

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

EFFECTIVE DATE: May 14, 2020

REVISION DATE: April 12, 2021

ISSUED TO

Zeeland Generating Station

State Registration Number (SRN): N6521

LOCATED AT

425 Fairview Road, Zeeland, Ottawa County, Michigan 49464

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N6521-2020a

Expiration Date: May 14, 2025

Administratively Complete ROP Renewal Application
Due Between November 14, 2023 and November 14, 2024

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-N6521-2020a

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

Heidi Hollenbach, Grand Rapids District Supervisor

TABLE OF CONTENTS

| | |
|---|-----------|
| AUTHORITY AND ENFORCEABILITY | 3 |
| A. GENERAL CONDITIONS..... | 4 |
| Permit Enforceability | 4 |
| General Provisions..... | 4 |
| Equipment & Design | 5 |
| Emission Limits..... | 5 |
| Testing/Sampling | 5 |
| Monitoring/Recordkeeping | 6 |
| Certification & Reporting | 6 |
| Permit Shield | 7 |
| Revisions | 8 |
| Reopenings..... | 8 |
| Renewals..... | 9 |
| Stratospheric Ozone Protection | 9 |
| Risk Management Plan..... | 9 |
| Emission Trading | 9 |
| Permit to Install (PTI) | 10 |
| B. SOURCE-WIDE CONDITIONS | 11 |
| C. EMISSION UNIT SPECIAL CONDITIONS | 12 |
| EMISSION UNIT SUMMARY TABLE..... | 12 |
| EUNEW AUXBLR | 13 |
| D. FLEXIBLE GROUP SPECIAL CONDITIONS..... | 15 |
| FLEXIBLE GROUP SUMMARY TABLE | 15 |
| FGSIMPLECYCLE..... | 16 |
| FGCOMBINEDCYCLE..... | 23 |
| FGCIRICEMACT..... | 31 |
| FGPARTSWASHERS..... | 35 |
| E. NON-APPLICABLE REQUIREMENTS | 37 |
| APPENDICES | 38 |
| Appendix 1. Acronyms and Abbreviations..... | 38 |
| Appendix 2. Schedule of Compliance..... | 39 |
| Appendix 3. Monitoring Requirements | 39 |
| Appendix 4. Recordkeeping | 41 |
| Appendix 5. Testing Procedures | 41 |
| Appendix 6. Permits to Install..... | 41 |
| Appendix 7. Emission Calculations | 42 |
| Appendix 8. Reporting | 42 |
| Appendix 9. Acid Rain Permit..... | 45 |
| Appendix 10. Cross State Air Pollution Rule (CSAPR) Trading Program Title V Requirements..... | 52 |

AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

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

Equipment & Design

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

Emission Limits

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

The grading of visible emissions shall be determined in accordance with Rule 303.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

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

Monitoring/Recordkeeping

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

Certification & Reporting

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

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

Permit to Install (PTI)

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

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

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 |
|------------------|---|---|-------------------|
| EUGT1A | Natural gas-fired turbine with dry low-NOx combustors. | 03-10-2001 / NA | FGSIMPLECYCLE |
| EUGT1B | Natural gas-fired turbine with dry low-NOx combustors. | 03-15-2001 / NA | FGSIMPLECYCLE |
| EUGT2A | Natural gas-fired turbine with dry low-NOx combustors. | 04-11-2002 / NA | FGCOMBINEDCYCLE |
| EUGT2B | Natural gas-fired turbine with dry low-NOx combustors. | 04-20-2002 / NA | FGCOMBINEDCYCLE |
| EUDUCTBURNER2A | Natural gas-fired heat steam generator (duct burner) | 05-02-2002 / NA | FGCOMBINEDCYCLE |
| EUDUCTBURNER2B | Natural gas-fired heat steam generator (duct burner) | 05-04-2002 / NA | FGCOMBINEDCYCLE |
| EUFIREPUMP | Diesel-fired reciprocating engine which is associated with a fire suppression system. | 03-01-2001 / NA | FGCIRICEMACT |
| EUPARTSWASHER | Cold cleaner | NA | FGPARTSWASHER |
| EUNEWAUXBLR | Natural gas-fired auxiliary boiler rated at 17.82 MMBTU/hr. | 11-08-2018 | NA |

| |
|---|
| EUNEAUUXBLR EMISSION UNIT CONDITIONS |
|---|

DESCRIPTION

Natural gas-fired auxiliary boiler rated at 17.82 MMBTU/hr. This emission unit is subject to the provisions of 40 CFR Part 60, Subpart Dc.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn natural gas, as defined in 40 CFR 60.41c, in EUNEAUUXBLR. **(R 336.1213)**

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 record and maintain records of the amount of natural gas combusted during each calendar month. **(40 CFR 60.48c(g)(2))**
2. The permittee shall maintain satisfactory records to demonstrate that EUNEAUUXBLR is only burning natural gas, as defined in 40 CFR 60.41c. **(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))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Dc, as they apply to EUNEWAUXMLR. **(40 CFR Part 60, Subparts A & Dc)**

Footnotes:

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

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

| Flexible Group ID | Flexible Group Description | Associated Emission Unit IDs |
|-------------------|--|--|
| FGSIMPLECYCLE | Simple cycle operation of natural gas-fired turbines 1A and 1B. Each unit has the same applicable requirements. All four turbines were originally permitted to operate in this mode; however, units 2A and 2B have been constructed for operation in combined cycle mode. | EUGT1A EUGT1B |
| FGCOMBINEDCYCLE | Units constructed to operate in combined cycle mode with a selective catalytic reduction (SCR) system on each turbine/duct burner unit. Each turbine/duct burner combination has the same applicable requirements. While all 4 units were originally permitted for combined cycle operation, units 2A and 2B (only) have been constructed to operate in combined cycle mode. | EUGT2A EUGT2B EUDUCTBURNER2A EUDUCTBURNER2B |
| FGCIRICEMACT | Existing compression ignition (CI) reciprocating internal combustion engines (RICE) which are subject to 40 CFR Part 63, Subpart ZZZZ. | EUFIREPUMP |
| FGPARTSWASHER | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. | EUPARTSWASHER |

**FGSIMPLECYCLE
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two (2) General Electric model 7FA natural-gas-fired combustion turbines operating in simple cycle mode.

Emission Units: EUGT1A, EUGT1B

POLLUTION CONTROL EQUIPMENT

Dry low-NOx combustors; integral to the firing process. As such, they are not considered to be control equipment with respect to Compliance Assurance Monitoring (CAM).

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|--------------------------|---|--|---|---|--|
| 1. Nitrogen oxides (NOx) | 0.04 pound per million BTU heat input ² | Average of all operating hours in a calendar day | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC VI.3 SC VI.5 (Continuous emission monitoring system (CEMS); also see Appendix 3.1) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) |
| 2. NOx | 9.0 ppmv, at 15% oxygen, dry ^{2, a} (This is equivalent to 0.04 pound per million BTU heat input) | Average of all operating hours in a calendar day | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC VI.3 SC VI.5 (CEMS; also see Appendix 3.1) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) 40 CFR 60, Subpart GG |
| 3. NOx | 334.6 tons per 12-month rolling time period ² | 12-month rolling time period, determined at the end of each calendar month | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC VI.1 SC VI.3 SC VI.6 (CEMS; also see Appendix 3.1) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) |

| Pollutant | Limit | Time Period/Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|--|--|--|---|---|--|
| 4. Particulate matter less than 10 microns in diameter (PM-10) | 10.8 pounds per hour ² | Average of all operating hours in a calendar day | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC V.2 SC VI.1 SC VI.10 (Stack test results in combination with records of heat input; see Appendix 5) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) |
| 5. PM-10 | 47.3 tons per 12-month rolling time period ² | 12-month rolling time period, determined at the end of each calendar month | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC V.2 SC VI.1 SC VI.11 (Stack test results in combination with records of heat input; see Appendix 5) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) |
| 6. Carbon monoxide (CO) | 0.021 pound per million BTU heat input ² | Average of all operating hours in a calendar day | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC VI.7 SC VI.8 (CEMS; also see Appendix 3.1) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) |
| 7. CO | 175.6 tons per 12-month rolling time period ² | 12-month rolling time period, determined at the end of each calendar month | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC VI.1 SC VI.7 SC VI.8 (CEMS; also see Appendix 3.1) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) |
| 8. VOC | 5.8 pounds per hour ² | Average of all operating hours in a calendar day | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC V.2 SC VI.1 SC VI.9 (Stack test results in combination with records of heat input; see Appendix 5) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) R336.1702(a) |
| 9. VOC | 25.4 tons per 12-month rolling time period ² | 12-month rolling time period, determined at the end of each calendar month | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC V.2 SC VI.1 SC VI.9 (Stack test results in combination with records of heat input; see Appendix 5) | 40 CFR 52.21(j) R 336.1205(1) (a) and (b) R 336.1702(a) |

| Pollutant | Limit | Time Period/Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-------------------------|--|--|--|---|--|
| 10. Formaldehyde (HCHO) | 9.4 tons per 12-month rolling time period ¹ | 12-month rolling time period, determined at the end of each calendar month | FGSIMPLECYCLE FG-COMBINEDCYCLE (The limit is applicable to all combustion turbine operations.) | SC V.2 SC VI.1 SC VI.12 (Stack test results in combination with records of heat input; see Appendix 5) | R 336.1205(2) R 336.1224 R 336.1225 |
| 11. Opacity | 10% ² | 6-minute average | EUGT1A EUGT1B (The limit is applicable to each individual turbine.) | SC V.1 SC VI.13 (Visible emissions evaluations per Federal Reference Method 9; see Appendix 5) | 40 CFR 52.21 R 336.1301 |

^a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined NO_x limit shall be considered compliance with the NO_x limit established by 40 CFR 60.332(a)(1).

12. The emission limits listed in SC I.1, I.2, I.4, I.6 and I.8 do not include periods of startup, shutdown, or malfunction. Startup is defined as the period of time from first ignition to when the turbine reaches “Mode 6.” Shutdown is defined as the period of time the turbine output is lowered below “Mode 6,” with the intent to shut down, until the point at which the combustion process stops.² **(40 CFR 52.21(j))**

II. MATERIAL LIMIT(S)

1. Only pipeline quality natural gas shall be fired in the turbines. For purposes of this ROP, pipeline quality natural gas is defined as 0.0006 lb/MMBTU sulfur content, which is equivalent to 0.2 grains total sulfur per 100 scf, 6.8 ppm by weight total sulfur or 3.4 ppm by volume total sulfur.^{2, b} **(R 336.1702, R 336.1201(3), R 336.1205, 40 CFR 52.21(j))**

^b In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined natural gas limit shall be considered compliance with the SO₂ limit in 40 CFR 60.333(b).

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the turbines unless an approvable plan entitled “Startup, Shutdown, Malfunction Plan”, as amended, is maintained and implemented. This plan describes how emissions will be minimized during startup(s), shutdown(s) and malfunction(s).² **(40 CFR 52.21(j))**

2. The permittee shall not exceed annual hours of operation for each of the following conditions, based on a 12-month rolling time period for each turbine: Startup (182 hours) and Shutdown (85 hours).² **(40 CFR 52.21(j))**

3. The permittee shall not operate FGSIMPLECYCLE unless all of the applicable provisions of the federal Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) are met. This permit is issued pursuant to the determination that FGSIMPLECYCLE can comply with all of the applicable requirements under these regulations.² **(40 CFR 52.21)**

4. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and GG as they apply to FGSIMPLECYCLE.² **(40 CFR Part 60, Subparts A and GG)**
5. The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Permit, as they apply to FGSIMPLECYCLE.² **(Title IV of the federal Clean Air Act of 1990, as amended; see Appendix 9)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine in FGSIMPLECYCLE with a dry low-NOx combustor system.² **(R 336.1205(1)(a) and (b), R 336.1205(2), R 336.1910, 40 CFR 52.21(j))**

V. TESTING/SAMPLING

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

1. Compliance with the visible emissions (opacity) limit shall be determined at least once per 1,624 hours of operation for each turbine or annually, whichever is least restrictive, using Federal Reference Method 9 (40 CFR Part 60, Appendix A) during maximum routine operating conditions.² **(R 336.1301, 40 CFR 52.21)**
2. The permittee shall verify VOC, PM10, and HCOH emission rates from one turbine in FGSIMPLECYCLE 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 |
|------------------|---|
| PM10 | Filterable: 40 CFR Part 51, Appendix M or 40 CFR Part 60 Appendix A Condensable: 40 CFR Part 51 Appendix M |
| VOC | 40 CFR Part 60, Appendix A and/or 40 CFR Part 63, Appendix A |
| HCOH | 40 CFR Part 60, Appendix A or 40 CFR Part 63, Appendix A |

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

3. The permittee shall verify the VOC, PM10, and HCOH emission rates from one turbine in FGSIMPLECYCLE at a minimum, every five years from the date of the last test. Testing must be completed at 70% and 100% of base load for one simple cycle turbine that was not tested during the previous test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are 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 monitor and record the heat input, in MMBTU, for each turbine in FGSIMPLECYCLE on a continuous basis.² **(40 CFR 52.21, R 336.1205(2))**
2. The permittee shall maintain a written or electronic log of hours of startup and shutdown for each turbine in FGSIMPLECYCLE.² **(40 CFR 52.21(j))**

3. The permittee shall install, calibrate, maintain and operate CEMS for NO_x emissions from each turbine in FGSIMPLECYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1 and 40 CFR Part 75.^{2, c} **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR Part 75)**
4. The permittee shall monitor the sulfur content of natural gas combusted in accordance with 40 CFR 60.334(h) or as described in the "Custom Fuel Monitoring Program" contained in Appendix 3.2.² **(40 CFR 60.334)**
5. The permittee shall keep, in a satisfactory manner, daily average NO_x emission calculation records for each turbine in FGSIMPLECYCLE.^{2, c} **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**
6. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period NO_x emission calculation records for each turbine in FGSIMPLECYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**
7. The permittee shall install, calibrate, maintain and operate CEMS for CO emissions from each turbine in FGSIMPLECYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**
8. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period CO emission calculation records for each turbine in FGSIMPLECYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**
9. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period VOC emission calculation records for each turbine in FGSIMPLECYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), R 336.1702(a))**
10. The permittee shall keep, in a satisfactory manner, daily average PM₁₀ emission calculation records for each turbine in FGSIMPLECYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 52.21(c) and (d))**
11. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period PM₁₀ emission calculation records for each turbine in FGSIMPLECYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**
12. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period formaldehyde emission calculation records for each turbine in FGSIMPLECYCLE.¹ **(R 336.1205(2), R 336.1225)**
13. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine in FGSIMPLECYCLE.² **(R 336.1301, 40 CFR 52.21(j))**

^c In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined recordkeeping condition shall be considered compliance with the recordkeeping condition in 40 CFR 60.334(c).

See Appendix 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))**

4. The permittee shall submit any performance test reports, including RATA reports, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for NO_x and O₂ CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(40 CFR 60.7, R 336.1213(3))**
6. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for all CO CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(R 336.1213(3))**
7. The permittee shall submit the results of quality assurance testing of the CEMS set forth in Appendix F of 40 CFR Part 60 in conjunction with submission of the next calendar quarter's Excess Emission Report as detailed in numbers five and six of this section. **(R 336.1213(3))**

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. SVGT1A | 210 ² | 105 ² | 40 CFR 52.21(c) and (d) R 336.1225 |
| 2. SVGT1B | 210 ² | 105 ² | 40 CFR 52.21(c) and (d) R 336.1225 |

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the acid rain permitting provisions of 40 CFR 72.1 to 72.94, as outlined in a complete Phase II, Acid Rain Permit issued by the AQD. Phase II, Acid Rain Permit No. MI-AR-55087-2020 is hereby incorporated into this ROP as Appendix 9. **(R 336.1902(1)(q))**
2. The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1902(1)(q) and 40 CFR 72.9(c)(1)(i). **(R 336.1213(10))**
3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_x Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 10. **(40 CFR Part 97, Subpart AAAAA)**
4. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_x Ozone Season Group 2 Trading program, as specified in 40 CFR Part 97, Subpart EEEEE, and identified in Appendix 10. **(40 CFR Part 97, Subpart EEEEE)**

5. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 10. **(40 CFR Part 97, Subpart CCCCC)**

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).

**FGCOMBINEDCYCLE
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two (2) combined-cycle units consisting of General Electric model 7FA combustion turbines, heat recovery steam generators with integral duct burners, exhaust stacks, mechanical cooling towers and a common steam turbine. (The combustion turbines and heat recovery steam generators/duct burners are arranged in a 2-on-1 design with the steam turbine.)

Emission Units: EUGT2A, EUGT2B, EUDUCTBURNER2A, EUDUCTBURNER2B

POLLUTION CONTROL EQUIPMENT

Dry low-NOx burners; integral to the firing process. As such, they are not considered to be control equipment with respect to Compliance Assurance Monitoring (CAM).

Selective Catalytic Reduction (SCR) Systems; post-combustion NOx control equipment that is exempt from CAM per the exemption provided for Acid Rain-monitored sources by 40 CFR 64.2(b)(1)(iii).

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|---------------------------------------|--|--|---|---|---|
| 1. Sulfur Dioxide (SO ₂) | 0.20 lb/MMBTU ² | At all times of operation | EUDUCTBURNER2A EUDUCTBURNER2B (The limit is applicable to each individual duct burner.) | SC VI.6 (Use of pipeline quality natural gas; see Appendix 3.2) | 40 CFR 60.43Da(b) |
| 2. Nitrogen oxides (NO _x) | 0.013 pound per million BTU heat input ² | Average of all operating hours in a calendar day | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC VI.4 SC VI.7 (Continuous emission monitoring system (CEMS); see also Appendix 3.1) | 40 CFR 52.21(j) |
| 3. NO _x | 3.5 ppmv, at 15% oxygen, dry ^{2, a} (This is equivalent to 0.013 pound per million BTU heat input) | Average of all operating hours in a calendar day | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC VI.4 SC VI.7 (CEMS; see also Appendix 3.1) | 40 CFR 52.21(j) |

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|--|--|--|--|---|--|
| 4. NOx | 119.6 tons per 12-month rolling time period ² | 12-month rolling time period, determined at the end of each calendar month | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC VI.1 SC VI.4 SC VI.8 (CEMS; see also Appendix 3.1) | 40 CFR 52.21(j) |
| 5. Particulate matter less than 10 microns in diameter (PM-10) | 14.7 pounds per hour ² | Average of all operating hours in a calendar day | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC V.2 SC VI.1 SC VI.11 (Stack test in combination with heat input and operations records; see Appendix 5) | 40 CFR 52.21(j) |
| 6. PM-10 | 64.4 tons per 12-month rolling time period ² | 12-month rolling time period, determined at the end of each calendar month | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC V.2 SC VI.1 SC VI.11 SC VI.12 (Stack test in combination with heat input and operations records; see Appendix 5) | 40 CFR 52.21(j) |
| 7. Carbon monoxide (CO) | 0.042 pound per million BTU heat input ² | Average of all operating hours in a calendar day | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC VI.5 SC VI.9 (CEMS; see also Appendix 3.1) | 40 CFR 52.21(j) |
| 8. CO | 238.0 tons per 12-month rolling time period ² | 12-month rolling time period, determined at the end of each calendar month | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC VI.1 SC VI.5 SC VI.9 (CEMS; see also Appendix 3.1) | 40 CFR 52.21(j) |

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|--|---|--|--|---|--|
| 9. VOC | 16.8 pounds per hour ² | Average of all operating hours in a calendar day | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC V.2 SC VI.1 SC VI.10 (Stack test in combination with heat input and operations records; see Appendix 5) | 40 CFR 52.21(j) |
| 10. VOC | 73.6 tons per 12-month rolling time period ² | 12-month rolling time period, determined at the end of each calendar month | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC V.2 SC VI.1 SC VI.10 (Stack test in combination with heat input and operations records; see Appendix 5) | 40 CFR 52.21(j) |
| 11. Formaldehyde (HCHO) | 9.4 tons per 12-month rolling time period ¹ | 12-month rolling time period, determined at the end of each calendar month | FGSIMPLECYCLE FG-COMBINEDCYCLE (The limit is applicable to all combustion turbine operations.) | SC V.2 SC VI.1 SC VI.13 (Stack test in combination with heat input and operations records; see Appendix 5) | R 336.1205(2) R 336.1224 R 336.1225 |
| 12. Opacity, except for uncombined water vapor | 10% ² | 6-minute average | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC V.1 SC VI.14 (Observations of visible emissions (Reference Method 9); see Appendix 5) | 40 CFR 52.21 |
| 13. Ammonia | 27.1 pounds per hour ¹ | Average of all operating hours in a calendar day. | EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.) | SC VI.4 SC VI.15 (Mass balance calculation; see Appendix 7) | R 336.1224 R 336.1225 |

^a In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined NO_x limit shall be considered compliance with the NO_x limit established by **40 CFR 60.332(a)(1)** and **40 CFR 60.44Da(d)(1)**.

14. The emission limits listed in SC I.2, I.3, I.5, I.7, I.9, and I.13 do not include periods of startup, shutdown, or malfunction. Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6." Shutdown is defined as the period of time the turbine output is lowered below "Mode 6," with the intent to shut down, until the point at which the combustion process stops.² **(40 CFR 52.21(j))**

II. MATERIAL LIMIT(S)

1. Only pipeline quality natural gas shall be fired in the turbines. For purposes of this ROP, pipeline quality natural gas is defined as 0.0006 lb/MMBTU sulfur content, which is equivalent to 0.2 grains total sulfur per 100 scf, 6.8 ppm by weight total sulfur or 3.4 ppm by volume total sulfur.^{2, b} **(R 336.1702, R 336.1201(3), R 336.1205, 40 CFR 52.21(j))**.

^b In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined natural gas limit shall be considered compliance with the SO₂ limits in **40 CFR 60.43Da(b) and 40 CFR 60.333(b)**.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the units in combined cycle mode without the SCR system for each unit in operation except as provided for within the Startup, Shutdown and Malfunction Plan.² **(40 CFR 52.21)**
2. The permittee shall not exceed annual hours of operation for each of the following conditions, based on a 12-month rolling time period for each unit: Cold Start (564 hours); Warm Start (456 hours); Hot Start (341 hours); and Shutdown (85 hours). Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6." A "hot start" is when the steam turbine first stage or reheat inner metal temperature is greater than 700 °F, a "warm start" is when this temperature is between 400 °F and 700 °F, and a "cold start" is when this temperature is less than 400 °F. Shutdown is defined as that period of time from the initial lowering of the turbine output, with the intent to shut down, until the point at which the combustion process has stopped.² **(40 CFR 52.21(j))**
3. The permittee shall not operate the turbines unless an approvable plan entitled "Startup, Shutdown, Malfunction Plan", as amended, is maintained and implemented. This plan describes how emissions will be minimized during startup(s), shutdown(s) and malfunction(s).² **(40 CFR 52.21(j))**
4. The permittee shall not operate FGCOMBINEDCYCLE unless all of the applicable provisions of the federal Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) are met. This permit is issued pursuant to the determination that FGCOMBINEDCYCLE can comply with all of the applicable requirements under these regulations.² **(40 CFR 52.21)**
5. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR 60, Subparts A, Da and GG as they apply to FGCOMBINEDCYCLE.² **(40 CFR Part 60, Subparts A, Da and GG)**
6. The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Permit, as they apply to FGCOMBINEDCYCLE.² **(Title IV of the federal Clean Air Act of 1990, as amended; see Appendix 9)**
7. The permittee shall not operate FGCOMBINEDCYCLE simultaneously at 60% load or less for more than 16 continuous hours. Based on historic summer Net Demonstrated Capability testing, 60% load equates to 95.4 megawatts, per each combined cycle unit combustion turbine, on a gross basis.² **(40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine in FGCOMBINEDCYCLE with a dry low-NO_x combustor system and a selective catalytic reduction (SCR) system.² **(R 336.1205(1)(a) and (b), R 336.1205(2), R 336.1910, 40 CFR 52.21(j))**

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 determine compliance with the visible emissions limit using Federal Reference Method 9 during maximum routine operating conditions at least once per calendar quarter; and then annually after the first 12 months of operation at less than 10% opacity.² **(40 CFR 52.21(j), 40 CFR 60.42a(b), R 336.1301)**
2. The permittee shall verify VOC, PM10, and HCHO emission rates from one of the turbines associated with FGCOMBINEDCYCLE by testing at owner's expense, in accordance with the Department requirements. Testing must be completed at 70% and 100% of base load for one of the combined cycle turbines that was not tested during the previous test. Testing shall be performed using an approved EPA Method listed in:

| Pollutant | Test Method Reference |
|------------------|--|
| PM10 | Filterable: 40 CFR Part 51, Appendix M or 40 CFR Part 60, Appendix A Condensable: 40 CFR Part 51 Appendix M |
| VOC | 40 CFR Part 60, Appendix A and/or 40 CFR Part 63, Appendix A |
| HCHO | 40 CFR Part 60 Appendix A or 40 CFR Part 63, Appendix A |

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

3. The permittee shall verify the VOC, PM10, and HCHO emission rates from FGCOMBINEDCYCLE, 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)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are 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 install, calibrate, maintain, and operate a device to monitor the heat input, in MMBTU, for each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis.² **(40 CFR 52.21, R 336.1205(1)(a) and (b), R 336.1205(2), R 336.1702(a), R 336.1225)**
2. The permittee shall keep in a satisfactory manner, a written or electronic log of the hours of operation for each turbine/duct burner set in FGCOMBINEDCYCLE.² **(40 CFR 52.21(c) and (d))**
3. The permittee shall maintain a written or electronic log of the monthly hours per cold startup, warm startup, hot startup and shutdown for each turbine in FGCOMBINEDCYCLE.² **(40 CFR 52.21(j))**
4. The permittee shall install, calibrate, maintain and operate CEMS for NOx emissions from each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1 and 40 CFR Part 75.^{2, c} **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR Part 75)**
5. The permittee shall install, calibrate, maintain and operate CEMS for CO emissions from each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

6. The permittee shall monitor the sulfur content of natural gas combusted in accordance with 40 CFR 60.334(h) or as described in the "Custom Fuel Monitoring Program" contained in Appendix 3.2.² **(40 CFR 60.334, R 336.1205(1)(a) and (b), 40 CFR 52.21)**
7. The permittee shall keep, in a satisfactory manner, daily average NOx emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 60.334(c), 40 CFR 60.48Da(k))**
8. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period NOx emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**
9. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period CO emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**
10. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period VOC emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), R 336.1702(a))**
11. The permittee shall keep, in a satisfactory manner, daily average PM10 emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 52.21(c) and (d))**
12. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period PM10 emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.² **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**
13. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period formaldehyde emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.¹ **(R 336.1205(2), R 336.1225)**
14. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine/duct burner set in FGCOMBINEDCYCLE.² **(R 336.1301, 40 CFR 52.21(j))**
15. The permittee shall keep, in a satisfactory manner, daily average ammonia slip records for each turbine/duct burner set in FGCOMBINEDCYCLE.¹ **(R 336.1224, R 336.1225)**
16. The permittee shall keep in a satisfactory manner a written or electronic record of the gross energy output of each combined cycle unit in FGCOMBINEDCYCLE, in megawatts, on a continuous basis. **(R 336.1213(3))**

^c In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined recordkeeping condition shall be considered compliance with the monitoring and recordkeeping conditions in **40 CFR 60.48Da(k) and 40 CFR 60.334(c)**.

See Appendices 3 and 7

VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports, including RATA reports, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for NO_x and O₂ CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(40 CFR 60.7, R 336.1213(3))**
6. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for all CO CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(R 336.1213(3))**
7. The permittee shall submit the results of quality assurance testing of the CEMS set forth in Appendix F of 40 CFR Part 60 in conjunction with submission of the next calendar quarter's Excess Emission Report as detailed in numbers five and six of this section. **(R 336.1213(3))**

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. SVGT2A | 202 ² | 160 ² | 40 CFR 52.21(c) and (d) R 336.1225 |
| 2. SVGT2B | 202 ² | 160 ² | 40 CFR 52.21(c) and (d) R 336.1225 |

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the acid rain permitting provisions of 40 CFR 72.1 to 72.94, as outlined in a complete Phase II, Acid Rain Permit issued by the AQD. Phase II, Acid Rain Permit No. MI-AR-55087-2020 is hereby incorporated into this ROP as Appendix 9. **(R 336.1902(1)(q))**
2. The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1902(1)(q) and 40 CFR 72.9(c)(1)(i). **(R 336.1213(10))**
3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_x Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 10. **(40 CFR Part 97, Subpart AAAAA)**

4. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_x Ozone Season Group 2 Trading program, as specified in 40 CFR Part 97, Subpart EEEEE, and identified in Appendix 10. **(40 CFR Part 97, Subpart EEEEE)**
5. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 10. **(40 CFR Part 97, Subpart CCCCC)**

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).

FGCIRICEMACT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group includes emergency stationary compression ignition (CI) reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutants (HAPs) which were installed or reconstructed before June 12, 2006 (i.e., existing CI RICE).

Emission Unit: EUFIREPUMP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. There is no time limit on the use of stationary RICE in emergency situations. **(40 CFR 63.6640(f)(1))**
2. The permittee may operate each CI engine 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))**
3. Each engine in FGCIRICEMACT may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 63.6640(f)(2). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity, except as allowed in 40 CFR 63.6640(f)(4)(ii). **(40 CFR 63.6640(f)(4))**
4. The permittee shall minimize the time spent at idle during startup and minimize the startup time of the stationary RICE 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 shall operate and maintain existing emergency stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or a plan developed by the facility that provides for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e), 40 CFR 63.6640(a) and Table 6(9)(a))**

6. The permittee shall operate and maintain engine manufacturer installed after treatment control device(s) on existing emergency stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or a plan developed by the facility that provides for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e))**
7. For existing emergency CI RICE, the permittee shall change the oil and filter every 500 hours of operation or annually, whichever comes first. In lieu of changing the oil and filter, the permittee may implement an oil analysis program to have the oil analyzed as described in 40 CFR 63.6625(i). **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d(4)(a))**
8. For existing emergency CI RICE, the permittee shall inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d))**
9. If the analytical results of the oil analysis program for emergency stationary CI engines indicate any of the following limits are exceeded, the permittee shall change the oil within 2 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 shall change the oil within 2 days or before commencing operation, whichever is later. **(40 CFR 63.6625(i))**
 - a. Total Base Number is less than 30% of the Total Base Number of the oil when new.
 - b. Viscosity of the oil has changed by more than 20% from the viscosity of the oil when new.
 - c. Percent water content (by volume) is greater than 0.5.
10. For existing emergency CI RICE, the permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d))**
11. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in SC III.7, 8, and 10, 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 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 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 Part 63, Subpart ZZZZ, Table 2d, Footnote 2)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FGCIRICEMACT 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 in order to extend the specified oil change requirement in 40 CFR Part 63, Subpart ZZZZ, Table 2d, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The oil analysis must be performed at the same frequency specified for changing oil in Table 2c or 2d of 40 CFR Part 63 Subpart ZZZZ. **(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. The permittee shall maintain a copy of each notification and report submitted, including supporting documentation. **(40 CFR 63.6655(a)(1))**

2. The permittee shall maintain a record of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(2))**
3. The permittee shall maintain a record of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5))**
4. The permittee shall maintain a record of all required maintenance performed on the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(4))**
5. The permittee shall maintain records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) was operated and maintained according to the facility maintenance plan. **(40 CFR 63.6655(e)(3))**
6. For existing emergency stationary RICE that do not meet the emission standards applicable to non-emergency stationary RICE, the permittee shall maintain records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The records must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the date, start time and end time the engine was operated as part of emergency demand response. **(40 CFR 63.6655(f))**
7. For the oil analysis program, the permittee shall 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))**

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. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **(40 CFR 63.6650(f))**
5. Sources must report any failure to perform the management practice (i.e. oil and filter changes, air filter inspections, hoses, and belt inspections) on a schedule required and the Federal, State, or local law under which the risk was deemed unacceptable. **(40 CFR Part 63, Subpart ZZZZ, Table 2d, Footnote 2)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, for Stationary Reciprocating Internal Combustion Engines. **(40 CFR 63.6595(a)(1), 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).

FGPARTSWASHERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Unit: EUPARTSWASHER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:

- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

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

APPENDICES

Appendix 1. Acronyms and Abbreviations

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

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 3.1

NO_x and CO Continuous Emission Monitoring System (CEMS) Requirements

1. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS.
2. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall submit two copies of a complete test plan for the CEMS to the AQD for approval.
3. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall complete the installation and testing of the CEMS.
4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS complies with the requirements of Performance Specification (PS) 4 for CO.

Note; as of the time of this permit, these requirements have been fulfilled.

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
6. The CO CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 4/4A of Appendix B, 40 CFR Part 60.
7. The NO_x and O₂ CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR Part 75, Appendices A and B.
8. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60 (for CO) and 40 CFR Part 75, Appendix A and B (for NO_x and O₂). Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F).
9. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
 - a. A report of each exceedance above the permitted NO_x and CO limit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
 - b. A report of all periods of CEMS downtime and corrective action.
 - c. A report of the total operating time of each emission unit included in FGSIMPLECYCLE and FGCOMBINEDCYCLE, during the reporting period.

- d. A report of any periods that the CEMS exceeds the instrument range.
- e. If no exceedances or CEMS downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

Appendix 3.2

**Custom Fuel Monitoring Program (CFMP)
For Sources Subject to
40 CFR Part 60 Subpart GG**

- 1. Nitrogen
 - a. Monitoring of fuel nitrogen content shall not be required while pipeline quality natural gas, as defined in 40 CFR 72.2, is the only fuel fired in the gas turbine.
- 2. Sulfur
 - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. Reference methods are {as referenced in 40 CFR 60.334(b)(2)}:
 - i. ASTM D3031-81: Total Sulfur in Natural Gas by Hydrogenation
 - ii. ASTM D3246: Sulfur in Petroleum Gas by Oxidative Microcoulometry
 - iii. ASTM D4084-82: Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method)
 - iv. Testing for Hydrogen Sulfide in Natural Gas Using Length of Stain Tubes
 - b. Effective the date this schedule is approved, sulfur monitoring shall be conducted as follows:
 - i. Twice monthly for six months,
 - A. if this monitoring shows little variability and represents compliance with the sulfur dioxide emission limits, then:
 - ii. Once per calendar quarter for six calendar quarters
 - A. if this monitoring show little variability and represents compliance with the sulfur dioxide emission limits, then:
 - iii. Semiannually, during the first and third calendar quarters of the calendar year.
 - iv. Should any sulfur analysis indicate non-compliance with 40 CFR 60.333, sulfur monitoring shall be conducted weekly during the interim period when this custom monitoring schedule is being re-examined.
- Note: As of the issuance date of this permit, requirements (b)(i) and (b)(ii) have been fulfilled and sulfur monitoring may be conducted in accordance with Appendix 3.2, requirement (2)(b)(iii).
- c. If there is a change in the fuel supply, the owner/operator must notify the Administrator of such changes for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom monitoring schedule is being re-examined.
- 3. Fuel analysis can be conducted at a single separate site for multiple plants (engines) provided there are no additional entry points for natural gas or other sulfur containing streams between the proposed sampling site and the plants (engines) in question.

Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of five years and be available for inspection.

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

The permittee shall use the following approved test methods to measure the pollutant emissions for the applicable requirements referenced in FGSIMPLECYCLE and FGCOMBINEDCYCLE unless an alternative test method has been approved by EGLE-AQD for a specific pollutant.

| Pollutant | Method | Testing Requirements |
|-------------------|---|---|
| VOC | Reference Method 25A; Methods 18 or 320 for correcting the results to account for non-VOCs* | Triplicate runs of required duration at each load condition |
| PM10 | Reference Methods 1 through 5 and Method 202 | Triplicate runs of required duration at each load condition |
| PM, Filterable | Reference Methods 1 through 5 | Triplicate runs of required duration during representative operating conditions |
| Formaldehyde | Reference Method 18 or 320 | Triplicate runs of required duration at each load condition |
| Visible Emissions | Reference Method 9 | Triplicate sets of at least 24 observations |

**As needed to quantify methane, ethane and other organic compounds not classified as VOCs but still detected by Method 25A.*

For VOCs, PM10 and formaldehyde, the results of the most recent stack tests shall be used in conjunction with heat input measurements in order to determine mass emission rates. For each of the pollutants, the higher of the emission factors derived from stack testing at 70% and 100% load shall be used for the calculations unless an alternate approach is approved by the District Supervisor. On June 6, 2012, the EGLE-AQD Grand Rapids District Supervisor approved an alternative PM10 emissions calculation methodology which relies on stack test results and linear interpolation based upon hourly heat input rate to calculate unit specific PM10 emission factors (as lb/MMBTU) in lieu of the preceding default methodology.

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-N6521-2015. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-N6521-2015a is being reissued as Source-Wide PTI No. MI-PTI-N6521-2020a

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

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 ammonia slip requirements referenced in FGCOMBINEDCYCLE:

Ammonia slip (NH3SLIP) is calculated as follows:

- NH3SLIP is calculated ammonia slip in PPM
- NH3IN is the ammonia injected into the HRSG in PPM
- NOXSCR is NOx measured before the SCR in PPM
- NOXPPM is NOx measured at the stack in PPM

If NH3IN <= 0 then NH3SLIP = 0.0

else

if NH3IN < (NOXSCR - NOXPPM) then NH3SLIP = NH3IN

else

NH3SLIP = NH3IN - (NOXSCR - NOXPPM)

NH3IN is calculated as follows:

- NH3INJ is the amount of ammonia injected in lbs/hr (measured value)
- NH3_WT% is the weight percentage of ammonia (29% for Zeeland)
- HEAT is the input from the gas turbine in MMBTU
- DBHEAT is the input from the duct burners in MMBTU
- Fd is the fuel factor (f-factor) for natural gas (8710 dscf/MMBTU)
- 0.000000044096 is a conversion factor from lbs/scf to PPM.
- (20.9 - O2) / 20.9 is the adjustment for actual oxygen level in the stack gas.

$((\text{NH3INJ} * (\text{NH3_WT\%} / 100)) / (\text{HEAT} + \text{DBHEAT}) * \text{Fd} * 0.000000044096) * (20.9 - \text{O2}) / 20.9)$

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.

Note, Standards of Performance for New Stationary Sources (NSPS) reporting requirements include, but are not necessarily limited to, the following:

Notification requirements per Section 60.7 of 40 CFR Part 60, Subpart A

| | |
|------------|--|
| 60.7(a)(1) | Notification of the date of construction or reconstruction of an affected facility is commenced, postmarked no later than 30 days after such date. |
| 60.7(a)(3) | Notification of the actual date of initial startup of an affected facility, postmarked within 15 days after such date. |

| | |
|------------|---|
| 60.7(a)(4) | Notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in Section 60.14(e). This notice shall be postmarked 60 days (or as soon as practicable) before the change is commenced. |
|------------|---|

Note, the one-time notifications required by 60.7(a)(1) and (3) have already been satisfied.

Notifications of reconstruction activities per Section 60.15 of 40 CFR Part 60, Subpart A; and

| | |
|----------|--|
| 60.15(d) | If an owner or operator of an existing facility proposes to replace components and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, notification of the proposed replacements, postmarked 60 days (or as soon as practicable) before the construction of the replacements is commenced. |
|----------|--|

Reporting requirements per Section 60.51a of 40 CFR Part 60, Subpart Da

| | |
|------------|---|
| 60.51Da(a) | For SO ₂ , NO _x , and PM emissions, the performance test data from the initial and subsequent performance test and from the performance evaluation of the continuous monitors (including the transmissometer) are submitted to the Administrator. |
| 60.51Da(b) | <p>For SO₂ and NO_x the following information is reported to the Administrator for each 24-hour period.</p> <ol style="list-style-type: none"> (1) Calendar date. (2) The average SO₂ and NO_x emission rates (ng/J or lb/million BTU) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken. (3) Percent reduction of the potential combustion concentration of SO₂ for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken. (4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken. (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO₂ only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions. (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted. (7) Identification of times when hourly averages have been obtained based on manual sampling methods. (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS. (9) Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3. |
| 60.51Da(c) | <p>If the minimum quantity of emission data as required by Sec. 60.49Da is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of Sec. 60.48Da(h) is reported to the Administrator for that 30-day period:</p> <ol style="list-style-type: none"> (1) The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i) as applicable. (2) The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable. (3) The lower confidence limit for the mean outlet emission rate (E_o*) and the upper confidence limit for the mean inlet emission rate (E_i*) as applicable. (4) The applicable potential combustion concentration. |

| | |
|------------|---|
| | (5) The ratio of the upper confidence limit for the mean outlet emission rate (E_o^*) and the allowable emission rate (E_{std}^*) as applicable. |
| 60.51Da(d) | NA |
| 60.51Da(e) | NA |
| 60.51Da(f) | For any periods for which opacity, SO ₂ or NO _x emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. |
| 60.51Da(h) | The owner or operator of the affected facility shall submit a signed statement indicating whether: <ol style="list-style-type: none"> (1) The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified. (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance. (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable. (4) Compliance with the standards has or has not been achieved during the reporting period. |
| 60.51Da(i) | For the purposes of the reports required under Sec. 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under Sec. 60.42Da(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter. |
| 60.51Da(j) | The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30 th day following the end of each six-month period. |
| 60.51Da(k) | The owner or operator of an affected facility may submit electronic quarterly reports for SO ₂ and/or NO _x and/or opacity in lieu of submitting the written reports required under paragraphs (b) and (i) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format. |

Appendix 9. Acid Rain Permit

PHASE II ACID RAIN PERMIT Permit No. MI-AR-55087-2020

| | |
|------------|---|
| Permittee | Consumers Energy - Zeeland Generating Station |
| Address | 425 Fairview Road, Zeeland, MI |
| SRN | N6521 |
| Plant Code | 55087 |
| Issue Date | May 14, 2020 |
| Effective | Issuance date of this facility's Renewable Operating Permit at the facility in accordance with 40 CFR 72.73. |
| Expiration | This permit shall expire when the facility's Renewable Operating Permit expires, in accordance with 40 CFR 72.73. |
| ROP No. | MI-ROP-N6521-2020 |

The Acid Rain Permit Contents

1. A statement of basis prepared by the Air Quality Division (AQD) containing:

References to statutory and regulatory authorities, and with comments, notes, and justification that apply to the source in general;
2. Terms and conditions including:

A table of sulfur dioxide allowances to be allocated during the term of the permit, if applicable, authorized by this permit during Phase II. Unless they are subject to Sections 405(g)(2) or (3) of the federal Clean Air Act, new units are not allocated allowances in 40 CFR Part 73 and must obtain allowances by other means (Section 403(e) of the federal Clean Air Act);

Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements; and,

Any applicable nitrogen oxides compliance plan. Unless they are coal fired utility units regulated pursuant to Sections 404, 405, or 409 of the federal Clean Air Act, new units are not subject to the acid rain nitrogen oxides requirements (40 CFR 76.1(a)).
3. The permit application that this source submitted, as corrected by the AQD. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

Statement of Basis

Statutory and Regulatory Authorities.

In accordance with the Natural Resources and Environmental Protection Act, 1994 PA 451 and Titles IV and V of the federal Clean Air Act, the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), issues this permit pursuant to the provisions of R 336.1210 to R 336.1218, and R 336.1902(q).

For further information contact:

Mr. Brian Carley
Environmental Quality Specialist
Michigan Department of Environment, Great Lakes, and Energy
Air Quality Division, Jackson District Office
State Office Building, 4th Floor
301 East Louis B. Glick Highway
Jackson, Michigan 49201-1556
Telephone: 517-416-4631
Facsimile: 517-780-7855

There are no comments, notes and/or justification that apply to the source in general for this section.

Terms and Conditions:

Phase II Sulfur Dioxide Allowance Allocation and Nitrogen Oxides Requirements for each affected unit.

| | | 2020 | 2021 | 2022 | 2023 | 2024 |
|----------|----------------------------|--|------|------|------|------|
| Unit CC1 | SO ₂ allowances | This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c). | | | | |

| | | 2020 | 2021 | 2022 | 2023 | 2024 |
|----------|----------------------------|--|------|------|------|------|
| Unit CC2 | SO ₂ allowances | This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c). | | | | |

| | | 2020 | 2021 | 2022 | 2023 | 2024 |
|----------|----------------------------|--|------|------|------|------|
| Unit CC3 | SO ₂ allowances | This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c). | | | | |

| | | 2020 | 2021 | 2022 | 2023 | 2024 |
|----------|----------------------------|--|------|------|------|------|
| Unit CC4 | SO ₂ allowances | This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c). | | | | |

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process: None.

Permit Application: (attached)

Acid Rain Permit Application submitted August 9, 2019

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

Acid Rain - Page 2

STEP 3

Read the standard requirements.

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

Acid Rain - Page 3

STEP 3, Cont'd.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Effect on Other Authorities

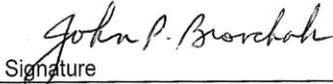
No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the
certification
statement, sign,
and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|------------|
| John P. Broschak, Designated Representative | |
| Name | |
|  | 04-01-2019 |
| Signature | Date |

Appendix 10. Cross State Air Pollution Rule (CSAPR) Trading Program Title V Requirements

Description of CSAPR Monitoring Provisions

The CSAPR subject units, and the unit-specific monitoring provisions, at this source are identified in the following tables. These units are subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 2 Trading Program, and CSAPR SO₂ Group 1 Trading Program, which are included below as Sections I, II, and III, respectively.

Each unit will use one of the following as the monitoring methodology for each parameter as provided below and shall comply with the general monitoring, recordkeeping, reporting and other requirements in conditions 1 through 5 below and in paragraph (b) of Sections I, II, and III:

- Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart B (for SO₂ monitoring) or 40 CFR Part 75, Subpart H (for NO_x monitoring)
- Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
- Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75, Appendix E
- Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19
- EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E

| Unit ID: CC1 | |
|-----------------|---|
| Parameter | Monitoring Methodology |
| SO ₂ | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D |
| NO _x | Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H |
| Heat Input | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D |

| Unit ID: CC2 | |
|-----------------|---|
| Parameter | Monitoring Methodology |
| SO ₂ | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D |
| NO _x | Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H |
| Heat Input | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D |

| Unit ID: CC3 | |
|-----------------|---|
| Parameter | Monitoring Methodology |
| SO ₂ | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D |
| NO _x | Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H |
| Heat Input | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D |

| Unit ID: CC4 | |
|-----------------|---|
| Parameter | Monitoring Methodology |
| SO ₂ | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D |
| NO _x | Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR |

| | |
|------------|---|
| | Part 75, Subpart H |
| Heat Input | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D |

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (CSAPR NO_x Annual Trading Program), 97.830 through 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and 97.630 through 97.635 (CSAPR SO₂ Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.
2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources>.
3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit's monitoring system description.

SECTION I: CSAPR NO_x Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are

reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

(1) CSAPR NO_x Annual emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source.
- (ii). If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

(2) CSAPR NO_x Annual assurance provisions.

- (i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such State exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
- (iv). It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

- (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.
- (3) Compliance periods.
- (i). A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
 - (ii). A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i). A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA.
- (6) Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i). Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR Part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR NO_x Annual allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.
- (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.

- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program.
- (2) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.
- (2) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR NO_x Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Annual source or CSAPR NO_x Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country.

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

SECTION II: CSAPR NO_x Ozone Season Group 2 Trading Program Requirements (40 CFR 97.806)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.813 through 97.818.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

- (1) CSAPR NO_x Ozone Season Group 2 emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.
 - (ii). If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 40 CFR 97.824(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (2) CSAPR NO_x Ozone Season Group 2 assurance provisions.
- (i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.825(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
 - (ii). The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season Group 2 trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).
 - (iv). It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

- (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (3) Compliance periods.
- (i). A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
 - (ii). A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i). A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.
- (6) Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i). Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.806(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the

certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.816 changing the designated representative.

- (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program.
- (2) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 40 CFR 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (2) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 40 CFR 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country.

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

SECTION III: CSAPR SO₂ Group 1 Trading Program requirements (40 CFR 97.606)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO₂ emissions requirements.

(1) CSAPR SO₂ Group 1 emissions limitation.

- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 1 units at the source.
- (ii). If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 1 units at a CSAPR SO₂ Group 1 source are in excess of the CSAPR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall hold the CSAPR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (B). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

(2) CSAPR SO₂ Group 1 assurance provisions.

- (i). If total SO₂ emissions during a control period in a given year from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the CSAPR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold CSAPR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

- (B). Each CSAPR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.
- (3) Compliance periods.
- (i). A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
 - (ii). A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i). A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC.
- (6) Limited authorization. A CSAPR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
- (i). Such authorization shall only be used in accordance with the CSAPR SO₂ Group 1 Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR SO₂ Group 1 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC.
- (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC.

- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO₂ Group 1 Trading Program.
- (2) The designated representative of a CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall make all submissions required under the CSAPR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 source or the designated representative of a CSAPR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 1 units at the source.
- (2) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 unit or the designated representative of a CSAPR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂ Group 1 source or CSAPR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country.

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.