

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
FG-DYNOS	40 CFR Part 63, Subpart PPPP – National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands	40 CFR Part 63, Subpart PPPPP establishes emission limits for new engine test cells at a source that is major for hazardous air pollutants (HAPs). TEC is not major for HAPs as constrained by the source-wide conditions contained in this ROP.

APPENDICES

Appendix 1. Acronyms and Abbreviations

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

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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.

The permittee shall use the approved formats and procedures for the recordkeeping requirements referenced in FG-RULE 290. Approved formats were reviewed and are included in the Detroit District file. Alternative formats must be approved by the AQD District Supervisor.

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-B3350-2014. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B3350-2014b is being reissued as Source-Wide PTI No. MI-PTI-B3350-2022.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
95-07A*	202100064	Incorporate PTI No. 95-07A into the ROP. PTI No. 95-07A corrects stack restrictions for FG-WETMACHINE.	FG-WETMACHINE
179-99F	201600005	Incorporate PTI No. 179-99F into the ROP. PTI No. 179-99F removes the requirement to keep records of lead and sulfur content in unleaded gasoline delivered and used at the facility, since leaded gasoline is no longer available, with the exception of racing vehicles. This facility does not manufacture or test racing engines.	FG-DYNOS
179-99E	201500019	Incorporate PTI No. 179-99E into the ROP. PTI No. 179-99E is for a third hot test stand in FG-HOT_TEST. Note: On October 29, 2019, FCA notified AQD that the third hot test stand is no longer in use and has been removed from the facility. This third hot test stand has been removed from the ROP.	FG-HOT_TEST

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Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FG-COMBUSTION.

<u>Note</u>: The emission factors used in this Appendix are for illustrative purpose only, and are used only to show the methodology for demonstrating compliance with the emission limits specified in the special conditions of this permit. Site specific emission factors from stack sampling shall be used whenever the stack sampling emission factors are available. In the event that no site specific stack sampling emission factors are available, default emission factors from AP-42, as identified in this Appendix, may be used.

X = Natural gas (NG) usage in Misc. Combustion Equipment in cubic feet per timeframe

X₁ = NG usage in Boiler No.1 in cubic feet per timeframe

X₂ = NG usage in Boiler No. 5 in cubic feet per timeframe

X₃ = NG usage in Hot Test Stands in cubic feet per timeframe

Y₁ = No. 2 fuel oil (FO2) usage in Boiler 1 in gallons per timeframe

Y₂ = FO2 usage in Boiler 5 in gallons per timeframe

Z₄ = Gasoline (Gas) usage in Dynamometers in gallons per timeframe

W₅ = Wet Machining Operation in pounds per hour

W₆ = Dry Machining Operation in pounds per hour

s = sulfur content wt% in FO2

PM/PM10:

NOx:

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$$(X_3 \text{ ft}^3 \text{ NG} * \underline{2840 \text{ lb NOx}}) + 10^6 \text{ ft}^3 \text{ NG}$$

CO:

$$[(X \text{ ft}^3 \text{ NG * } \underline{0.084 \text{ lb CO}} \text{ * } \underline{1020 \text{ Btu}} \text{ }) \text{ + } \\ \underline{10^6 \text{ Btu NG}} \text{ } \text{ } \text{ } \underline{1020 \text{ Btu}} \text{ }) \text{ + }$$

$$(X_2 \ ft^3 \ NG \ ^* \ \underline{0.084 \ lb \ CO} \ ^* \ \underline{1020 \ Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{Btu} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.036 \ lb \ CO} \ ^* \ \underline{0.0$$

$$(X_3 ft^3 NG * 399 lb CO) + 10^6 ft^3 NG$$

SO₂:

$$[(X ft^3 NG * 0.6 lb SO_2) + 10^6 ft^3 NG]$$

$$(X_2 \ ft^3 \ NG \ ^* \ \underline{0.6 \ lb \ SO_2} \) \ + \ (Y_2 \ gal \ ^* \ \underline{0.302 \ lb \ SO_2} \ ^* \ \underline{Btu} \) \ + \ 10^6 \ ft^3 \ NG \ 10^6 \ Btu \ FO2 \ gal$$

$$(X_3 ft^3 NG * 0.60 lb CO / 10^6 ft^3 NG) +$$

(Z4 gal Gas *
$$\underline{5.31 \text{ lb SO}_2}$$
)] 10^3 gal Gas

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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.