

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

EFFECTIVE DATE: March 10, 2020

ISSUED TO

**MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP
Midland Cogeneration Venture**

State Registration Number (SRN): B6527

LOCATED AT

100 Progress Place, Midland, Midland County, Michigan 48640

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B6527-2020

Expiration Date: March 10, 2025

Administratively Complete ROP Renewal Application Due Between
September 10, 2023 and September 10, 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-B6527-2020

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

Chris Hare, Bay City District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - 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 states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- 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))**

Emissions Cap

47. The permittee shall provide written notification to the department and the USEPA at least seven days in advance of any emissions trade among emission units within the stationary source, solely for the purpose of complying with an emissions cap. The notice shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of this ROP. **(R 336.1213(9)(a))**

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
EU-T03	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T04	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T05	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T06	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T07	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T08	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-T09	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER09	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T09; Maximum heat input of 249 MMBTU/hr	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-T10	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER10	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T10; Maximum heat input of 249 MMBTU/hr	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-T11	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER11	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T11; Maximum heat input of 249 MMBTU/hr.	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-TURBINE12	Combined-cycle natural gas-fired turbine with dry low-NOx burner for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.	04-1988 1990 1992 03-22-2010	FG-TURB/DB12
EU-DUCTBURNER12	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-TURBINE12; Maximum heat input of 249 MMBTU/hr	04-1988 1990 1992	FG-TURB/DB12, FG-DUCTBURNERS
EU-T13	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER13	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T13; Maximum heat input of 249 MMBTU/hr.	04-1988	FG-DUCTBURNERS, FG-SITURB/DB

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-T14	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER14	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T14; Maximum heat input of 249 MMBTU/hr	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-COLDCLEANER	Small cold cleaner used for parts cleaning. Air/vapor interface less than 10 square feet.	07-1979	FG-CLDCLR
EU-BOILER1	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER2	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER3	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER4	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER5	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	02-2009	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER6	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	02-2009	FG-BOILERS1-6, FG-BOILERMACT

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

**EU-TURBINE12
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Combined-cycle natural gas-fired turbine with dry low-NOx burner for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.

Flexible Group ID: FG-TURB/DB12

POLLUTION CONTROL EQUIPMENT

Dry-low NOx Burner

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen Oxides (NOx)	98 pph* ²	1-hr average	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.332(a)(1)
2. Carbon Monoxide (CO)	26 pph ²	Hourly	EU-TURBINE12	SC V.2, V.3 FG-TURB/DB12 SC V.1	R 336.2810, 40 CFR 52.21(j)
3. NOx	400 lbs per startup** ²	Each startup	EU-TURBINE12	SC VI.2, VI.3 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j)
4. NOx	200 lbs per shutdown** ²	Each shutdown	EU-TURBINE12	SC VI.2, VI.3 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j)
5. NOx	0.10 lb/MMBTU ²	Ozone season	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.1201(3)
6. NOx	0.10 lb/MMBTU ²	Calendar year	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.1201(3)
7. NOx	429.2 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 above. In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the nitrogen oxides emissions limit established by 40 CFR 52.21(j) and R 336.2810; and also compliance with the nitrogen oxides emissions limit in 40 CFR 60.332(a)(1), an additional applicable requirement that has been subsumed within this condition.

** Startup is defined as the period of time from synchronization to the grid (generator breaker closed) until the unit reaches steady state operation (loads greater than 50 percent of design capacity). Shutdown is defined as that period of time from the initial lowering of the turbine output below 50 percent of full operating load, with the intent to shut down, until the point at which the generator breaker opens.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(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 & GG, as they apply to EU-TURBINE12.² **(40 CFR Part 60, Subparts A & GG)**
2. The combined hours of operation of the foggers for EU-TURBINE12 and FG-SITURBINES shall not exceed 20,400 hours on a 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818, R 336.2818(3)(f)(ii), 40 CFR 52.21)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-TURBINE12 with a dry low-NOx combustor.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. No later than 180 days following the installation of upgraded compressor blades, verification of NOx and CO emission rates from EU-TURBINE12, by testing at owner's expense, in accordance with Department requirements, will be required. Upon installation, certification, and operation of a NOx CEM system, testing for NOx, as specified in this permit condition, shall no longer apply. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for the turbine and must be approved by the AQD prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))**
2. The permittee shall verify CO emission rates from EU-TURBINE12 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. 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 CO emission rates from EU-TURBINE12, 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 30 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 keep, in a satisfactory manner, hourly, yearly, monthly, and 12-month rolling NOx emission records for EU-TURBINE12. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall keep, in a satisfactory manner, NO_x emission records during each startup and shutdown for EU-TURBINE12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
3. The permittee shall keep, in a satisfactory manner, a written or electronic log of the number of startups, and shutdowns for EU-TURBINE12 for each month and 12-month rolling time period. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
4. The permittee shall keep, in a satisfactory manner, records of the hours of operation of the fogger for EU-TURBINE12 and of each fogger for FG-SITURBINES. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² **(R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818(3)(f)(ii), 40 CFR 52.21)**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with 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 9. **(40 CFR Part 97, Subpart AAAAA)**
2. 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 9. **(40 CFR Part 97, Subpart EEEEE)**
3. 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 9. **(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).

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
FG-BOILERS1-6	Six (6) 370 MMBTU/hr natural gas-fired cycling boilers controlled by low NOx burner technology and flue gas recirculation. Each capable of supplying 250,000 lb/hr steam at 800 psig and 750°F. PTI No. 351-07.	EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6
FG-BOILERMACT	Requirements for existing Gas 1, (Natural Gas only) for existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.	EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6
FG-TURB/DB12	Combined-cycle gas turbine equipped with a dry-low NOx burner and a natural gas fired duct burner. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.	EU-TURBINE12, EU-DUCTBURNER12
FG-SITURBINES	Eleven (11) combined-cycle natural gas-fired turbines using steam injection for NOx control at the facility. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.	EU-T03, EU-T04, EU-T05, EU-T06, EU-T07, EU-T08, EU-T09, EU-T10, EU-T11, EU-T13, EU-T14
FG-DUCTBURNERS	Six (6) duct burners used to supplement the steam producing capabilities of combined cycle gas turbines. PTI No. 241-09.	EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER12, EU-DUCTBURNER13, EU-DUCTBURNER14
FG-SITURB/DB	Five (5) combined-cycle gas turbines using steam injection for NOx control and containing a natural gas fired duct burner. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.	EU-T09, EU-DUCTBURNER09, EU-T10, EU-DUCTBURNER10, EU-T11, EU-DUCTBURNER11, EU-T13, EU-DUCTBURNER13, EU-T14, EU-DUCTBURNER14
FG-CLDCLR	Any new cold cleaner (placed into operation after (7/1/79) that is exempt from permitting by R 336.1281(h) or R 336.1285(r)(iv)	EU-COLDCLEANER

**FG-BOILERS1-6
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Six (6) 370 MMBTU/hr natural gas-fired cycling boilers controlled by low NOx burner technology and flue gas recirculation. Each capable of supplying 250,000 lb/hr steam at 800 psig and 750°F. PTI No. 351-07.

Emission Units/Flexible Groups: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6, and FG-BOILERMACT

A cycling facility is defined as being operated in the following manner:

- a. Each boiler of FG-BOILERS1-6 is expected to be brought on-line and off-line several times per day.
- b. During each boiler of FG-BOILERS1-6 startup operations, the length of a warm startup shall not exceed two (2) hours; whereas, the length of a cold startup shall not exceed four (4) hours. Warm startup operation is defined as maintaining each boiler of FG-BOILERS1-6 in a “hot stand-by” mode when the boilers are not actively producing steam by passing steam from the GT/HRSG through steam coils or by-passing steam directly to other facilities. The end of startup at the Plant's boilers in service is the time when steam flows to the header (i.e., when the boiler check valve opens).
- c. During each boiler of FG-BOILERS1-6 shutdown and/or malfunction operations, the length of a shutdown shall not exceed one (1) hour.
- d. Some or all of the Plant's boilers will be shut down as GT/HRSG units are brought on-line.
- e. The Plant is expected to operate most often in the summer months and less in other months when system demand is lower.
- f. As a cycling facility, the Plant may be dispatched at other appropriate times whenever system demand, capacity/steam and commercial energy availability, market, and/or emergency conditions dictate.

POLLUTION CONTROL EQUIPMENT

Low NOx burner technology and flue gas recirculation for each boiler

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.0075 lb/MMBTU ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 40 CFR Part 60, Subparts A & Da R 336.1331
2. PM10	0.0075 lb/MMBTU ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
3. PM10	2.8 pph ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.2803 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4. SO ₂	0.0006 lb/MMBTU ²	NA	Each boiler in FG-BOILERS1-6	SC VI.7	40 CFR Part 60, Subparts A & Da 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
5. NO _x	0.037 lb/MMBTU ²	Based on a 24-hour rolling time period as determined at the end of each calendar day*	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
6. NO _x	13.7 pph ²	Based on a 24-hour rolling time period as determined at the end of each calendar day**	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
7. NO _x	0.2 lb/MMBTU ²	30-day rolling average [^]	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR Part 60, Subparts A & Da
8. CO	50 ppmv corrected to 3% O ₂ ² (see note below)	Based on a 24-hour rolling time period as determined at the end of each calendar day*	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (d) R 336.2804
9. CO	21.8 pph ²	Based on a 24-hour rolling time period as determined at the end of each calendar day**	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (d) R 336.2804
10. VOC	0.0054 lb/MMBTU ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.1702
11. VOC	2.0 pph ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.1702
12. Visible Emissions	10 percent opacity ²	Six-minute average	Each Boiler in FG-BOILERS1-6	SC III.1, V.3, VI.8 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	R 336.1301, R 336.1331, R 336.2802, 40 CFR 52.21(j), 40 CFR Part 60, Subparts A & Da

* Based on the average of all operating hours in a calendar day with the exception of operation during startup, shutdown, and malfunction

** Based on the average of all operating hours in a calendar day including the operation during startup, shutdown, and malfunction shall be applicable on a per boiler basis

[^] Based on the average of all operating hours in a calendar month with the exception of operation during startup, shutdown, and malfunction calculated in accordance with Appendix 7.

NOTE: ppmv = Parts per million by volume. This is equivalent to 0.059 lb/MMBTU. This supersedes the results of the case-by-case 112(g) review which resulted in CO limit of 400 ppm.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	0.2 grains sulfur per 100 standard cubic feet of natural gas ²	Monthly average	FG-BOILERS1-6	SC VI.1, VI.2	40 CFR Part 60, Subparts A & Da R 336.1205(3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only fire natural gas in each boiler of FG-BOILERS1-6.² **(40 CFR 52.21(c) &(d))**
2. The permittee shall operate each boiler of FG-BOILERS1-6 as a cycling facility. During startup operations for each boiler of FG-BOILERS1-6, the length of a warm startup shall not exceed two (2) hours; whereas, the length of a cold startup shall not exceed four (4) hours. Warm startup operation is defined as maintaining each boiler of FG-BOILERS1-6 in a “hot stand-by” mode when the boilers are not actively producing steam by passing steam from the GT/HRSG through steam coils or by-passing steam directly to other facilities. The end of startup at the Plant’s boilers in service is the time when steam flows to the header (i.e., when the boiler check valve opens). During shutdown operations of each boiler of FG-BOILERS1-6, the length of a shutdown shall not exceed one (1) hour.² **(R 336.1113, R 336.1119, 40 CFR 52.21 (j))**
3. The heat input capacity of from each boiler of FG-BOILERS1-6 shall not exceed a maximum of 370 MMBTU per hour.² **(40 CFR Part 60, Subparts A & Da)**
4. The permittee shall not operate each boiler of FG-BOILERS1-6 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the following equipment: boilers, low NOx burner technology, flue gas recirculation, and monitoring equipment, has been submitted within 30 days of permit issuance, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Each boiler shall be equipped with low NOx burner technology and flue gas recirculation. The permittee shall not operate each boiler of FG-BOILERS1-6 unless the low NOx burner technology and flue gas recirculation are installed, maintained and operated in a satisfactory manner.² **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21)**

V. TESTING/SAMPLING

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

1. The permittee shall verify PM, PM10 and VOC emission rates from FG-BOILERS1-6 upon written request of the AQD 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
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
VOC	40 CFR Part 60, Appendix A

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

- The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**
- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during normal operation of FG-BOILERS1-6. **(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))**

- The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the natural gas usage rate to each boiler of FG-BOILERS1-6 on an hourly, daily, monthly and annual basis in cubic feet. The permittee shall determine the heat value of the natural gas in BTU per cubic foot and the sulfur content on a monthly basis from samples taken at a point in the pipeline to the permittee's property. Upon request, the AQD District Supervisor may authorize a different sampling schedule. Each day, the permittee shall determine the heat input rate to each of the FG-BOILERS1-6 for the previous operating day.² **(R 336.2802, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)**
- The permittee shall keep records of hourly, daily, monthly, and annual fuel consumption rates; natural gas fuel value and sulfur content; calculations of the BTU/hr heat input rates and the startup, shutdown and malfunction times for each boiler of FG-BOILERS1-6. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.2802, 40 CFR 52.21, R 336.1225, R 336.1702(a), 40 CFR Part 60, Subparts A & Da)**
- The permittee shall perform inspections and monitor operating information for each of the FG-BOILERS1-6 in accordance with the applicable federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60, Subparts A & Da.² **(40 CFR Part 60, Subparts A & Da)**
- The permittee shall keep records of inspections and operating information for each of the FG-BOILERS1-6 in accordance with the applicable federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60, Subparts A & Da. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR Part 60, Subparts A & Da)**
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx and CO mass and concentration emissions from each boiler of FG-BOILERS1-6 on a continuous basis. The permittee shall install and operate each Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix 3 and shall use the CEMS data for determining compliance with Special Conditions I.5, I.6, I.7, I.8, and I.9. **(R 336.2802, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)**
- Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation each boiler of FG-BOILERS1-6. **(R 336.1216(1), R 336.1201(7)(a))**

7. Monitoring and recording of fuel sulfur content for FG-BOILERS1-6 is required to comply with the SO₂ emission limits specified in the Federal Standards of Performance for New Stationary sources, 40 CFR Part 60, Subparts A & Da. The permittee shall use the following information to make the required demonstration: Verify the gas quality by performing representative fuel sampling. The sulfur content of the gaseous fuel shall not exceed 0.2 grains per 100 scf. At a minimum, the amount of fuel sampling data specified in 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR Part 75 is required. **(40 CFR Part 60, Subparts A & Da)**
8. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for FG-BOILERS1-6. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1213(3))**

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 keep records of emissions and operating information to comply with the applicable federal Standards of Performance for New Stationary Sources reporting requirements as specified in 40 CFR Part 60, Subparts A and Da. The permittee shall submit all source emissions data and operating information to the AQD District Supervisor in an acceptable format within 30 days following the end of the calendar quarter in which the data were collected. **(40 CFR Part 60 Subparts, A & Da)**
5. The permittee shall submit two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix 3. All reports shall be postmarked by the 30th day following the end of each six-month period. **(R 336.2810, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)**

See Appendices 3 and 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV BOILER1	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
2. SV BOILER2	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
3. SV BOILER3	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
4. SV BOILER4	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
5. SV BOILER5	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
6. SV BOILER6	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

1. 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 9. **(40 CFR Part 97, Subpart AAAAA)**
2. 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 9. **(40 CFR Part 97, Subpart EEEEE)**
3. 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 9. **(40 CFR Part 97, Subpart CCCCC)**
4. 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 & Da, as they apply to each boiler of FG-BOILERS1-6. **(40 CFR Part 60, Subparts A & Da)**

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).

FG-BOILERMACT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Gas 1 Fuel Subcategory for existing Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These existing boilers or process heaters must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i).

Emission Units: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, and EU-BOILER6

The collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within the units designed to burn gas 1 fuel subcategory as defined in 40 CFR 63.7575.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only burn fuels as allowed in the units designed to burn gas 1 subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(I))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraph (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of 40 CFR 63.7500, stated in SC III.4. **(40 CFR 63.7500(a))**
 - a. The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. **(40 CFR 63.7500(a)(1))**
 - b. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490, stated in SC IX.1), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**
2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(b))**
3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(e))**
4. The above standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time the permittee must comply only with Table 3 of 40 CFR Part 63 Subpart DDDDD. **(40 CFR 63.7500(f))**

5. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.6, no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than January 31, 2016, except as provided in 40 CFR 63.6(i)), except as specified in paragraph (j) of 40 CFR 63.7510. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than January 31, 2016, except as provided in 40 CFR 63.6(i)), except as specified in paragraph (j) of 40 CFR 63.7510. **(40 CFR 63.7510(e))**
6. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. **(40 CFR 63.7515(d))**
7. For startup and shutdown, the permittee must meet the work practice standards according to item 5 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7540(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**
 - a. A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**
 - b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7555(a)(2))**
2. If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, other gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 63 or Parts 60, 61, or 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. **(40 CFR 63.7555(h))**
3. The permittee must maintain records of the calendar date, time, occurrence, and duration of each startup and shutdown. **(40 CFR 63.7555(i))**
4. The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. **(40 CFR 63.7555(j))**
5. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
6. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
7. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective

action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(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 must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.8 through SC VII.13, and in Subpart A of 40 CFR Part 63. **(40 CFR 63.7495(d))**
5. If the permittee owns or operates an existing unit in the unit designed to burn gas 1 subcategory, the permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted a tune-up of the unit. **(40 CFR 63.7530(d))**
6. The permittee must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 of 40 CFR Part 63, Subpart DDDDD and is an accurate depiction of the facility at the time of the assessment. **(40 CFR 63.7530(e))**
7. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e), stated in SC VII.11. **(40 CFR 63.7530(f))**
8. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII 16. **(40 CFR 63.7540(b))**
9. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**
10. As specified in 40 CFR 63.9(b)(2), if permittee starts up the affected source before January 31, 2013, the permittee must submit an Initial Notification not later than 120 days after January 31, 2013. **(40 CFR 63.7545(b))**
11. If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530, the permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. If the permittee is not required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8). **(40 CFR 63.7545(e))**
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-

hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. **(40 CFR 63.7545(e)(1))**

- b. In addition to the information required in 40 CFR 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.7545(e)(8))**
 - i. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
 - ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." **(40 CFR 63.7545(e)(8)(ii))**
12. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of 40 CFR 63.7545, as listed below. **(40 CFR 63.7545(f))**
 - a. Company name and address. **(40 CFR 63.7545(f)(1))**
 - b. Identification of the affected unit. **(40 CFR 63.7545(f)(2))**
 - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. **(40 CFR 63.7545(f)(3))**
 - d. Type of alternative fuel that the permittee intends to use. **(40 CFR 63.7545(f)(4))**
 - e. Dates when the alternative fuel use is expected to begin and end. **(40 CFR 63.7545(f)(5))**
13. If the permittee intends to commence or recommence combustion of solid waste, the permittee must provide 30 days prior notice of the date upon which the permittee will commence or recommence combustion of solid waste. The notification must identify: **(40 CFR 63.7545(g))**
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice. **(40 CFR 63.7545(g)(1))**
 - b. The currently applicable subcategories under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(g)(2))**
 - c. The date on which the permittee became subject to the currently applicable emission limits. **(40 CFR 63.7545(g)(3))**
 - d. The date upon which the permittee will commence combusting solid waste. **(40 CFR 63.7545(g)(4))**
14. If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify: **(40 CFR 63.7545(h))**
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
 - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**
 - c. The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**
15. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**
16. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.7, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6, and not subject to emission limits or operating limits, the permittee may submit only an annual compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report. **(40 CFR 63.7550(b))**
 - a. The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3, and ending on July 31 or January 31,

whichever date is the first date that occurs at least 180 days (or 1 year, as applicable, if submitting an annual compliance report) after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. **(40 CFR 63.7550(b)(1))**

- b. The first compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3. The first annual compliance report must be postmarked or submitted no later than January 31. **(40 CFR 63.7550(b)(2), 40 CFR 63.10(a)(5))**
 - c. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual compliance reports must cover the applicable 1-year period from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
 - d. Each subsequent compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4), 40 CFR 63.10(a)(5))**
17. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**
- a. If the facility is subject to the requirements of a tune up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv) and (xiv) of 40 CFR 63.7550. **(40 CFR 63.7500(c)(2))**
 - b. 40 CFR 63.7550(c)(5) is as follows:
 - i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
 - iv. The total operating time during the reporting period. **(40 CFR 63.7550(c)(5)(iv))**
 - v. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(1), stated in SC IX.6 Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
18. The permittee must submit the reports according to the procedures specified in paragraph (h)(1) through (3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
- a. Within 60 days after the date of completing each performance test (defined in 40 CFR 63.2) as required by 40 CFR Part 63, Subpart DDDDD the permittee must submit the results of the performance tests, including any associated fuel analyses, required by 40 CFR Part 63, Subpart DDDDD and the compliance reports required in 40 CFR 63.7550(b), stated in SC VII.15, to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). Only data collected using test methods on the ERT website are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Road, Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the Administrator, the permittee must also submit these reports, including the confidential business information, to the Administrator in the format specified by the Administrator. For any performance test conducted using test methods that are not listed on the ERT website, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator. **(40 CFR 63.7550(h)(1))**
 - b. Within 60 days after the date of completing each CEMS performance evaluation test (defined in 40 CFR 63.2) the permittee must submit the relative accuracy test audit (RATA) data to the EPA's Central Data Exchange by using CEDRI as mentioned in paragraph (h)(1) of 40 CFR 63.7550. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator. **(40 CFR 63.7550(h)(2))**

- c. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due the report the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. At the discretion of the Administrator, the permittee must also submit these reports, to the Administrator in the format specified by the Administrator. **(40 CFR 63.7550(h)(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. 40 CFR Part 63, Subpart DDDDD applies to existing affected sources as described in paragraph (a)(1) of 40 CFR 63.7490, as listed below. **(40 CFR 63.7490(a))**
 - a. The affected source of 40 CFR Part 63, Subpart DDDDD is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in 40 CFR 63.7575. **(40 CFR 63.7490(a)(1))**
2. A boiler or process heater is existing if it is not new or reconstructed, as defined below. **(40 CFR 63.7490(d))**
 - a. A boiler or process heater is new if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
 - b. A boiler or process heater is reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. **(40 CFR 63.7490(c))**
3. If the permittee has an existing boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, except as provided in 40 CFR 63.6(i). **(40 CFR 63.7495(b))**
4. The permittee must be in compliance with the emission limits, work practice standards, and operating limits of 40 CFR Part 63, Subpart DDDDD. These limits apply at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f), stated in SC III.4. **(40 CFR 63.7505(a))**
5. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.6, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.6, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**
6. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
 - a. If the boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. **(40 CFR 63.7540(a)(10))**
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**

- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
 - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
 - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
 - vi. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
 - (1). The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - (2). A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
 - (3). The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
 - b. If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. **(40 CFR 63.7540(a)(12))**
 - c. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**
7. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. **(40 CFR 63.7565)**

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).

**FG-TURB/DB12
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

A combined cycle gas turbine equipped with a dry-low NOx burner and a natural gas fired duct burner. Unit is equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09.

Emission Units: EU-TURBINE12 and EU-DUCTBURNER12

POLLUTION CONTROL EQUIPMENT

Dry-low NOx burner

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen Oxides (NOx)	122.9 pph* ²	1-hr average	FG-TURB/DB12	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.44b(a)(4)(i)
2. Carbon Monoxide (CO)	60.9 pph ²	Hourly	FG-TURB/DB12	SC V.1, V.2	R 336.2810, 40 CFR 52.21(j)
3. CO	266.8 tpy** ²	12-month rolling time period as determined at the end of each calendar month	FG-TURB/DB12	SC VI.4, VI.5	R 336.2810, 40 CFR 52.21(j)
4. NOx	0.10 lb/MMBTU ²	Ozone season	FG-TURB/DB12	SC VI.2, VI.3	R 336.1201(3)
5. NOx	0.10 lb/MMBTU ²	Calendar year	FG-TURB/DB12	SC VI.2, VI.3	R 336.1201(3)
6. NOx	538.3 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-TURB/DB12	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j)
7. Visible Emissions	10 percent opacity during normal operation ²	Six-minute average	FG-TURB/DB12	SC III.2, V.4, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)
8. Visible Emissions	20 percent opacity during periods of startup, shutdown and malfunction ²	Six-minute average	FG-TURB/DB12	SC III.2, V.5, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 from Table "EU-TURBINE12 Emission Unit Conditions".

** Compliance Method for annual CO:

The permittee shall use results from the most recent stack test for CO (pursuant to SC V.1) to develop an emission factor in terms of pounds of CO per million British Thermal Units (MMBTU) of natural gas burned. The permittee shall use the worst-case turbine emission factor and the worst-case turbine/duct burner emission factor from all of the operating scenarios specified in SC V.1. The emission factors, along with the fuel-monitoring requirement in SC VI.1 shall be applied to each month to determine compliance with the 12-month rolling average.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	0.2 gr Sulfur / 100 scf of natural gas ²	Monthly average	FG-TURB/DB12	SC VI.7	40 CFR 52.21(j), 40 CFR 60.333 (b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² **(R 336.1911, R 336.1912)**
2. The permittee shall use only pipeline quality natural gas as fuel for FG-TURB/DB12. **(R 336.213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall verify CO emission rates from FG-TURB/DB12 by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. Testing must be done for EU-TURBINE12 at 50 percent and 100 percent of base load. Testing must also be done for EU-TURBINE12 at maximum load with EU-DUCTBURNER12 at maximum firing rate. An alternative method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 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 final plan must describe the normal operating range for FG-TURB/DB12. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))**
2. The permittee shall verify the CO emission rates from FG-TURB/DB12, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**
4. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG-TURB/DB12.² **(R 336.1301(c), R 336.2810, 40 CFR 52.21(j))**
5. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-TURB/DB12. **(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 in a satisfactory manner a device to monitor and record the natural gas usage for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, on a continuous basis.² **(R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, on a continuous basis and according to the procedures outlined in Appendix 3.² **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(c))**
3. The permittee shall keep, in a satisfactory manner, hourly, monthly, and 12-month rolling NOx emission records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling CO emission calculation records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling natural gas use records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
6. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.1301(c), R 336.2810, 40 CFR 52.21(j))**
7. The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334, 40 CFR 60.335)**

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 two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix 3. All reports shall be postmarked by the 30th day following the end of each six-month period.² **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.334(j))**
5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendices 3 and 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-12	216 ²	150 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**FG-SITURBINES
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Combined-cycle gas turbines which use steam injection for NOx control. Units are equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09.

Emission Units: EU-T03, EU-T04, EU-T05, EU-T06, EU-T07, EU-T08, EU-T09, EU-T10, EU-T11, EU-T13, EU-T14

POLLUTION CONTROL EQUIPMENT

Steam injection (including desuperheater station)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen Oxides (NOx)	159.0 pph* ²	1-hr average	Each turbine	SC VI.1, VI.2	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.332(a)(1)
2. Carbon Monoxide (CO)	26 pph ²	Hourly	Each turbine	SC V.1, V.2	R 336.2810, 40 CFR 52.21(j)
3. NOx	1500 lbs per startup** ²	Each startup	Each turbine	SC VI.1, VI.5, VI.6	R 336.2810, 40 CFR 52.21(j)
4. NOx	750 lbs per shutdown** ²	Each shutdown	Each turbine	SC VI.1, VI.5, VI.6	R 336.2810, 40 CFR 52.21(j)
5. NOx	0.149 lb/MMBTU ²	Ozone season	Each turbine	SC VI.1, VI.2	R 336.1201(3)
6. NOx	0.149 lb/MMBTU ²	Calendar year	Each turbine	SC VI.1, VI.2	R 336.1201(3)
7. NOx	697 tpy ²	12-month rolling time period as determined at the end of each calendar month	Each turbine	SC VI.1, VI.2	R 336.2810, 40 CFR 52.21(j)
8. Visible Emissions	10 percent opacity during normal operation ²	Six-minute average	Each turbine	SC III.4, V.4, VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)
9. Visible Emissions	20 percent opacity during periods of startup, shutdown and malfunction ²	Six-minute average	Each turbine	SC III.4, V.5, VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 above. In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the nitrogen oxides emissions limit established by 40 CFR 52.21(j) and R 336.2810; and also compliance with the nitrogen oxides emissions limit in 40 CFR 60.332(a)(1), an additional applicable requirement that has been subsumed within this condition.

** Startup is defined as the period of time from synchronization to the grid (generator breaker closed) until the unit reaches steady state operation (loads greater than 50 percent of design capacity). Shutdown is defined as that period of time from the initial lowering of the turbine output below 50 percent of full operating load, with the intent to shut down, until the point at which the generator breaker opens.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	0.2 gr Sulfur / 100 scf of natural gas ²	Monthly average	FG-SITURBINES	SC VI. 4	40 CFR 52.21(j), 40 CFR 60.333(b)

III. PROCESS/OPERATIONAL RESTRICTION(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 & GG, as they apply to FG-SITURBINES.² **(40 CFR Part 60, Subparts A & GG)**
2. The permittee shall not operate each turbine included in FG-SITURBINES, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² **(R 336.1911, R 336.1912)**
3. The combined hours of operation of the foggers for FG-SITURBINES shall not exceed 18,700 hours on a 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818, R 336.2818(3)(f)(ii), 40 CFR 52.21)**
4. The permittee shall use only pipeline quality natural gas as fuel for FG-SITURBINES. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine included in FG-SITURBINES with a steam injection system.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 verify CO emission rates from one turbine (EU-T03 through EU-T08) in FG-SITURBINES by testing at owner’s expense, in accordance with Department requirements. Testing must be done for one turbine at 50 percent and 100 percent of base load. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))**
2. The permittee shall verify the CO emission rates from one turbine (EU-T03 through EU-T08) in FG-SITURBINES, at a minimum, every two years from the date of the last test. A different turbine shall be tested every two years thereafter until all turbines have been tested. This cycle shall repeat after all turbines have been tested. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**
4. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG-SITURBINES.² **(R 336.1301(c), R 336.2810, 40 CFR 52.21(j))**
5. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-SITURBINES. **(R 336.1213(3))**
6. No later than 180 days following the installation of upgraded compressor blades on each turbine included in FG-SITURBINES, verification of CO emission rates, by testing at owner's expense, in accordance with Department requirements, will be required on each turbine. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine and must be approved by the AQD prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))**

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 in a satisfactory manner a device to monitor and record the NOx emissions for each turbine included in FG-SITURBINES, on a continuous basis and according to the procedures outlined in Appendix 3.² **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(b))**
2. The permittee shall keep, in a satisfactory manner, hourly, monthly and 12-month rolling NOx emission records for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
3. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.1301(c), R 336.2810, 40 CFR 52.21(j))**
4. The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334, 40 CFR 60.335)**
5. The permittee shall keep, in a satisfactory manner, NOx emission records during each startup and shutdown for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
6. The permittee shall keep, in a satisfactory manner, a written or electronic log of the number of startups, and shutdowns for each turbine included in FG-SITURBINES for each month and 12-month rolling time period. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
7. The permittee shall keep, in a satisfactory manner, records of the hours of operation of the fogger for FG-TURBINES and for EU-TURBINE12 and of each fogger for FG-SITURBINES. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² **(R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818(3)(f)(ii), 40 CFR 52.21)**

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 two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix 3. All reports shall be postmarked by the 30th day following the end of each six-month period.² **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.334(j))**
5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendices 3 and 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-03	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SV-04	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SV-05	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SV-06	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SV-07	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6. SV-08	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. 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 9. **(40 CFR Part 97, Subpart AAAAA)**
2. 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 9. **(40 CFR Part 97, Subpart EEEEE)**
3. 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 9. **(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).

FG-DUCTBURNERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Natural gas-fired duct burners used to supplement the steam producing capabilities of turbines 9-14. PTI No. 241-09.

Emission Units: EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER12, EU-DUCTBURNER13, EU-DUCTBURNER14

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(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 & Db, as they apply to FG-DUCTBURNERS.² **(40 CFR Part 60, Subparts A & Db)**

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

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, records of the amount of each fuel combusted during each day for each duct burner included in FG-DUCTBURNERS and calculate the annual capacity factor for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis as determined at the end of each calendar month. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(40 CFR 60.49b(d))**

VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.
(R 336.1213(4)(c))
4. The permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply, to the AQD, by the dates specified in 40 CFR 63.9(b).²
(40 CFR 63.7545(a))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**FG-SITURB/DB
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Combined cycle gas turbines that use steam injection for NOx control and natural gas fired duct burners. Units are each equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09.

Emission Units: EU-T09, EU-T10, EU-T11, EU-T13, EU-T14, EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER13, EU-DUCTBURNER14

POLLUTION CONTROL EQUIPMENT

Steam injection (including desuperheater station)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen Oxides (NOx)	183.9 pph* ²	1-hr average	Each turbine and duct burner set included in FG-SITURB/DB	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.44b(a)(4)(i)
2. Carbon Monoxide (CO)	246.0 pph ²	Hourly	Each turbine and duct burner set included in FG-SITURB/DB	SC V.1, V.2	R 336.2810, 40 CFR 52.21(j)
3. CO	266.8 tpy** ²	12-month rolling time period as determined at the end of each calendar month	Each turbine and duct burner set included in FG-SITURB/DB	SC VI.4, VI.5	R 336.2810, 40 CFR 52.21(j)
4. NOx	0.149 lb/MMBTU ²	Ozone season	Each turbine and duct burner set included in FG-SITURB/DB	SC VI.2, VI.3	R 336.1201(3)
5. NOx	0.149 lb/MMBTU ²	Calendar year	Each turbine and duct burner set included in FG-SITURB/DB	SC VI.2, VI.3	R 336.1201(3)
6. NOx	806.1 tpy ²	12-month rolling time period as determined at the end of each calendar month	Each turbine and duct burner set included in FG-SITURB/DB	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j)
7. Visible Emissions	10 percent opacity during normal operation ²	Six-minute average	Each turbine and duct burner set included in FG-SITURB/DB	SC III.2, V.4, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)
8. Visible Emissions	20 percent opacity during periods of startup, shutdown and malfunction ²	Six-minute average	Each turbine and duct burner set included in FG-SITURB/DB	SC III.2, V.5, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 from Table "FG-SITURBINES Emission Limits".

**** Compliance Method for annual CO:**

The permittee shall use results from the most recent stack test for CO (pursuant to SC V.1) to develop an emission factor in terms of pounds of CO per million British Thermal Units (MMBTU) of natural gas burned. The permittee shall use the worst-case turbine emission factor and the worst-case turbine/duct burner emission factor from all of the operating scenarios specified in SC V.1. The emission factors, along with the fuel-monitoring requirement in SC VI.1 shall be applied to each month to determine compliance with the 12-month rolling average.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	0.2 gr Sulfur / 100 scf of natural gas ²	Monthly average	FG-SITURB/DB	SC VI. 7	40 CFR 52.21(j), 40 CFR 60.333(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate each turbine included in FG-SITURB/DB, operating alone or in conjunction with respective duct burner, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² **(R 336.1911, R 336.1912)**
2. The permittee shall use only pipeline quality natural gas as fuel for FG-SITURB/DB. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall verify CO emission rates from two turbines (EU-T09, 10, 11, 13, 14) and respective duct burners (EU-DUCTBURNER09, 10, 11, 13, 14) in FG-SITURB/DB by testing at owner's expense, in accordance with Department requirements. Testing must be done for two turbines at maximum load with the respective duct burners at maximum firing rate. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205(1), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(j))**
2. The permittee shall verify the CO emission rates from two turbines (EU-T09, 10, 11, 13, 14) and respective duct burners (EU-DUCTBURNER09, 10, 11, 13, 14) in FG-SITURB/DB, at a minimum, every two years from the date of the last test. Two different turbines and respective duct burners than the two tested during the previous test shall be tested every two years thereafter until all turbines and respective duct burners have been tested. This cycle shall repeat after all turbines and respective duct burners have been tested. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

4. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG-SITURB/DB.² **(R 336.1301(c), 40 CFR 52.21(j))**
5. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-SITURB/DB. **(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 in a satisfactory manner a device to monitor and record the natural gas usage for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner, on a continuous basis.² **(R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NO_x emissions for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner, on a continuous basis and according to the procedures outlined in Appendix 3.² **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(b))**
3. The permittee shall keep, in a satisfactory manner, hourly, yearly, monthly and 12-month rolling NO_x emission records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling CO emission calculation records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.2810, 40 CFR 52.21(j))**
5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling natural gas use records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
6. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² **(R 336.1301(c), R 336.2810, 40 CFR 52.21(j))**
7. The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334, 40 CFR 60.335)**

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 two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix 3. All reports shall be postmarked by the 30th day following the end of each six-month period.² **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(j))**
5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendices 3 and 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-09	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SV-10	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SV-11	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SV-13	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SV-14	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

FG-CLDCLR 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: EU-COLDCLEANER

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 FG-BOILERS1-6:

1. The permittee shall maintain a copy of the approved Monitoring Plan on site. The Monitoring Plan shall include drawings or specifications showing the locations and descriptions of the required CEMS.
2. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
3. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Part 75, Appendix A and B. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD.
4. In accordance with 40 CFR 60.7(c) & (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, semiannually. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). All reports shall be postmarked by the 30th day following the end of each six-month period. The EER shall include the following information:
 - a. A report of each exceedance above the limits specified in the Emission Limits section of FG-BOILERS1-6. 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 boiler in FG-BOILERS1-6 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.

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FG-TURB/DB12, FG-SITURBINES, and FG-SITURB/DB:

1. The permittee shall maintain a copy of the approved Monitoring Plan on site. The Monitoring Plan shall include drawings or specifications showing the locations and descriptions of the required CEMS.
2. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
3. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Part 75, Appendix A and B. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD.
4. In accordance with 40 CFR 60.7(c) & (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, semiannually. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). All reports shall be postmarked by the 30th day following the end of each six-month period. The EER shall include the following information:
 - a. A report of each exceedance above the permitted NO_x 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 turbine included in FG-SITURB/DB and FG-TURB/DB12, operating alone or in conjunction with the respective duct burner 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.

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B6257-2014. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B6257-2014a is being reissued as Source-Wide PTI No. MI-PTI-B6257-2020.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201600025/ June 16, 2016	Reopening to update from CAIR to CSAPR.	EU-TURNINE12, FG-BOILERS1-6, FG-SITURBINES

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FG-BOILERS1-6 permit condition specified in SC I.7, Emission Limits. The NOx emission limit shall be calculated as follows:

1. Each calendar month, the permittee will verify that the NOx Rate for the previous month is less than or equal to 0.20 lb/MMBTU for each unit.
 - a. The permittee will review the "MCV Monthly NOx Emissions Report" that reports the calendar month average NOx rate including startup, shutdown, and malfunction (SSM). The Calendar Month average is calculated as follows: sum of all operating hourly emissions rates that include SSM divided by the number of operating hours in a calendar month.
2. If the Calendar Month average is greater than 0.20 lb/MMBTU for a unit, the permittee will then calculate a 30-operating day rolling average for each day in the subject calendar month, using data from prior months as required.
 - a. Compliance with the applicable 30-day rolling average NOx emission is determined by calculating the arithmetic average of all hourly emission rates for the 30 successive boiler operating days for each calendar day.
 - b. This analysis will provide a 30-day rolling average for each day in the subject calendar month and will include SSM.
 - c. If this analysis shows that the subject unit's 30-operating day rolling average NOx rate for every calculated day is less than or equal to 0.20 lb/MMBTU, then the unit(s) will be considered within compliance.

3. If the 30-day rolling average calculated above, indicates that the average is greater than 0.20 lb/MMBTU for any one day in the calendar month, then MCV staff will evaluate every hour in the data set, and exclude all hours deemed due to SSM, and will remove those hours from the data set. The calculation/analysis performed in step 2 will be re-run.
 - a. If the revised analysis (excluding SSM) shows that all subject unit's 30-operating day rolling average NOx rates is less than or equal to 0.20 lb/MMBTU, then it will be considered within compliance.
If the revised analysis shows a calculated 30-day rolling average greater than 0.20 lb/MMBTU, then that day, or days, will be considered out of compliance, and a Rule 912 Exceedance Report will be submitted to the EGLE.

Definitions

The Hourly Emission Rate is the one-hour arithmetic average of all non-startup, shutdown, and malfunction emission rates in an operating hour. 40 CFR 60.13(h)(2) requires at least one valid data point in each 15-minute quadrant of the hour in which the unit operates.

Boiler Operating Day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam-generating unit. It is not necessary for fuel to be combusted the entire 24-hour period (40 CFR 60.41 Da).

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the 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.

Appendix 9. 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: 3 (EU-T03)	
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	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: 4 (EU-T04)	
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	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: 5 (EU-T05)	
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	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: 6 (EU-T06)	
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	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: 7 (EU-T07)	
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	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: 8 (EU-T08)	
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	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: 9 (EU-T09)	
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	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: 10 (EU-T10)	
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	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: 11 (EU-T11)	
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	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: 12 (EU-TURBINE12)	
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	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: 13 (EU-T13)	
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	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: 14 (EU-T14)	
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	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: 15 (EU-BOILER1)	
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	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: 16 (EU-BOILER2)	
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	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: 17 (EU-BOILER3)	
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	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: 18 (EU-BOILER4)	
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	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: 19 (EU-BOILER5)	
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	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: 20 (EU-BOILER6)	
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	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 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.