# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

EFFECTIVE DATE: January 28, 2014 REVISION DATE: June 16, 2016

# ISSUED TO

# CMS Generation Michigan Power LLC Livingston Generating Station

State Registration Number (SRN): N6526

LOCATED AT

155 North Townline Road, Gaylord, Otsego County, Michigan 49735

# **RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-N6526-2014a

Expiration Date: January 28, 2019

Administratively Complete ROP Renewal Application Due Between July 28, 2017 and July 28, 2018

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 Michigan Air Pollution Control Rule 210(1), 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-N6526-2014a

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, 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 Environmental Quality

Janis Denman, Cadillac 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 Environmental Quality (MDEQ) 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 are 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 requirement requires a more detailed schedule of compliance.

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

# A. GENERAL CONDITIONS

# Permit Enforceability

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

# **General Provisions**

- The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. (R 336.1213(1)(a))
- 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). (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: **(R 336.1301(1))** 
  - a. A 6-minute average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent 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.<sup>1</sup> (R 336.1901(a))
  - b. Unreasonable interference with the comfortable enjoyment of life and property.<sup>1</sup> (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). **(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. (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, 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. (**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(9))
- 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(7))

### 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, Part 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).
- 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, Part 68.10(a):
   a. June 21, 1999,
  - b. Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
  - c. The date on which a regulated substance is first present above a threshold quantity in a process.
- 40. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR, Part 68.
- 41. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). (40 CFR, Part 68)

### **Emission Trading**

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

# Permit To Install (PTI)

- 43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.<sup>2</sup> (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. <sup>2</sup> (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, MDEQ.<sup>2</sup> (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, MDEQ, 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.<sup>2</sup> (R 336.1201(4))

### Footnotes:

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

<sup>2</sup>This 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 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<br>(Including Process Equipment & Control<br>Device(s))                                      | Installation<br>Date/<br>Modification Date | Flexible Group ID |
|------------------|--|--|-------------------|
| EUCOMBTURB01     | Dresser-Rand ER-224 combustion turbine, 39<br>MW, Unit 1, with water injection for control of<br>nitrogen oxides (NOx) | 10/6/1998                                  | FGCOMBTURB        |
| EUCOMBTURB02     | Dresser-Rand ER-224 combustion turbine, 39<br>MW, Unit 2, with water injection for control of<br>nitrogen oxides (NOx) | 10/6/1998                                  | FGCOMBTURB        |
| EUCOMBTURB03     | Dresser-Rand ER-224 combustion turbine, 39<br>MW, Unit 3, with water injection for control of<br>nitrogen oxides (NOx) | 10/6/1998                                  | FGCOMBTURB        |
| EUCOMBTURB04     | Dresser-Rand ER-224 combustion turbine, 39<br>MW, Unit 4, with water injection for control of<br>nitrogen oxides (NOx) | 10/6/1998                                  | FGCOMBTURB        |

# D. FLEXIBLE GROUP 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<br>Emission Unit IDs                                 |
|-------------------|--|---|
| FGCOMBTURB        | Four Dresser-Rand ER-224 combustion turbines rated<br>at 39 MW each, equipped with water injection for<br>control of nitrogen oxides (NOx) | EUCOMBTURB01,<br>EUCOMBTURB02,<br>EUCOMBTURB03,<br>EUCOMBTURB04 |

# FGCOMBTURB FLEXIBLE GROUP CONDITIONS

**DESCRIPTION:** Four Dresser-Rand ER-224 combustion turbines rated at 39 MW each

Emission Units: EUCOMBTURB01, EUCOMBTURB02, EUCOMBTURB03, EUCOMBTURB04

# POLLUTION CONTROL EQUIPMENT: Water Injection

# I. EMISSION LIMIT(S)

|    | Pollutant | Limit  | Time Period/ Operating<br>Scenario  |   | Monitoring/<br>Testing<br>Method | Underlying<br>Applicable<br>Requirements   |
|----|-----------|--|---|---|----------------------------------|--|
| 1. | NOx       | 75 parts per<br>million by<br>volume at 15<br>percent oxygen<br>on a dry basis. <sup>2</sup> | Test Protocol*  | EUCOMBTURB01,<br>EUCOMBTURB02,<br>EUCOMBTURB03,<br>and<br>EUCOMBTURB04,<br>individually | Condition V.1                    | 40 CFR 60.332<br>40 CFR 52.21(c)<br>and (d)<br>R 336.1205(1)(a)<br>R 336.1205(3) |
| 2. | NOx       | 624.0<br>pounds/hour <sup>2</sup>  |   | FGCOMBTURB  | Condition VI.6<br>and VI.7       | 40 CFR 52.21(c)<br>and (d)<br>R 336.1205(1)(a)<br>R 336.1205(3)                  |
| 3. | NOx       | 224 tons/year <sup>2</sup>   | 12-month rolling time<br>period as determined at<br>the end of each calendar<br>month | FGCOMBTURB  |                                  | 40 CFR 52.21(c)<br>and (d)<br>R 336.1205(1)(a),<br>R 336.1205(3)                 |
| 4. | СО        | 0.48 pounds<br>per million BTU<br>heat input <sup>2</sup>                                    | Test Protocol*  | EUCOMBTURB01,<br>EUCOMBTURB02,<br>EUCOMBTURB03,<br>and<br>EUCOMBTURB04,<br>individually |                                  | 40 CFR 52.21(d)<br>R 336.1205(1)(a),<br>R 336.1205(3)                            |
| 5. | СО        | 844.0<br>pounds/hour <sup>2</sup>  |   | FGCOMBTURB  |                                  | 40 CFR 52.21(d)<br>R 336.1205(1)(a),<br>R 336.1205(3)                            |
| 6. | СО        | 224.0<br>tons/year <sup>2</sup>  | 12-month rolling time<br>period as determined at<br>the end of each calendar<br>month |   |                                  | 40 CFR 52.21(d)<br>R 336.1205(1)(a),<br>R 336.1205(3)                            |

\*Test Protocol shall specify the averaging time.

# II. MATERIAL LIMIT(S)

| Material | Limit | Time Period/ Operating<br>Scenario |    | Monitoring/<br>Testing Method | Underlying<br>Applicable<br>Requirements |
|----------|-------|------------------------------------|----|-------------------------------|--|
| NA       | NA    | NA                                 | NA | NA                            | NA                                       |

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

1. The permittee shall burn only natural gas as defined in 40 CFR 60.331(u) in the combustion turbines.<sup>2</sup> (R 336.1301(1), 40 CFR 60.331(u))

In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined operational limit shall be considered compliance with the operational limit established by **R 336.1301(1) and 40 CFR 60.331(u)**; and also compliance with the operational limit established by **40 CFR 60.333(b)**, an additional applicable requirement that has been subsumed within this condition.

- The permittee shall not operate any of the combustion turbine units at or beyond a 10.0% capacity factor, averaged over three calendar years, or a 20.0% capacity factor for any one calendar year, without the increased monitoring equipment and recordkeeping as specified in Federal Acid Rain regulations. (40 CFR 75.12(d)(2))
- 3. Except for purposes of start-up, shutdown, and testing, the permittee shall not operate any combustion unit except at a percent load and average hourly water to fuel ratio within a range demonstrated for that individual unit, by stack testing, to be in compliance with NOx and CO limits. (R 336.1205(1)(a), R 336.1205(3), 40 CFR 52.21)

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

- 1. The permittee shall equip and maintain the four combustion turbine units with a working water injection system. (40 CFR 52.21(j))
- 2. The permittee shall equip and maintain the four combustion turbine units with a continuous monitoring system to monitor and record fuel consumption and water to fuel ratio for each turbine. (40 CFR 60.334(a)).

#### V. TESTING/SAMPLING

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

- To establish compliance with NOx emission limits, the permittee shall test each combustion turbine unit in accordance with Subparts A and GG of 40 CFR, Part 60 and Appendix E of 40 CFR, Part 75 or other protocol approved in advance by the AQD. The permittee shall by this testing determine the range of water to fuel ratios within which the combustion turbine units comply with their NOx emission limits. Testing shall be conducted at least once each 20 calendar quarters and within 90 days after any combustion turbine change-out. (R 336.1213(3)(a), 40 CFR 60.335, 40 CFR, Part 75)
- To establish compliance with CO emission limits, the permittee shall test each combustion turbine unit in accordance with 40 CFR, Part 60, Appendix A, Method 10, or other method approved in advance by the AQD. Testing shall be conducted at least once each 20 calendar quarters and within 90 days after any combustion turbine change-out. (R 336.1213(3)(a), 40 CFR 52.21)

#### VI. MONITORING/RECORDKEEPING

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

- The permittee shall continuously monitor and record the fuel and water injection flows, by volume, for each combustion turbine unit, at all times the unit is operating. Data recorded during monitoring malfunctions, repair activities, and QA/QC operations shall not be used for 40 CFR, Part 64 compliance. (R 336.1213(3), 40 CFR 60.334(a), 40 CFR 64.6(c)(1)(iii), 40 CFR 64.7(c), 40 CFR 64.6(c)(3))
- The permittee shall continuously calculate and record the water to fuel ratio, by volume, for each combustion turbine unit. Data recorded during monitoring malfunctions, repair activities, and QA/QC operations shall not be used for 40 CFR, Part 64 compliance. (R 336.1213(3), 40 CFR 60.334(a), 40 CFR 64.6(c)(1)(iii), 40 CFR 64.7(c), 40 CFR 64.6(c)(3))

- 3. The permittee shall record the hours of operation of each combustion turbine unit for each calendar month. (R 336.1213(3))
- 4. The permittee shall calculate the annual capacity factor for the facility for each calendar year. (R 336.1213(3), 40 CFR 75.12(d)(2))
- 5. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage on an hourly and monthly basis for each combustion turbine unit. The permittee shall keep all records on file and make them available to the Air Quality Division upon request. (R 336.1205(1)(a), R 336.1205(3), 40 CFR 52.21)
- 6. The permittee shall continuously monitor and record the operating load with the associated water to fuel ratio, proven by stack testing, for each combustion turbine unit. The permittee shall keep all records on file and make them available to the Air Quality Division upon request. (R 336.1205(1)(a), R 336.1205(3), 40 CFR 52.21)
- The permittee shall calculate and record the NOx and CO emissions on an hourly, monthly, and 12 month rolling time period basis, in the manner specified in the Continuous Compliance Protocol. The permittee shall keep all records on file and make them available to the Air Quality Division upon request. (R 336.1205(1)(a), R 336.1205(3), 40 CFR 52.21)
- 8. The permittee shall demonstrate that the gaseous fuel burned in FGCOMBTURB is natural gas, as defined in 40 CFR 60.331(u) by using one of the following sources of information: (R 336.1213(3), 40 CFR 60.334(h)(3))
  - a. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total fuel sulfur content of the fuel is 20 grains/100 scf or less; or
  - b. Representative fuel sampling date which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR, Part 75 is required.
- 9. The permittee shall use continuous monitoring of fuel consumption and of the ratio of water to fuel, in accordance with the provisions of 40 CFR 60.332, as an indicator of the proper functioning of the water injection system. The appropriate range of water-to-fuel ratio defining proper function of the water injection system is indicated by graphs or figures of heat input vs. water-to-fuel ratio developed to demonstrate compliance under 40 CFR 60.335. (40 CFR 64.6(c)1(i and ii))
- An excursion for NOx shall be any one hour period in which the average water to fuel ratio falls below the minimum determined by stack tests to demonstrate compliance at the current operating heat input. (40 CFR 60.334(j)(1)(i)(A)), 40 CFR 64.6(c)(2))
- 11. Upon detecting an excursion or exceedance, the permittee shall restore operation of the affected combustion turbine unit and its water injection system to compliance as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion or exceedance and documentation of any corrective actions taken. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator actions (such as through response by a computerized control system) or any necessary follow-up actions to return operation to compliance with all emission limits. (40 CFR 64.7(d))
- The permittee shall properly maintain the systems for monitoring fuel and injection water flow for each combustion turbine unit, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))
- 13. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring

malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, in frequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 64.7(c))** 

# VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration, and cause of excursions or exceedances and the corrective actions taken. If there were no excursions or exceedances in the reporting period, then this report shall include a statement that there were no excursions or exceedances. (40 CFR 64.9(a)(2)(i))
- 5. Each semiannual report of monitoring and deviations shall include summary information on downtime of the water-to-fuel ratio monitoring system and associated data acquisition system. If there were no periods of downtime in the reporting period, then the report shall include a statement to that effect. (40 CFR 64.9(a)(2)(ii))
- 6. The permittee shall submit semiannual monitoring system performance and excess NOx emission reports within 30 days following the end of each reporting period. For any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined by stack testing to demonstrate compliance with the 75 ppm NOx emission limit, the following information will be provided:
  - a. Average water-to-fuel ratio
  - b. Average fuel consumption rate
  - c. Gas turbine load (MW)
  - d. The graphs or figures developed under compliance testing to show the correlation between water-to-fuel ratio and NOx emissions

The report shall also state all times during which the water-to-fuel ratio monitoring system was inoperative, when it was repaired, or when it was adjusted. If there were no excess emissions and the monitoring system was never inoperative, repaired, or adjusted during a quarter, the report shall state these facts. (40 CFR 60.334(j)(1)and (5), 40 CFR 60.7(c))

- 7. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. (R 336.12001(3))
- 8. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. (R 336.2001(4))

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 The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. (R 336.2001(5))

#### See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

|    | Stack & Vent ID | Maximum<br>Exhaust<br>Dimensions<br>(inches) | Minimum Height<br>Above Ground<br>(feet) | Underlying Applicable<br>Requirements |
|----|-----------------|--|--|---------------------------------------|
| 1. | SVUNIT01        | 250.8 x 145.2 <sup>2</sup>                   | 39 <sup>2</sup>                          | 40 CFR 52.21(c) and (d)               |
| 2. | SVUNIT02        | 250.8 x 145.2 <sup>2</sup>                   | 39 <sup>2</sup>                          | 40 CFR 52.21(c) and (d)               |
| 3. | SVUNIT03        | 250.8 x 145.2 <sup>2</sup>                   | 39 <sup>2</sup>                          | 40 CFR 52.21(c) and (d)               |
| 4. | SVUNIT04        | 250.8 x 145.2 <sup>2</sup>                   | 39 <sup>2</sup>                          | 40 CFR 52.21(c) and (d)               |

# IX. OTHER REQUIREMENT(S)

- 1. The permittee shall develop and shall maintain, on site, a continuous compliance plan which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include parameters monitored, their acceptable ranges, and the basis for the parameters and ranges selected. The plan shall be updated following each emission test approved by the AQD to incorporate the emission rates and compliant ranges of unit load and fuel to water ratio established in that test. **(40 CFR 60.334(g))**
- 2. The permittee shall comply with the acid rain permitting provisions of 40 CFR, Part 72, as outlined in a complete Phase II, Acid Rain Permit issued by the AQD. Phase II, Acid Rain Permit No. MI-AR-55102-2014 is hereby incorporated into this ROP as Appendix 9. (R 336.1299(d))
- 3. The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to Rule 299(d) and 40 CFR, Part 72.9(c)(1)(i). (R 336.1213(10))
- 4. The permittee shall comply with the provisions of the Transport Rule NOX Annual Trading Program, as specified in 40 CFR, Part 97 Subpart AAAAA, and identified in Appendix 10. (40 CFR Part 97 Subpart AAAAA)
- 5. The permittee shall comply with the provisions of the Transport Rule NOX Ozone Trading Program, as specified in 40 CFR, Part 97 Subpart BBBBB, and identified in Appendix 10. (40 CFR Part 97 Subpart BBBBB)
- 6. The permittee shall comply with the provisions of the Transport Rule SO2 Group 1 Trading Program, as specified in 40 CFR, Part 97 Subpart CCCCC, and identified in Appendix 10. (40 CFR Part 97 Subpart CCCCC)
- The permittee shall promptly notify the AQD for the need to modify the CAM Plan if the existing plan is found to be inadequate. In this case, the permittee shall submit a proposed modification to the ROP if necessary. (40 CFR 64.7(e))
- 8. The permittee shall comply with all applicable requirements of 40 CFR, Part 64. (40 CFR, Part 64)

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9. The permittee shall comply with all applicable requirements of the Standards of Performance for Stationary Gas Turbines, Subparts A and GG. (40 CFR 60.330 through 60.335)

Footnotes: <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

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

# E. NON-APPLICABLE REQUIREMENTS

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

# **APPENDICES**

# Appendix 1. Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

| AQD        | ig is an alphabetical listing of abbreviations/acro<br>Air Quality Division | MM              | Million   |
|------------|---|-----------------|---|
| acfm       | Actual cubic feet per minute  | MSDS            | Material Safety Data Sheet                              |
| ВАСТ       | Best Available Control Technology   | MW              | Megawatts   |
| BTU        | British Thermal Unit  | NA              | Not Applicable  |
| °C         | Degrees Celsius   | NAAQS           | National Ambient Air Quality Standards                  |
| CAA        | Federal Clean Air Act   | NESHAP          | National Emission Standard for Hazardous Air Pollutants |
| CAM        | Compliance Assurance Monitoring   | NMOC            | Non-methane Organic Compounds                           |
| CEM        | Continuous Emission Monitoring  | NOx             | Oxides of Nitrogen                                      |
| CFR        | Code of Federal Regulations   | NSPS            | New Source Performance Standards                        |
| со         | Carbon Monoxide   | NSR             | New Source Review                                       |
| СОМ        | Continuous Opacity Monitoring   | PM              | Particulate Matter                                      |
| department | Michigan Department of Environmental Quality                                | PM-10           | Particulate Matter less than 10 microns in<br>diameter  |
| dscf       | Dry standard cubic foot   | pph             | Pound per hour  |
| dscm       | Dry standard cubic meter  | ppm             | Parts per million                                       |
| EPA        | United States Environmental Protection Agency                               | ppmv            | Parts per million by volume                             |
| EU         | Emission Unit   | ppmw            | Parts per million by weight                             |
| °F         | Degrees Fahrenheit  | PS              | Performance Specification                               |
| FG         | Flexible Group  | PSD             | Prevention of Significant Deterioration                 |
| GACS       | Gallon of Applied Coating Solids  | psia            | Pounds per square inch absolute                         |
| GC         | General Condition   | psig            | Pounds per square inch gauge                            |
| gr         | Grains  | PeTE            | Permanent Total Enclosure                               |
| HAP        | Hazardous Air Pollutant   | PTI             | Permit to Install                                       |
| Hg         | Mercury   | RACT            | Reasonable Available Control Technology                 |
| hr         | Hour  | ROP             | Renewable Operating Permit                              |
| HP         | Horsepower  | SC              | Special Condition                                       |
| H₂S        | Hydrogen Sulfide  | scf             | Standard cubic feet                                     |
| HVLP       | High Volume Low Pressure *  | sec             | Seconds   |
| ID         | Identification (Number)   | SCR             | Selective Catalytic Reduction                           |
| IRSL       | Initial Risk Screening Level  | SO <sub>2</sub> | Sulfur Dioxide  |
| ITSL       | Initial Threshold Screening Level   | SRN             | State Registration Number                               |
| LAER       | Lowest Achievable Emission Rate   | TAC             | Toxic Air Contaminant                                   |
| lb         | Pound   | Temp            | Temperature   |
| m          | Meter   | THC             | Total Hydrocarbons                                      |
| MACT       | Maximum Achievable Control Technology                                       | tpy             | Tons per year   |
| MAERS      | Michigan Air Emissions Reporting System                                     | μg              | Microgram   |
| MAP        | Malfunction Abatement Plan  | VE              | Visible Emissions                                       |
| MDEQ       | Michigan Department of Environmental Quality                                | VOC             | Volatile Organic Compounds                              |
| mg         | Milligram   | yr              | Year  |
| mm         | Millimeter  |                 |   |

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

# Appendix 2. Schedule of Compliance

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

#### **Appendix 3. Monitoring Requirements**

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

#### Appendix 4. Recordkeeping

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

#### Appendix 5. Testing Procedures

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

#### Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N6526-2009. 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-N6526-2009 is being reissued as Source-Wide PTI No. MI-PTI-6526-2014.

| Permit to<br>Install<br>Number | ROP Revision<br>Application Number | Description of Equipment or Change     | Corresponding<br>Emission Unit(s) or<br>Flexible Group(s) |
|--------------------------------|------------------------------------|--|---|
| 250-09                         | 201000083*                         | Monitoring and recordkeeping revisions | FGCOMBTURB  |

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-N6526-2014.

| Permit to | ROP Revision                | Description of Change                   | Corresponding       |  |
|-----------|-----------------------------|---|---------------------|--|
| Install   | Application                 |   | Emission Unit(s) or |  |
| Number    | Number/Issuance Date        |   | Flexible Group(s)   |  |
| NA        | 201500158/<br>June 16, 2016 | Reopening to update from CAIR to CSAPR. | FGCOMBTURB          |  |

# **Appendix 7. Emission Calculations**

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

# Appendix 8. Reporting

#### A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ, AQD, Report Certification form (EQP 5736) and MDEQ, 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. Phase II Acid Rain Permit



Michigan Department Of Environmental Quality Air Quality Division

# PHASE II ACID RAIN PERMIT Permit No. MI-AR-55102-2014

| Permittee  | CMS Generation Michigan Power LLC  |
|------------|--|
|            | Livingston Generating Station  |
| Address    | 155 North Townline Road, Gaylord, Michigan 49735   |
| SRN        | N6526  |
| ORIS code  | 55102  |
| Issue Date | January 28, 2014   |
| Effective: | Issuance date of this facility's Renewable Operating Permit at the facility in accordance with 40 CFR 72.73.         |
| Expiration | This permit shall expire when the facility's Renewable<br>Operating Permit expires, in accordance with 40 CFR 72.73. |
| ROP No.    | MI-ROP-N6526-2014  |
|            |  |

### The Acid Rain Permit Contents

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

References to statutory and regulatory authorities, and with comments, notes, and justification that apply to the source in general;

2. Terms and conditions including:

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

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

Any applicable nitrogen oxides compliance plan. Unless they are coal fired utility units regulated pursuant to sections 404, 405, or 409 of the Clean Air Act, new units are not subject to the acid rain nitrogen oxides requirements [40 CFR 76.1(a)].

3. The permit application that this source submitted, as corrected by the AQD. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

# **Statement of Basis**

# Statutory and Regulatory Authorities.

In accordance with the Natural Resources and Environmental Protection Act, 1994 PA 451 and Titles IV and V of the Clean Air Act, the Michigan Department of Environmental Quality, Air Quality Division (AQD), issues this permit pursuant to the provisions of R 336.1210 to R 336.1218, and R 336.1299(d).

For further information contact:

Brian Carley Environmental Quality Specialist Michigan Department of Environmental Quality Air Quality Division 301 Louis Glick Highway Jackson, Michigan 49201 Telephone: (517) 780-7843 Facsimile: (517) 780-7855

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

# Terms and Conditions:

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

|        |                               | 2014   | 2015  | 2016   | 2017  | 2018  |
|--------|-------------------------------|--|---|--|---|---|
| Unit 1 | SO <sub>2</sub><br>allowances | deadline, in th<br>73.34(c) of th<br>sulfur dioxide<br>the source; a | ne source's cor<br>is chapter) not<br>for the previou<br>nd comply with | allowances, as<br>mpliance accou-<br>less than the to<br>us calendar yea<br>the applicable<br>n accordance w | unt (after deduc<br>otal annual em<br>ar from the affe<br>Acid Rain emi | ctions under §<br>issions of<br>cted units at<br>ssions |

|        |                               | 2014   | 2015  | 2016  | 2017  | 2018  |
|--------|-------------------------------|--|---|---|---|---|
| Unit 2 | SO <sub>2</sub><br>allowances | deadline, in the 73.34(c) of the source; and | ne source's cor<br>is chapter) not<br>for the previou<br>nd comply with | allowances, as<br>npliance accou<br>less than the to<br>is calendar yea<br>the applicable<br>accordance w | int (after deduc<br>otal annual em<br>ar from the affe<br>Acid Rain emi | ctions under §<br>issions of<br>cted units at<br>ssions |

|        |                               | 2014   | 2015  | 2016   | 2017  | 2018  |
|--------|-------------------------------|--|---|--|---|---|
| Unit 3 | SO <sub>2</sub><br>allowances | deadline, in the 73.34(c) of the source; and | ne source's cor<br>is chapter) not<br>for the previou<br>nd comply with | allowances, as<br>mpliance accou-<br>less than the to<br>us calendar yea<br>the applicable<br>n accordance w | Int (after deduc<br>otal annual em<br>ar from the affe<br>Acid Rain emi | ctions under §<br>issions of<br>cted units at<br>ssions |

|        |                               | 2014   | 2015  | 2016   | 2017  | 2018  |
|--------|-------------------------------|--|---|--|---|---|
| Unit 4 | SO <sub>2</sub><br>allowances | deadline, in the 73.34(c) of the source; and | ne source's cor<br>is chapter) not<br>for the previou<br>nd comply with | allowances, as<br>mpliance accou-<br>less than the to<br>us calendar yea<br>the applicable<br>n accordance w | unt (after deduc<br>otal annual em<br>ar from the affe<br>Acid Rain emi | ctions under §<br>issions of<br>cted units at<br>ssions |

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

Permit Application: (attached)

Acid Rain Permit application submitted January 14, 2013



United States Environmental Protection Agency Acid Rain Program

OMB No. 2060-0258 Approval expires 11/30/2012

# Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is:  $\sim$  new  $\sim$  revised  $\sim$  for Acid Rain permit renewal

#### STEP 1

| Facility (Source) Name        | State    | Plant Code |
|-------------------------------|----------|------------|
| Livingston Generating Station | Michigan | 55102      |

Identify the facility name, State, and plant (ORIS) code.

#### STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

| а                                       | b   |
|---|---|
| Unit ID#                                | Unit Will Hold Allowances<br>in Accordance with 40 CFR 72.9(c)(1) |
| 1                                       | Yes   |
| 2                                       | Yes   |
| 3                                       | Yes   |
| 4                                       | Yes   |
|   | Yes   |
| (10) (10) (10) (10) (10) (10) (10) (10) | Yes   |
|   | Yes   |

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# Facility (Source) Name (from STEP 1)

#### Permit Requirements

STEP 3

Read the standard requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

 (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

#### Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

#### Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3). Livingston Generating Station

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Facility (Source) Name (from STEP 1)

#### Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd. (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

#### Nitrogen Oxides Requirements

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

#### Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.

(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:

(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

#### Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation;

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Facility (Source) Name (from STEP 1)

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Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

#### Liability 14 1

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
 (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

#### Effect on Other Authorities

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

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

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#### Effect on Other Authorities, Cont'd.

STEP 3, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State law. under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

#### Certification

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

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

| Name Jimmy Chong, Commercial Director |                 |
|---------------------------------------|-----------------|
| Signature Milling                     | Date 12/21/2012 |
| $\Theta$                              |                 |

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# Appendix 10. Transport Rule (TR) Trading Program Title V Requirements

# **Description of TR Monitoring Provisions**

The TR 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 TR  $NO_X$  Annual Trading Program, TR  $NO_X$  Ozone Season Trading Program, and TR  $SO_2$  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) and 40 CFR part 75, subpart H (for NOX 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: 1      |   |
|-----------------|---|
| Parameter       | Monitoring Methodology  |
| SO <sub>2</sub> | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D         |
| NOx             | Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E |
| Heat Input      | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D         |

| Unit ID: 2      |   |
|-----------------|---|
| Parameter       | Monitoring Methodology  |
| SO <sub>2</sub> | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D         |
| NOx             | Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E |
| Heat Input      | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D         |

| Unit ID: 3      |   |
|-----------------|---|
| Parameter       | Monitoring Methodology  |
| SO <sub>2</sub> | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D         |
| NOx             | Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E |
| Heat Input      | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D         |

| Unit ID: 4      |  |
|-----------------|--|
| Parameter       | Monitoring Methodology   |
| SO <sub>2</sub> | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part |

|            | 75, appendix D  |
|------------|---|
| NOx        | Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E |
| 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 (TR NO<sub>X</sub> Annual Trading Program), 97.530 through 97.535 (TR NO<sub>X</sub> Ozone Season Trading Program), and 97.630 through 97.635 (TR SO<sub>2</sub> Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR 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 <a href="http://www.epa.gov/airmarkets/emissions/monitoringplans.html">http://www.epa.gov/airmarkets/emissions/monitoringplans.html</a>.
- 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 (TR NO<sub>X</sub> Annual Trading Program), 97.535 (TR NO<sub>X</sub> Ozone Season Trading Program), and/or 97.635 (TR SO<sub>2</sub> 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 <a href="http://www.epa.gov/airmarkets/emissions/petitions.html">http://www.epa.gov/airmarkets/emissions/petitions.html</a>.
- 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 (TR NO<sub>X</sub> Annual Trading Program), 97.530 through 97.534 (TR NO<sub>X</sub> Ozone Season Trading Program), and/or 97.630 through 97.634 (TR SO<sub>2</sub> 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 (TR NO<sub>X</sub> Annual Trading Program), 97.535 (TR NO<sub>X</sub> Ozone Season Trading Program), and/or 97.635 (TR NO<sub>X</sub> Annual Trading Program), 97.535 (TR NO<sub>X</sub> Ozone Season Trading Program), and/or 97.635 (TR SO<sub>2</sub> 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 <a href="http://www.epa.gov/airmarkets/emissions/petitions.html">http://www.epa.gov/airmarkets/emissions/petitions.html</a>.
- 5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NO<sub>X</sub> Annual Trading Program), 97.530 through 97.534 (TR NO<sub>X</sub> Ozone Season Trading Program), and 97.630 through 97.634 (TR SO<sub>2</sub> 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: TR NO<sub>X</sub> 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 TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> 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 TR NO<sub>X</sub> Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO<sub>X</sub> 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) TR NO<sub>X</sub> Annual emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> 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<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Annual units at the source.
  - (ii). If total NO<sub>X</sub> emissions during a control period in a given year from the TR NO<sub>X</sub> Annual units at a TR NO<sub>X</sub> Annual source are in excess of the TR NO<sub>X</sub> Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR  $NO_X$  Annual unit at the source shall hold the TR  $NO_X$  Annual allowances required for deduction under 40 CFR 97.424(d); and
    - (B). The owners and operators of the source and each TR NO<sub>x</sub> 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) TR NO<sub>X</sub> Annual assurance provisions.
  - (i). If total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> 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<sub>x</sub> 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) TR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> 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 TR NO<sub>X</sub> 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<sub>X</sub> emissions from all TR NO<sub>X</sub> Annual units at TR NO<sub>X</sub> 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<sub>X</sub> 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<sub>x</sub> emissions from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> 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<sub>x</sub> emissions from the TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in the state and Indian country within the borders of such 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 TR NO<sub>X</sub> 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 TR NO<sub>X</sub> 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 TR NO<sub>X</sub> 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 TR NO<sub>X</sub> 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 TR NO<sub>X</sub> 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 TR NO<sub>X</sub> Annual allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR NO<sub>X</sub> 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 TR NO<sub>X</sub> 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 TR NO<sub>x</sub> 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 TR NO<sub>X</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>X</sub> 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 TR NO<sub>X</sub> 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 TR  $NO_X$  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 TR NO<sub>X</sub> Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.
- (2) This permit incorporates the TR 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 TR 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 TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> 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 TR NO<sub>X</sub> 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 TR NO<sub>X</sub> Annual Trading Program.
- (2) The designated representative of a TR NO<sub>X</sub> Annual source and each TR NO<sub>X</sub> Annual unit at the source shall make all submissions required under the TR NO<sub>X</sub> 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 TR NO<sub>X</sub> Annual Trading Program that applies to a TR NO<sub>X</sub> Annual source or the designated representative of a TR NO<sub>X</sub> Annual source shall also apply to the owners and operators of such source and of the TR NO<sub>X</sub> Annual units at the source.
- (2) Any provision of the TR NO<sub>X</sub> Annual Trading Program that applies to a TR NO<sub>X</sub> Annual unit or the designated representative of a TR NO<sub>X</sub> Annual unit shall also apply to the owners and operators of such unit.

#### (g) Effect on other authorities.

No provision of the TR NO<sub>X</sub> 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 TR NO<sub>X</sub> Annual source or TR NO<sub>X</sub> 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: TR NO<sub>x</sub> Ozone Season Trading Program Requirements (40 CFR 97.506)

#### (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 97.513 through 97.518.

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

(1) The owners and operators, and the designated representative, of each TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO<sub>X</sub> Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO<sub>X</sub> Ozone Season 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 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

#### (c) NO<sub>X</sub> emissions requirements.

- (1) TR  $NO_X$  Ozone Season emissions limitation.
  - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall hold, in the source's compliance account, TR NO<sub>X</sub> Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO<sub>X</sub> emissions for such control period from all TR NO<sub>X</sub> Ozone Season units at the source.
  - (ii). If total NO<sub>X</sub> emissions during a control period in a given year from the TR NO<sub>X</sub> Ozone Season units at a TR NO<sub>X</sub> Ozone Season source are in excess of the TR NO<sub>X</sub> Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR  $NO_X$  Ozone Season unit at the source shall hold the TR  $NO_X$  Ozone Season allowances required for deduction under 40 CFR 97.524(d); and
    - (B). The owners and operators of the source and each TR NO<sub>X</sub> Ozone Season 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 BBBBB and the Clean Air Act.
- (2) TR  $NO_X$  Ozone Season assurance provisions.
  - (i). If total NO<sub>X</sub> emissions during a control period in a given year from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season 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<sub>X</sub> 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) TR NO<sub>X</sub> Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(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 97.525(b), of multiplying—
    - (A). The quotient of the amount by which the common designated representative's share of such NO<sub>X</sub> 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 assurance level; and emissions exceeds the respective common designated representative's assurance level; and
    - (B). The amount by which total NO<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season 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 TR NO<sub>X</sub> Ozone Season 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<sub>X</sub> emissions from all TR NO<sub>X</sub> Ozone Season units at TR NO<sub>X</sub> Ozone Season 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<sub>X</sub> emissions exceed the sum, for such control period, of the State NO<sub>X</sub> Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total  $NO_x$  emissions from all TR  $NO_x$  Ozone Season units at TR  $NO_x$  Ozone Season 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 TR  $NO_x$  Ozone Season units at TR  $NO_x$  ozone Season units at TR  $NO_x$  emissions from the TR  $NO_x$  ozone Season units at TR  $NO_x$  emissions from the TR  $NO_x$  ozone Season units at TR  $NO_x$  ozone Season 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 TR NO<sub>X</sub> Ozone Season 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 TR NO<sub>X</sub> Ozone Season 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 BBBBB and the Clean Air Act.
- (3) Compliance periods.
  - (i). A TR NO<sub>X</sub> Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
  - (ii). A TR NO<sub>X</sub> Ozone Season 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 97.530(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
  - (i). A TR NO<sub>X</sub> Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO<sub>X</sub> Ozone Season allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR NO<sub>X</sub> Ozone Season 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 TR NO<sub>X</sub> Ozone Season 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 TR NO<sub>X</sub> Ozone Season 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 BBBBB.
- (6) Limited authorization. A TR NO<sub>X</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>X</sub> 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 TR  $\text{NO}_{\text{X}}$  Ozone Season Trading Program; and
  - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, 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 TR  $NO_X$  Ozone Season allowance does not constitute a property right.

### (d) Title V permit revision requirements.

- No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO<sub>X</sub> Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, 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 TR 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 97.506(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 TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season 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 97.516 for the designated representative for the source and each TR NO<sub>X</sub> Ozone Season 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 97.516 changing the designated representative.
  - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.
  - (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 TR NO<sub>X</sub> Ozone Season Trading Program.
- (2) The designated representative of a TR NO<sub>X</sub> Ozone Season source and each TR NO<sub>X</sub> Ozone Season unit at the source shall make all submissions required under the TR NO<sub>X</sub> Ozone Season Trading Program, except as provided in 40 CFR 97.518. 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 TR NO<sub>X</sub> Ozone Season Trading Program that applies to a TR NO<sub>X</sub> Ozone Season source or the designated representative of a TR NO<sub>X</sub> Ozone Season source shall also apply to the owners and operators of such source and of the TR NO<sub>X</sub> Ozone Season units at the source.
- (2) Any provision of the TR NO<sub>X</sub> Ozone Season Trading Program that applies to a TR NO<sub>X</sub> Ozone Season unit or the designated representative of a TR NO<sub>X</sub> Ozone Season unit shall also apply to the owners and operators of such unit.

#### (g) Effect on other authorities.

No provision of the TR NO<sub>X</sub> Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO<sub>X</sub> Ozone Season source or TR NO<sub>X</sub> Ozone Season 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: TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO<sub>2</sub> 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) SO<sub>2</sub> emissions requirements.

- (1) TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 source and each TR SO2 Group 1 unit at the source shall hold, in the source's compliance account, TR SO<sub>2</sub> 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 SO<sub>2</sub> emissions for such control period from all TR SO<sub>2</sub> Group 1 units at the source.
  - (ii). If total SO<sub>2</sub> emissions during a control period in a given year from the TR SO<sub>2</sub> Group 1 units at a TR SO<sub>2</sub> Group 1 source are in excess of the TR SO<sub>2</sub> Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A). The owners and operators of the source and each TR SO<sub>2</sub> Group 1 unit at the source shall hold the TR SO<sub>2</sub> Group 1 allowances required for deduction under 40 CFR 97.624(d); and
    - (B). The owners and operators of the source and each TR SO<sub>2</sub> 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) TR SO<sub>2</sub> Group 1 assurance provisions.
  - (i). If total SO<sub>2</sub> emissions during a control period in a given year from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> 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 SO<sub>2</sub> 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) TR SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> emissions exceeds the respective common designated representative's assurance level; and

- (B). The amount by which total SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> 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 TR SO<sub>2</sub> 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 SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> 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 SO<sub>2</sub> emissions exceed the sum, for such control period, of the state SO<sub>2</sub> 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 SO<sub>2</sub> emissions from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> 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 SO<sub>2</sub> emissions from the TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in the state and Indian country within the borders of such state and Indian country within the borders of such 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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 allowance that was allocated for such control period or a control period in a prior year.
  - (ii). A TR SO<sub>2</sub> 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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 allowance is a limited authorization to emit one ton of SO<sub>2</sub> 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 TR  $SO_2$  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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.
- (2) This permit incorporates the TR 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 part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E), Therefore, the Description of TR 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 TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> 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 TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 Trading Program.
- (2) The designated representative of a TR SO<sub>2</sub> Group 1 source and each TR SO<sub>2</sub> Group 1 unit at the source shall make all submissions required under the TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 source or the designated representative of a TR SO<sub>2</sub> Group 1 source shall also apply to the owners and operators of such source and of the TR SO<sub>2</sub> Group 1 units at the source.
- (2) Any provision of the TR SO<sub>2</sub> Group 1 Trading Program that applies to a TR SO<sub>2</sub> Group 1 unit or the designated representative of a TR SO<sub>2</sub> Group 1 unit shall also apply to the owners and operators of such unit.

### (g) Effect on other authorities.

No provision of the TR SO<sub>2</sub> 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 TR SO<sub>2</sub> Group 1 source or TR SO<sub>2</sub> 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.