

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

EFFECTIVE DATE: October 1, 2011

ISSUED TO

Detroit Edison Greenwood Energy Center

State Registration Number (SRN): B6145

LOCATED AT

7000 Kilgore Road, Avoca, Michigan 48006

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B6145-2011

Expiration Date: September 29, 2016

Administratively Complete ROP Renewal Application Due Between March 31, 2015 and
March 30, 2016

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-B6145-2011

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

Christopher Ethridge, Acting Southeast Michigan District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY.....4

Section 1 Main Boiler.....5

A. GENERAL CONDITIONS 6

Permit Enforceability 6

General Provisions.....6

Equipment & Design 7

Emission Limits 7

Testing/Sampling 7

Monitoring/Recordkeeping 8

Certification & Reporting 8

Permit Shield..... 9

Revisions 10

Reopenings..... 10

Renewals 11

Stratospheric Ozone Protection 11

Risk Management Plan 11

Emission Trading 11

Permit To Install (PTI)..... 12

B-1. SOURCE-WIDE CONDITIONS..... 13

C-1. EMISSION UNIT CONDITIONS..... 14

EMISSION UNIT SUMMARY TABLE 14

EUBOILER1 15

D-1. FLEXIBLE GROUP CONDITIONS 19

FLEXIBLE GROUP SUMMARY TABLE 19

FGBOILERS 20

FGAUXBOILERS..... 22

FGCOLDCLEANERS..... 25

FGRULE290 27

FGGDFMACT 29

E-1. NON-APPLICABLE REQUIREMENTS 31

APPENDICES..... 32

Appendix 1-S1. Abbreviations and Acronyms..... 32

Appendix 2-S1. Schedule of Compliance 33

Appendix 3-S1. Monitoring Requirements 33

Appendix 4-S1. Recordkeeping 34

Appendix 5-S1. Testing Procedures 34

Appendix 6-S1. Permits to Install..... 35

Appendix 7-S1. Emission Calculations 35

Appendix 8-S1. Reporting..... 35

Appendix 9-S1. Acid Rain Permit..... 36

Appendix 10-S1. CAIR SO₂ Budget Permit..... 44

Appendix 11-S1. CAIR Annual NO_x Budget Permit..... 47

Appendix 12-S1. CAIR Ozone NO_x Budget..... 50

Section 2 Combustion Turbine Generators..... 53

A. GENERAL CONDITIONS 54

Permit Enforceability 54

General Provisions..... 54

Equipment & Design 55

Emission Limits 55

Testing/Sampling 55

Monitoring/Recordkeeping 56

Certification & Reporting 56

Permit Shield..... 57

Revisions 58

Reopenings..... 58

Renewals 59

Stratospheric Ozone Protection 59

Risk Management Plan..... 59

Emission Trading 59

Permit To Install (PTI) 60

B-2. SOURCE-WIDE CONDITIONS..... 61

C-2. EMISSION UNIT CONDITIONS..... 62

EMISSION UNIT SUMMARY TABLE 62

D-2. FLEXIBLE GROUP CONDITIONS 63

FLEXIBLE GROUP SUMMARY TABLE 63

FG-CTGS..... 64

E-2. NON-APPLICABLE REQUIREMENTS 68

APPENDICES..... 69

Appendix 1-S2. Abbreviations & Acronyms 69

Appendix 2-S2. Schedule of Compliance 70

Appendix 3-S2. Monitoring Requirements 70

Appendix 4-S2. Recordkeeping 70

Appendix 5-S2. Testing Procedures 70

Appendix 6-S2. Permits to Install..... 70

Appendix 7-S2. Emission Calculations 71

Appendix 8-S2. Reporting..... 71

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 will be identified for each ROP term or condition. All terms and conditions that are included in a PTI, are streamlined or subsumed, or is state only enforceable will be noted as such.

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

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

Section 1 Main Boiler

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 federally enforceable Source- wide PTI No. MI-PTI-B6145-2011 pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

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

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

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

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(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. Except as provided in Subrules 2, 3, and 4 of Rule 301, states in part; "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 Rule 301(1)(a) or (b) unless otherwise specified in this ROP." The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part):**
 - 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.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(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(4))**

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 has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA. **(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 reclaiming, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F.
37. If the permittee is subject to 40 CFR, Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR, 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).
39. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall comply with the requirements of 40 CFR, Part 68, no later than the latest of the following dates as provided in 40 CFR, Part 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR, Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR, Part 68)**

Emission Trading

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

Permit To Install (PTI)

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

Footnotes:

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

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

B-1. SOURCE-WIDE CONDITIONS

There are no Source-Wide Conditions applicable to Section 1.

C-1. 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 (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBOILER1	Greenwood Energy Center Unit 1 boiler, nominally rated at 785 MW gross output; fueled by No. 2 oil, No. 6 oil, specification used oil and/or natural gas. Flue gas injection is used for NOx control.	May 1, 1972 / September 11, 1997	FGBOILERS
EUEASTAUXBOILER	East auxiliary boiler fired with No. 2, No. 6 oil, specification used oil, or blends thereof.	May 1, 1972 / September 11, 1997	FGAUXBOILERS FGBOILERS
EUWESTAUXBOILER	West auxiliary boiler fired with No. 2, No. 6 oil, specification used oil, or blends thereof.	May 1, 1972 / September 11, 1997	FGAUXBOILERS FGBOILERS
EUCOLDCLEANER	Any new cold cleaner exempt from NSR permitting	After July 1, 1979	FGCOLDCLEANERS
EUGDFMACT	Existing and new/reconstructed stationary gasoline dispensing facilities subject to the Gasoline Distribution Area MACT	Various	FGGDFMACT

EUBOILER1
EMISSION UNIT CONDITIONS

DESCRIPTION

Greenwood Energy Center Unit 1 boiler, nominally rated at 785 MW gross output; fueled by No. 2 fuel oil, No. 6 fuel oil, specification used oil, or a combination thereof, (hereinafter termed "oil fuels"), and/or natural gas. This unit often fires a blend of fuels.

Flexible Group ID: FGBOILERS

POLLUTION CONTROL EQUIPMENT

Flue gas injection system

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur dioxide (SO ₂)	0.80 lb per million Btu heat input ² See Note a.	3-hour average	EUBOILER1	VI.1 See Notes c & d	40 CFR Part 60 Subparts A and D §60.43(a)(1)
	5760 lbs per hour ²				
2. Particulate matter (PM)	0.072 lb per million Btu heat input ²	NA	EUBOILER1	V.2	40 CFR Part 60 Subpart D §60.42(a)(1)
	518.4 lbs per hour ²				
	0.10 lb per 1,000 lbs of exhaust gases on a wet basis, corrected to 50% excess air	NA	EUBOILER1	V.2	R 336.1331
3. Nitrogen oxides (NO _x) <i>(When firing oil fuels only)</i>	0.30 lb per million Btu heat input ²	3-hour average	EUBOILER1	VI.1 See Notes c & d	40 CFR Part 60 Subpart A §60.8 & Subpart D §60.44 (a)(1) & (2)
	2,160 lbs / hour ²				
<i>(When firing natural gas only)</i>	0.20 lb per million Btu heat input ²	3-hour average	EUBOILER1	VI.1 See Notes c & d	40 CFR Part 60 Subpart A §60.8 & Subpart D §60.44 (a)(1) & (2)
	1,494 lbs / hour ²				
<i>(When co- firing oil fuels and natural gas)</i>	Prorated between 0.20 and 0.30 lb per million Btu See Note b.	3-hour average	EUBOILER1	VI.1 See Notes c & d	40 CFR Part 60 Subpart A §60.8 & Subpart D §60.44 (a)(1) & (2)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4.Opacity	20% per 6-minute period except for one 6-minute period per hour of not more than 27%	6-minute average	EUBOILER1	VI.1 Method 9	40 CFR Part 60 Subpart D §60.42(a)(2) R 336.1301(1)(b)
<p>Note a: This is equivalent to using oil fuels with 0.78% sulfur content and a heat value of 19,390 Btu's per pound. Compliance with this limit shall be considered compliance with the limit of R 336.1401, which has been subsumed under this streamlined requirement.² (R 336.1213)</p> <p>Note b: Based on the ratio of the total heat input provided by the natural gas and the total heat input provided by the oil that is being combusted as a mixture in the boiler.</p> <p>Note c: Compliance with SO₂ / NO_x emission rate limits shall be based upon any 3-hour average determined in accordance with the performance test established by 40 CFR 60.8.</p> <p>Note d: The emission rate limits do not apply during periods of startup, shutdown, or malfunction per 40 CFR §60.8(c).</p>					

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The flue gas injection system shall be installed and operated in a satisfactory manner.² (R 336.1910)
2. The permittee shall not burn any fuels other than Number 2 fuel oil, Number 6 fuel oil, specification used oil, and natural gas, or blends of these fuels, without prior notification to, and approval by, the AQD.² (R 336.1201(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall analyze and record the sulfur content of the oil fuel.² (R⁰336.1201(3))
See Appendix 1-3.1, Fuel Oil Sulfur Monitoring
2. Every third year, or more frequently upon AQD request, the permittee shall test the particulate matter emission rate using Reference Method 5, results reported on a wet basis, corrected to 50% excess air. Alternate methods may be used, subject to AQD approval. (R 336.1213(3))
3. Not less than 7 days before performance tests are to be conducted, the permittee shall notify the AQD District Supervisor, in writing, of the time and place of the performance tests and who shall conduct them. (R 336.2001(3))

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall install, calibrate, maintain and operate continuous emission monitoring systems for sulfur dioxide, nitrogen oxides, and carbon dioxide, and a continuous opacity monitoring system of the exhaust gases in accordance with the Emission and Fuel Monitoring section of 40 CFR Part 60, Subpart D.² **(40 CFR Part 60 Subpart D)**
See Appendices 1-3.2, 1-3.3, and 1-3.4
2. The permittee shall maintain the following records on a monthly basis: **(R^o336.1213(3))**
 - a. Heating value of oil fuels, as fired, expressed in Btu per pound
 - b. Heat input to EUBOILER1 from natural gas, expressed in MMBtu per hour
 - c. Heat input to EUBOILER1 from oil fuels, expressed in MMBtu per hour
 - d. Sulfur content of oil fuels, expressed as a percentage by weight
 - e. Total operating hours
 - f. Quantity of used oil burned

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
 4. Quarterly reporting of emissions and operating information. Due 30 calendar days following the end of the quarter in which the data were collected. Compliance with this requirement shall be considered compliance with the reporting requirement specified in 40 CFR Part 60 Subpart D.² **(R 336.2170)**
 5. Permittee shall report sulfur dioxide, nitrogen oxide and carbon dioxide emission, volumetric flow, and opacity data in accordance with 40 CFR, Part 75 (Continuous Emission Monitoring). **(R 336.1213(3))**
 6. For the continuous monitoring system for the measurement of opacity, the permittee shall submit to the District Supervisor and Compliance Support Unit Supervisor, Air Quality Division and to the Chief of the Air Compliance Branch, U.S. Environmental Protection Agency, within 30 days of the end of the calendar quarter, a written report for each calendar quarter which shall include all of the following information:²
 - a) Excess emissions, corrective action taken and the nature and cause of excess emissions, if known, as follows: For opacity measurements, the report shall consist of the magnitude, in actual percent opacity, of all 6-minute averages of opacity more than the applicable opacity standard for each hour of operation (all allowable exceptions are to be deducted prior to determining the excess averages of opacity). Average values shall be obtained by integration over the averaging period of by arithmetically averaging a minimum of 24 equally spaced, instantaneous opacity measurements per 6 minutes.
 - b) The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of repairs or adjustments made.
 - c) If the monitoring system has not been inoperative, repaired, or adjusted, and if no excess emissions occurred, a statement attesting to this fact.
- (Title I (Air Pollution Prevention and Control), Clean Air Act, Section 114(a); R 336.2170(1)(a), (b), and (c))**
7. Permittee shall submit to the Chief of the Air Compliance Branch, U.S. Environmental Protection Agency and the District Supervisor of the Air Quality Division, within 30 days of the end of the calendar quarter, a written report for each calendar quarter which shall include sulfur dioxide monthly emission rate averages. **(Title I (Air Pollution Prevention and Control) of the Clean Air Act, Section 114(a); (R 336.1213(3))**

See Appendix 1-8.

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV001	279 ²	496 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the acid rain permitting provisions of 40 CFR §72.1 to §72.94 as outlined in a complete Phase II Acid Rain Permit issued by the AQD. Phase II Acid Rain Permit No. MI-AR-6035-2011 is hereby incorporated into this ROP as Appendix 1-9. **(R 336.1299(d))**
2. The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1299(d) and 40 CFR §72.9(c)(1)(i). **(R 336.1213(10))**
3. The permittee shall comply with the CAIR SO2 Trading Program provisions of 40 CFR §97.201 through 40 CFR §97.288 as adopted and modified by R 336.1420 and as outlined in any complete CAIR SO2 Budget Permit issued by the AQD. The CAIR SO2 Budget Permit No. MI-SO2-6035-2011 is hereby incorporated into this ROP as Appendix 1-10. **(R 336.1420)**
4. The permittee shall hold allowances for compliance deductions in the source’s compliance account of the allowance transfer deadline in an amount not less than the total SO2 emissions for the control period from the source pursuant to 40 CFR §97.254. **(40 CFR §97.254)**
5. The permittee shall comply with the CAIR Annual NOx Trading Program provisions of 40 CFR, Part 97-101 through 40 CFR, Part 97-188 as adopted and modified by R 336.1802a, R 336.1803, R 336.1821 and R 336.1830 through R 336.1834 and as outlined in any complete CAIR Annual NOx Budget Permit issued by the AQD. The CAIR Annual NOx Budget Permit No. MI-NOA-6035-2011 is hereby incorporated into the ROP as Appendix 1-11. **(R 336.1821)**
6. The permittee shall hold allowances for compliance deductions in the source’s compliance account of the allowance transfer deadline in an amount not less than the total NOx emissions for the control period from the source pursuant to 40 CFR §97.154. **(40 CFR §97.154)**
7. The permittee shall comply with the CAIR Ozone NOx Trading Program provisions of 40 CFR §97.301 through 40 CFR §97.388 as adopted and modified by R 336.1802(a), R 336.1803 and R 336.1821 through R 336.1826 and as outlined in any complete CAIR Ozone NOx Budget Permit issued by the AQD. The CAIR Ozone NOx Budget Permit No. MI-NOO-6035-2011 is hereby incorporated into this ROP as Appendix 1-12. **(R 336.1821)**
8. The permittee shall hold allowances for compliance deductions in the source’s compliance account of the allowance transfer deadline in an amount not less than the total NOx emissions for the control period from the source pursuant to 40 CFR §97.354. **(40 CFR §97.354)**
9. The permittee shall comply with the applicable provisions 40 CFR Part 60 Subparts A and D. **(R 336.1213(3))**
10. As would apply to any other condition in this permit, nothing in this permit shall preclude the use, including exclusive use of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.² **(40 CFR §60.11(g))**

Footnotes:

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

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

D-1. 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 Emission Unit IDs
FGBOILERS	Flexible group for Unit 1 boiler and auxiliary boilers regarding applicable requirements of specification used oil as fuel.	EUBOILER1 EUEASTAUXBOILER EUWESTAUXBOILER
FGAUXBOILERS	East and West auxiliary boilers.	EUEASTAUXBOILER EUWESTAUXBOILER
FGCOLDCLEANERS	Any new cold cleaner (placed into operation after 7/1/79) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285(r)(iv).	NA
FGRULE290	Any existing or future emission unit that emits air contaminants which are exempt from the requirements of R 336.1201 pursuant to R 336.1290.	NA
FGGDFMACT	Existing and new/reconstructed stationary gasoline dispensing facilities that have a maximum monthly gasoline throughput of 10,000 gallons and located at an area source of hazardous air pollutants (HAPs).	NA

**FGBOILERS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Flexible group for Unit 1 boiler and the East and West auxiliary boilers regarding applicable requirements of specification used oil as fuel.

Emission Units: EUBOILER1, EUEASTAUXBOILER, and EUWESTAUXBOILER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total halogens	≤ 4,000 ppm ^{2*} (by weight)	Each batch received	FGBOILERS	V.1 & VI.1	R 336.1201(3)
2. Total lead (Pb)	≤ 100 ppm ²				
3. Total cadmium (Cd)	≤ 2 ppm ²				
4. Total chromium (Cr)	≤ 10 ppm ²				
5. Total arsenic (As)	≤ 5 ppm ²				
6. Polychlorinated biphenyls (PCB)	< 2 ppm ²				
7. Flashpoint	≥ 100 °F ² (closed cup)				

* If total halogens are >1,000 ppm, an analysis shall be conducted to ensure that no halogenated compound listed in Appendix VIII of 40 CFR, Part 261 is present in concentrations greater than 100 ppm.²

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not receive, unload, or store, any specification used oil which is not accompanied by the vendor's certification and analytical data. Analytical data must show compliance with the limits set forth in Section II prior to unloading and/or storing the specification used oil.² **(R 336.1201(3))**
2. The permittee shall not operate FGBOILERS unless all of the requirements of 40 CFR §52.21, the federal Prevention of Significant Deterioration rules and regulations, are being met. This permit is issued pursuant to the determination that the equipment covered by this permit can comply with all of the requirements under these rules and regulations.² **(R 336.1201(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall follow the provisions for testing specified in the approved Quality Control Program for Burning Specification Used Oil.² **(R 336.1201(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall follow the provisions for monitoring and recordkeeping specified in the approved Quality Control Program for Burning Specification Used Oil.² **(R 336.1213(3))**

VII. REPORTING

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

See Appendix 1-8.

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The Quality Control Program for Burning Specification Used Oil shall not be modified or changed without prior notification to the District Supervisor of AQD, and may be implemented only upon written approval of the District Supervisor of AQD.² **(R 336.1201(3))**

Footnotes:

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

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

FGAUXBOILERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two auxiliary boilers, each nominally rated at 173 MMBtu/hour, fired on No. 2 fuel oil, No. 6 fuel oil, specification used oil, or a combination thereof (hereinafter termed “oil fuels”)

Emission Unit: EUEASTAUXBOILER and EUWESTAUXBOILER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur dioxide (SO ₂)	0.80 lb per million Btu heat input ^{2*}	NA	Each auxiliary boiler	V.1	R 336.1201(3)
	180 lbs per hour ²				
2. Particulate matter (PM)	0.072 lb per million Btu heat input ²	NA	Each auxiliary boiler	VI.1	R 336.1201(3)
	16.20 lbs per hour ²				
	0.10 lb per 1,000 lbs of exhaust gases, on a wet basis, corrected to 50% excess air	NA	Each auxiliary boiler	NA	R 336.1331
3. Nitrogen oxides (NO _x)	0.90 lb per million Btu heat input ²	NA	Each auxiliary boiler	NA	R 336.1201(3)
	202.5 lbs per hour ²				
4. Opacity	20% average per 6-minute period except for one 6-minute period per hour of not more than 27%	NA	Each auxiliary boiler	EPA Reference Method 9 VI.1	R 336.1301(1) R 336.1213(2)

* This is equivalent to using oil fuels with 0.78% sulfur content and a heat value of 19,390 Btu's per pound.² Compliance with this limit shall be considered compliance with the limit of R 336.1401, which has been subsumed under this streamlined requirement. (R 336.1213)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Specification used oil	2,847,000 gallons ²	Calendar year	FGAUXBOILERS	VI.3.b	R 336.1201(3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and maintain instrumentation and equipment necessary to measure specification used oil consumption in the auxiliary boilers whenever used oil is consumed.² (R 336.1201(3))

V. TESTING/SAMPLING

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

1. The permittee shall analyze and record the sulfur content of the oil fuel.² (R 336.1201(3))

See Appendix 1-3.1.

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform a visible emission observation of the Auxiliary Boiler common stack pursuant to the schedule outlined in Appendix 1-3.5. If visible emissions are noted, the procedure outlined in Appendix 1-3.5 shall be implemented and the permittee shall maintain a written record of corrective actions taken. Alternatively, permittee may monitor opacity from the Auxiliary Boiler common stack in a manner and with instrumentation acceptable to the AQD. A record of each visible emission observation shall be maintained. (R 336.1213(3))

See Appendix 1-3.5.

- 2. The permittee shall keep a record of the date or dates when the auxiliary boilers are in use and oil is being combusted continuously for 24 hours or more. (R 336.1213(3))
- 3. The permittee shall maintain the following records on a monthly basis:
 - a. Hours of operation of each auxiliary boiler (R 336.1213(3))
 - b. Total specification used oil consumption, in gallons² (R 336.1201(3))
 - c. Total volume of oil fuels consumed, by type, in gallons (R 336.1213(3))
 - d. Heating value of oil fuels, as fired, expressed in Btu per pound (R 336.1213(3))
 - e. Heat input from oil fuels, expressed in MMBtu per hour (R 336.1213(3))
 - f. Sulfur content of oil fuels, expressed as a percentage by weight (R 336.1213(3))

VII. REPORTING

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

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

See Appendix 1-8.

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV001-025	144 ²	220 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

- 1. NA

Footnotes:

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

**FGCOLDCLEANERS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

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

Emission Unit:

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
 - c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R3 36.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

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

See Appendix 1-8.

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FGRULE290
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Unit:

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(i))**
2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(a)(ii))**
 - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(ii)(A))**
 - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(B))**
 - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(C))**
 - d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(a)(ii)(D))**
3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: **(R 336.1290(a)(iii))**
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(a)(iii)(A))**
 - b. The visible emissions from the emission unit are not more than 5 percent opacity in accordance with the methods contained in Rule 303. **(R 336.1290(a)(iii)(B))**
 - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(a)(iii)(C))**

II. MATERIAL LIMIT(S) NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by the AQD District Supervisor. **(R 336.1213(3))**
 - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
 - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
 - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). **(R 336.1213(3))**
 - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. **(R 336.1213(3), R 336.1290(c))**
2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(b), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

VII. REPORTING

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

See Appendix 1-8.

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

**FGGDFMACT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Existing and new/reconstructed stationary gasoline dispensing facilities (GDFs) that have a maximum monthly gasoline throughput of 10,000 gallons and located at an area source of hazardous air pollutants (HAPs).

The federal regulations addressed by this flexible group include Title 40 of the Code of Federal Regulations (CFR), Part 63, Subpart CCCCC (40 CFR §63.11110-11132), herein called the "Gasoline Distribution Area MACT" as promulgated effective September 23, 2008.

The affected source is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank. Emission sources to which this rule applies are gasoline storage tank(s) and associated equipment components in vapor or liquid gasoline service; and pressure/vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at a GDF. Equipment used for the refueling of motor vehicles is not covered by this rule. **(40 CFR §63.11111 and 40 CFR §63.11112(a))**

A GDF is an "existing" GDF if it was constructed or reconstructed on or before November 9, 2006. A GDF is "new" if it was constructed or reconstructed after November 9, 2006. **(40 CFR §63.11112(b) & (c))**

COMPLIANCE SCHEDULE

Existing GDFs must comply with the Gasoline Distribution Area MACT by January 10, 2011.
(40 CFR §63.11113(a)(1))

New and reconstructed GDFs must comply with Gasoline Distribution Area MACT upon startup.
(40 CFR §63.11113(a)(2))

POLLUTION CONTROL EQUIPMENT

The gasoline distribution area source MACT imposes Stage I controls to control emissions during the loading of gasoline storage tanks at each GDF and management (work) practices. **(40 CFR §63.11110)**

GDFs < 10,000 Gallons/Month Throughput

GDF ID/Location	List of GDF Tanks	Submerged Fill (Yes/No)	GDF Installation Date
Gasoline Underground Storage Tank	One 2500-gallon tank to fuel facility vehicles	Yes	Mid – 1990's

I. **EMISSION LIMIT(S)** NA

II. **MATERIAL LIMIT(S)** NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Required Measures for GDF with Monthly Throughput < 10,000 Gallons
Measures required to prevent handling of gasoline in a manner that would result in vapor releases to the atmosphere for extended periods of time include:
 - a. Minimize gasoline spills. **(40 CFR §63.1116(a)(1))**
 - b. Clean up spills as expeditiously as practicable. **(40 CFR §63.1116(a)(1))**
 - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. **(40 CFR §63.1116(a)(1))**
 - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. **(40 CFR §63.1116(a)(1))**
2. Provide gasoline throughput records upon request by USEPA or MDEQ. Facilities are not required to submit notifications or reports, but must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.. **(40 CFR §63.1116(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S) NA

V. TESTING/SAMPLING NA

VI. MONITORING/RECORDKEEPING

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

1. A record of gasoline throughput is necessary to be able to demonstrate that monthly throughput is less than 10,000 gallons and such record must be made available to USEPA or to MDEQ within 24 hours of a request. **(40 CFR §63.1116(b))**

VII. REPORTING

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

See Appendix 1-8.

VIII. STACK/VENT RESTRICTION(S) NA

IX. OTHER REQUIREMENT(S)

1. Existing GDFs must comply with the Gasoline Distribution Area MACT by January 10, 2011. New and reconstructed GDFs must comply upon startup. **(40 CFR §11116(c))**

Footnotes:

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

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

E-1. 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-S1. Abbreviations and Acronyms

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

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	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
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in 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
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H ₂ S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO ₂	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

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

Appendix 2-S1. 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-S1. Monitoring Requirements

The following monitoring procedures, methods, or specifications provide the details for the monitoring requirements identified and referenced in EUBOILER1 and FGAUXBOILERS.

3.1-S1. Fuel Oil Sulfur Monitoring

Maintain a complete record of fuel oil specifications and /or fuel analysis for each delivery, or storage tank, of fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil.

3.2-S1. Continuous Emission Monitoring Systems (SO₂)

The Continuous Emissions Monitoring Systems (CEMS) performance specifications defined in 40 CFR Part 75, Appendix B are adopted. The Certified SO₂ monitors will be used to determine sulfur dioxide emissions. The data reduction procedures defined in R 336.2175 will be used to determine SO₂ lbs/MMBTU. The CEMS data recording system will be capable of generating a monthly average of SO₂ emissions as the average of the one-hour periods reported for Part 75 for the previous month.

3.3-S1. Continuous Emissions Monitoring System (Title IV)

The CEMS performance specifications defined in 40 CFR Part 75, Appendix B are adopted.

Methods of measurement, frequency of measurement and record keeping methods for CEMS required under 40 CFR 75 are outlined in the most recent version of the Acid Rain Program – Greenwood Energy Center Monitoring Plan.

Data Reporting: AQD may approve alternative data reporting or reduction procedures if it can be demonstrated that such procedures are at least as accurate as the procedures identified in R 336.2175.

3.4-S1. Continuous Opacity Monitoring Systems

The Continuous Opacity Monitoring System (COMS) performance specifications defined in 40 CFR Part 60, Appendix B are adopted.

Cycling time for opacity: The COMS must complete a minimum of one cycle of sampling/analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period. **(R 336.2152)**

Zero and Drift: The COMS must be subject to the manufacturer's zero and span check at least once daily. **(R 336.2153)**

Location: The location of the COMS or the monitoring devices must be such that representative measurements of emissions or process parameters are obtained. **(R 336.2155)**

Alternative Systems: AQD may approve the use of an alternative monitoring system if one is available that meets COMS objectives and if, because of physical limitations or other reasons, COMS cannot be installed or give accurate measurements. **(R 336.2159)**

Monitoring and reporting requirements shall not apply during any period of monitoring system malfunction if it can be demonstrated to the satisfaction of AQD that: the cause of the malfunction could not have been avoided by any reasonable action and necessary repairs are being made as expeditiously as practicable. **(R 336.2190)**

3.5-S1. Auxiliary Boiler Visible Emission Procedure

Permittee shall perform a non-certified visible emission observation of the Auxiliary Boiler common stack when an Auxiliary Boiler is combusting oil according to the following operation schedule:

Number of Operating Hours per Week	Number of Observations per week
0 - 12	0
12 – 36	1
36 – 60	2
60 – 84	3
Etc.	+1, to a maximum of 7

Upon noting visible emissions during the non-certified visible emissions observation specified in FGAUXBOILERS special condition VI.1, the permittee shall initiate any of the following corrective actions until visible emissions return to permissible limits:

1. Conduct a certified visible emissions observation in compliance with EPA Method 9 -- Visual Determination of the Opacity of Emissions from Stationary Sources (40 CFR Part 60 Appendix A-4) to determine if the six minute average emissions exceeded the 20 percent opacity limit (except for one, 6-minute period of 27percent once per hour),
2. Inspect auxiliary boiler and operating parameters for possible cause of visible emissions and implement changes (if any),
3. Perform another non-certified visible emission observation of the exhaust stack to determine if visible emissions have stopped,

Once the visible emissions have stopped or are shown to be within permissible limits by certified Method 9 reading, then the corrective action situation is complete. If the corrective actions are not sufficient to reduce the visible emissions to permissible levels, the boiler shall be shut-down

Appendix 4-S1. 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-S1. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6-S1. Permits to Install

The following table lists any PTIs issued since the effective date of previously issued ROP No. MI-ROP-B6145-2006. This includes any PTI that were incorporated into the Source-Wide PTI No MI-PTI-B6145-2006a through amendments or modifications and any PTI that remained off-permit until this ROP renewal.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
MI-PTI-B6145	Boiler No. 1, east auxiliary boiler, and west auxiliary boiler.	EUBOILER FGBOILERS FGAUXBOILERS
MI-PTI-B6145a	Boiler No. 1, east auxiliary boiler, and west auxiliary boiler.	EUBOILER FGBOILERS FGAUXBOILERS

Appendix 7-S1. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

Appendix 8-S1. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ 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

The permittee shall use formats approved by the AQD District Supervisor for all other reporting. The MDEQ Report Certification form (EQP 5736) shall accompany all such reports (e.g., MAERS submittals).

Appendix 9-S1. Acid Rain Permit

**PHASE II ACID RAIN PERMIT
Permit No. MI-AR-6035-2011**

Permittee	Detroit Edison – Greenwood Energy Center
Address	7000 Kilgore Rd., Avoca, MI
SRN	B6145
ORIS code	6035
Issue Date	October 1, 2011
Effective:	Issuance date of this facility’s Renewable Operating Permit at the facility in accordance with 40 CFR 72.73.
Expiration	This permit shall expire when the facility’s Renewable Operating Permit expires, in accordance with 40 CFR 72.73.
ROP No.	MI-ROP-B6145-2011

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) 780-7437

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

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

		2011	2012	2013	2014	2015
Unit 1	SO ₂ allowances	541	541	541	541	541

		2011	2012	2013	2014	2015
Unit CTG 11-1	SO ₂ allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under § 73.34(c) of this chapter) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

		2011	2012	2013	2014	2015
Unit CTG 11-2	SO ₂ allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under § 73.34(c) of this chapter) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

		2011	2012	2013	2014	2015
Unit CTG 12-1	SO ₂ allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under § 73.34(c) of this chapter) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

Permit Application: (attached)

Phase II Acid Rain Permit application submitted February 8, 2011

Greenwood Energy Center

Acid Rain - Page 2

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).

Greenwood Energy Center

Acid Rain - Page 3

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 changing the designated representative;

Greenwood Energy Center

Acid Rain - Page 4

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

- (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

Greenwood Energy Center

Acid Rain - Page 5

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 regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

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 Paul Fessler, Designated Representative	
Signature <i>Paul Fessler</i>	Date 2/7/11

Appendix 10-S1. CAIR SO₂ Budget Permit

**CAIR Sulfur Dioxide Budget Permit
 Permit No. MI-SO2-6035-2011**

Permittee Detroit Edison – Greenwood Energy Center
 Address 7000 Kilgore Rd., Avoca, MI
 SRN B6145
 ORIS code 6035
 Issue Date **October 1, 2011**
 Expiration This permit shall expire when the facility’s Renewable Operating Permit (ROP) expires in accordance with 40 CFR 97.221(b).
 ROP No. MI-ROP-B6145-2011

This permit incorporates automatically the definitions of terms under Air Pollution Control Rule 336.1420.

This permit incorporates automatically, upon recordation by the EPA Administrator in accordance with 40 CFR part 97 subpart FFF, GGG, or III every allocation, transfer, or deduction of a SO₂ allowance to or from the compliance accounts of the CAIR SO₂ unit(s) covered by the permit.

The owners and operators of the source must comply with the standard requirements and special provisions set forth in this permit.

This permit incorporates any attached comments, notes or justifications regarding permit decisions and changes made to the permit application forms during the review process.

Units covered under this permit

AQD Unit ID	Unit Type			
1	<input checked="" type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG111	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG112	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG121	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other

Permit Application:

CAIR SO₂ Annual Permit application submitted February 8, 2011

Standard requirements

(a) Permit requirements.

- (1) The CAIR designated representative of each CAIR SO₂ source required to have a ROP and each CAIR SO₂ unit required to have a ROP at the source shall:
- (i) Submit to the permitting authority a complete CAIR permit application under § 97.222 in accordance with the deadlines specified in § 97.221; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.
- (2) The owners and operators of each CAIR SO₂ source required to have a ROP and each CAIR SO₂ unit required to have a ROP at the source shall have a CAIR permit issued by the permitting authority under subpart CCC of 40 CFR part 97 for the source and operate the source and the unit in compliance with such CAIR permit.

(b) Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subpart HHH of 40 CFR part 97.
- (2) The emissions measurements recorded and reported in accordance with subpart HHH of 40 CFR part 97 shall be used to determine compliance by each CAIR SO₂ source with the CAIR SO₂ emissions limitation under paragraph (c) of this permit.

(c) Sulfur Dioxide Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with § 97.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with subpart HHH of 40 CFR part 97.
- (2) A CAIR SO₂ unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit(s) monitor certification requirements under § 97.270(b)(1),(2), or (5) and for each control period thereafter.
- (3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of this section, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 97.
- (5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under § 97.205 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (6) A CAIR SO₂ allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 97, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in any CAIR permit of the source

(d) Excess emissions requirements.

If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then:

- (1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under § 97.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ 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 before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under § 97.213 for the CAIR designated representative for the source and each CAIR SO₂ 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 documents are superseded because of the submission of a new certificate of representation under § 97.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subpart HHH of 40 CFR part 97, provided that to the extent that subpart HHH of 40 CFR part 97 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 CAIR SO₂ Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.

(2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under subpart HHH of 40 CFR part 97.

(f) Liability.

(1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.

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

(3) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ unit or the CAIR designated representative of a CAIR SO₂ unit shall also apply to the owners and operators of such unit.

(g) Effect On Other Authorities.

No provision of the CAIR SO₂ Trading Program, a CAIR permit application, a CAIR permit, or an exemption under § 97.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Appendix 11-S1. CAIR Annual NOx Budget Permit

**CAIR Annual Nitrogen Oxide Budget Permit
Permit No. MI-NOA-6035-2011**

Permittee	Detroit Edison – Greenwood Energy Center
Address	7000 Kilgore Rd., Avoca, MI
SRN	B6145
ORIS code	6035
Issue Date	October 1, 2011
Expiration	This permit shall expire when the facility’s Renewable Operating Permit expires in accordance with Air Pollution Control Rule 336.1821.
ROP No.	MI-ROP-B6145-2011

This permit incorporates automatically the definitions of terms under Air Pollution Control Rule 336.1803.

This permit incorporates automatically, upon recordation by the EPA Administrator in accordance with Air Pollution Control Rule 336.1830, 336.1831 and 336.1834 every allocation, transfer, or deduction of a NOx allowance to or from the compliance accounts of the NOx Budget unit(s) covered by the permit.

The owners and operators of the source must comply with the standard requirements and special provisions set forth in this permit.

This permit incorporates any attached comments, notes or justifications regarding permit decisions and changes made to the permit application forms during the review process.

Units covered under this permit

AQD Unit ID	Unit Type			
1	<input checked="" type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG111	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG112	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG121	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other

Permit Application:

CAIR NOx Annual Permit application submitted February 8, 2011

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NOX source required to have a Renewable Operating Permit (ROP) and each CAIR NOX unit required to have a ROP at the source shall:

- (i) Submit to the Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) a complete CAIR permit application under R 336.1821(3) in accordance with the deadlines specified in 40 CFR 97.121; and
- (ii) Submit in a timely manner any supplemental information that the MDEQ-AQD determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NOX source required to have a ROP and each CAIR NOX unit required to have a ROP at the source shall have a CAIR permit issued by the MDEQ-AQD under subpart CC of 40 CFR part 97 for the source and operate the source and the unit in compliance with such CAIR permit.

(b) Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NOX source and each CAIR NOX unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subpart HH of 40 CFR part 97.

(2) The emissions measurements recorded and reported in accordance with subpart HH of 40 CFR part 97 shall be used to determine compliance by each CAIR NOX source with the CAIR NOX emissions limitation under paragraph (c) of this permit.

(c) Nitrogen Oxides Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NOX source and each CAIR NOX unit at the source shall hold, in the source's compliance account, CAIR NOX allowances available for compliance deductions for the control period under 40 CFR 97.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NOX units at the source, as determined in accordance with subpart HH of 40 CFR part 97.

(2) A CAIR NOX unit shall be subject to the requirements under paragraph (c)(1) for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NOX allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of this section, for a control period in a calendar year before the year for which the CAIR NOX allowance was allocated.

(4) CAIR NOX allowances shall be held in, deducted from, or transferred into or among CAIR NOX Allowance Tracking System accounts in accordance with subparts EE, FF, GG, or II of 40 CFR part 97.

(5) A CAIR NOX Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NOX Ozone Season Trading Program. No provision of the CAIR NOX Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under § 97.105 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(6) A CAIR NOX allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NOX Annual Trading Program. No provision of the CAIR NOX Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR 97.105 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) A CAIR NOX allowance does not constitute a property right.

(8) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 97, every allocation, transfer, or deduction of a CAIR NOX allowance to or from a CAIR NOX source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Excess Emissions Requirements.

If a CAIR NOX source emits nitrogen oxides during any control period in excess of the CAIR NOX emissions limitation, then:

(1) The owners and operators of the source and each CAIR NOX unit at the source shall surrender the CAIR NOX allowances required for deduction under 40 CFR 97.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, the Clean Air Act, and applicable State rules.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NOX source and each CAIR NOX 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 before the end of 5 years, in writing by the MDEQ-AQD or the Administrator.

- (i) The certificate of representation under § 97.113 for the CAIR designated representative for the source and each CAIR NOX 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 documents are superseded because of the submission of a new certificate of representation under § 97.113 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with subpart HH of 40 CFR part 97.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NOX Annual Trading Program.
- (iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NOX Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NOX Annual Trading Program.

(2) The CAIR designated representative of a CAIR NOX source and each CAIR NOX unit at the source shall submit the reports required under the CAIR NOX Annual Trading Program, including

(f) Liability.

(1) Each CAIR NOX source and each CAIR NOX unit shall meet the requirements of the CAIR NOX Annual Trading Program.

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

(3) Any provision of the CAIR NOX Annual Trading Program that applies to a CAIR NOX unit or the CAIR designated representative of a CAIR NOX unit shall also apply to the owners and operators of such unit.

(g) Effect on Other Authorities.

No provision of the CAIR NOX Annual Trading Program, a CAIR permit application, a CAIR permit, or an exemption under § 97.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NOX source or CAIR NOX unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Appendix 12-S1. CAIR Ozone NOx Budget

**CAIR Ozone Nitrogen Oxide Budget Permit
 Permit No. MI-NOO-6035-2011**

Permittee Detroit Edison – Greenwood Energy Center
 Address 7000 Kilgore Rd., Avoca, MI
 SRN B6145
 ORIS code 6035
 Issue Date **October 1, 2011**
 Expiration This permit shall expire when the facility’s Renewable Operating Permit expires in accordance with Air Pollution Control Rule 336.1821.
 ROP No. MI-ROP-B6145-2011

This permit incorporates automatically the definitions of terms under Air Pollution Control Rule 336.1803.

This permit incorporates automatically, upon recordation by the EPA Administrator in accordance with Air Pollution Control Rule 336.1822, 336.1823 and 336.1834 every allocation, transfer, or deduction of a NOx allowance to or from the compliance accounts of the NOx Budget unit(s) covered by the permit.

The owners and operators of the source must comply with the standard requirements and special provisions set forth in this permit.

This permit incorporates any attached comments, notes or justifications regarding permit decisions and changes made to the permit application forms during the review process.

Units covered under this permit

AQD Unit ID	Unit Type			
1	<input checked="" type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG111	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG112	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
CTG121	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other

Permit Application:

CAIR NOx Ozone Season Permit application submitted February 8, 2011

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NOX source required to have a Renewable Operating Permit (ROP) and each CAIR NOX unit required to have a ROP at the source shall:

- (i) Submit to the Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) a complete CAIR permit application under R 336.1821(3) in accordance with the deadlines specified in 40 CFR 97.321; and
- (ii) Submit in a timely manner any supplemental information that the MDEQ-AQD determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NOX source required to have a ROP and each CAIR NOX unit required to have a ROP at the source shall have a CAIR permit issued by the MDEQ-AQD under subpart CCCC of 40 CFR part 97 for the source and operate the source and the unit in compliance with such CAIR permit.

(b) Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NOX source and each CAIR NOX unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subpart HHHH of 40 CFR part 97.

(2) The emissions measurements recorded and reported in accordance with subpart HHHH of 40 CFR part 97 shall be used to determine compliance by each CAIR NOX source with the CAIR NOX emissions limitation under paragraph (c) of this permit.

(c) Nitrogen Oxides Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NOX source and each CAIR NOX unit at the source shall hold, in the source's compliance account, CAIR NOX allowances available for compliance deductions for the control period under 40 CFR 97.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NOX units at the source, as determined in accordance with subpart HHHH of 40 CFR part 97.

(2) A CAIR NOX unit shall be subject to the requirements under paragraph (c)(1) for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NOX allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of this permit, for a control period in a calendar year before the year for which the CAIR NOX allowance was allocated.

(4) CAIR NOX allowances shall be held in, deducted from, or transferred into or among CAIR NOX Allowance Tracking System accounts in accordance with subparts EEEE, FFFF, GGGG, or IIII of 40 CFR part 97.

(5) A CAIR NOX Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NOX Ozone Season Trading Program. No provision of the CAIR NOX Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under § 97.305 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(6) A CAIR NOX allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 97, every allocation, transfer, or deduction of a CAIR NOX allowance to or from a CAIR NOX source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Excess Emissions Requirements.

If a CAIR NOX source emits nitrogen oxides during any control period in excess of the CAIR NOX emissions limitation, then:

- (1) The owners and operators of the source and each CAIR NOX unit at the source shall surrender the CAIR NOX allowances required for deduction under 40 CFR 97.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, the Clean Air Act, and applicable State rules.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NOX source and each CAIR NOX 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 before the end of 5 years, in writing by the MDEQ-AQD or the Administrator.

- (i) The certificate of representation under § 97.313 for the CAIR designated representative for the source and each CAIR NOX 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 documents are superseded because of the submission of a new certificate of representation under § 97.313 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with subpart HHHH of 40 CFR part 97.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NOX Ozone Trading Program.
- (iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NOX Ozone Trading Program or to demonstrate compliance with the requirements of the CAIR NOX Ozone Trading Program.

(2) The CAIR designated representative of a CAIR NOX source and each CAIR NOX unit at the source shall submit the reports required under the CAIR NOX Ozone Trading Program, including those under subpart HHHH of 40 CFR part 97.

(f) Liability.

- (1) Each CAIR NOX source and each CAIR NOX unit shall meet the requirements of the CAIR NOX Ozone Trading Program.
- (2) Any provision of the CAIR NOX Ozone Trading Program that applies to a CAIR NOX source or the CAIR designated representative of a CAIR NOX source shall also apply to the owners and operators of such source and of the CAIR NOX units at the source.
- (3) Any provision of the CAIR NOX Ozone Trading Program that applies to a CAIR NOX unit or the CAIR designated representative of a CAIR NOX unit shall also apply to the owners and operators of such unit.

(g) Effect on Other Authorities.

No provision of the CAIR NOX Ozone Trading Program, a CAIR permit application, a CAIR permit, or an exemption under § 97.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NOX source or CAIR NOX unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Section 2 Combustion Turbine Generators

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 federally enforceable Source- wide PTI No. MI-PTI-B6145-2011 pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

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

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

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

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(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. Except as provided in Subrules 2, 3, and 4 of Rule 301, states in part; "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 Rule 301(1)(a) or (b) unless otherwise specified in this ROP." The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part):**
 - 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.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(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(4))**

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 has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA. **(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 reclaiming, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F.
37. If the permittee is subject to 40 CFR, Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR, 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).
39. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall comply with the requirements of 40 CFR, Part 68, no later than the latest of the following dates as provided in 40 CFR, Part 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR, Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR, Part 68)**

Emission Trading

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

Permit To Install (PTI)

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

Footnotes:

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

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

B-2. SOURCE-WIDE CONDITIONS

There are no Source-Wide Conditions applicable to Section 2.

C-2. EMISSION UNIT CONDITIONS

There are no terms and conditions that are specific to individual emission units in the Emission Unit Summary Table.

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCTG11-1	Combustion Turbine Generator Peaking Unit No. 11-1 (82.4 MW). Natural gas fired, simple-cycle turbine with dry low-NO _x combustor.	January 1, 1998/ October 23, 2008	FG-CTGS
EUCTG11-2	Combustion Turbine Generator Peaking Unit No. 11-2 (82.4 MW). Natural gas fired, simple-cycle turbine with dry low-NO _x combustor.	January 1, 1998/ October 23, 2008	FG-CTGS
EUCTG12-1	Combustion Turbine Generator Peaking Unit No. 12-1 (82.4 MW). Natural gas fired, simple-cycle turbine with dry low-NO _x combustor.	January 1, 1998/ October 23, 2008	FG-CTGS

D-2. FLEXIBLE GROUP CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-CTGS	Three natural gas-fired combustion turbine generator peaking units, each rated at 82.4 MW and equipped with dry low-NOx combustors.	EUCTG11-1, EUCTG11-2, EUCTG12-1

FG-CTGS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION – Three natural gas-fired combustion turbine generators that are operated as peaking units.

Emission Units: EUCTG11-1, EUCTG11-2, and EUCTG12-1

POLLUTION CONTROL EQUIPMENT – The turbines are equipped with dry low-NO_x combustors.

I. EMISSION LIMIT(S)

Pollutant	Limit*	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen oxides (as nitrogen dioxide) (NO _x)	9 ppm dry gas basis at 15% O ₂ and 100% load ²	Averaged over operating hours in a calendar day	Each turbine	V.1 Appendix 2-7	40 CFR §52.21 (j) & (x)(i)–(iii) R 336.1205(1) (a) & (b) 40 CFR §60.332(a)(1)
	522 tons per year ²	12-month rolling total determined at the end of each calendar month	FG-CTGS	V.1 Appendix 2-7	
2. Carbon monoxide (CO)	25 ppm by volume, dry gas basis at 15%O ₂ ²	Averaged over operating hours in a calendar day	Each turbine	V.2 Appendix 2-7	40 CFR §52.21 R 336.1205(1) and (30)
	856 tons per year ²	12-month rolling total determined at the end of each calendar month	FG-CTGS	V.2 Appendix 2-7	
3. Formaldehyde (HCOH)	9.9 tons per year ²	12-month rolling total determined at the end of each calendar month	FG-CTGS	V.6 Appendix 2-7	R 336.1205(2) R 336.1225
4. Visible emissions (Opacity)	10% 6-minute average opacity ²	At least once every 1,812 hours of operation	Each turbine	V.3	40 CFR §52.21 R 336.1301
5. Particulate matter (PM-10)	9.0 pounds per hour ²	Averaged over operating hours in a calendar day	Each turbine	V.6 Appendix 2-7	40 CFR §52.21(j) R 336.1205(1) (a) and (b)
	102 tons per year ²	12-month rolling total determined at the end of each calendar month	FG-CTGS	V.6 Appendix 2-7	40 CFR §52.21(j) R 336.1205(1) (a) & (b)

*These emission limits do not apply during start-up, shut-down, or malfunction events².

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements ²
Natural gas	27,300 million cubic feet ²	12-month rolling total determined at the end of each calendar month	FG-CTGS	VI.1	40 CFR §52.21 (j) & (x)(i) – (iii) R 336.1205(1) (a) and (b) R 336.1225

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall minimize the NOx, CO and PM-10 emission rates during startup, shutdown, and malfunction conditions in accordance with the approved Emission Minimization Plan. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Alternate plans or modifications to the approved plan must be approved by the District Supervisor. Unless notified by the District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved.² **(R 336.1911, R 336.1912 and 40 CFR §52.21(j))**
2. The total hours for startup and shutdown for FG-CTGS shall not exceed 500 hours per turbine per 12-month rolling time period as determined at the end of each calendar month. Startup is defined as the period of time from initiation of combustion firing until the unit reaches steady state operation (i.e., when premix conditions are achieved). Shutdown is defined as that period of time from the initial lowering of the turbine output, with the intent to shut down, until the point at which the combustion process has stopped.² **(40 CFR §52.21(j))**
3. The permittee shall not operate FG-CTGS unless all provisions of the federal Prevention of Significant Deterioration regulations, 40 CFR §52.21, are met.² **(40 CFR §52.21)**
4. The permittee shall burn only pipeline quality natural gas in FG-CTGS.² **(R 336.1225, R 336.1702(a), 40 CFR 60.333(b), and 40 CFR §52.21(x)(6)(iv))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine included in FG-CTGS with a dry low-NOx combustor.² **(R 336.1910 and 40 CFR §52.21(x)(6)(iv) and (7)(iii))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. In accordance with 40 CFR 75, Appendix E, permittee shall retest the NOx emission rate of each turbine at least once every 20 calendar quarters. Permittee shall perform NOx testing for at least four (4) approximately equally spaced operating load points, ranging from the maximum operating load to the minimum operating load. All testing shall be in accordance with the applicable federal Reference Methods.² **(40 CFR Subparts GG, 40 CFR Part 60 Appendix A, 40 CFR 75 Appendix E, 40 CFR 75, 40 CFR §60.8 and 60.335)**
2. CO emission rates from each turbine will be verified in accordance with Department requirements. Testing must be done for each turbine in conjunction with NOx testing and under the same operating load and test averaging period requirements.² **(R 336.2001, R 336.2003, R 336.2004)**
3. Compliance with the visible emissions limit shall be determined at least once per 1,812 hours of operation per turbine using Federal Reference Method 9 (40 CFR Part 60, Appendix A).² **(R 336.1301 and 40 CFR §52.21)**
4. Not less than 30 days before performance tests (except for opacity) are to be conducted, a complete stack testing plan shall be submitted to the AQD for approval.² **(R 336.1213(3))**
5. Not less than 7 days before performance tests (except for opacity) are to be conducted, the permittee shall notify the AQD District Supervisor, in writing, of the time and place of the performance tests and who shall conduct them.² **(R 336.2001(3))**
6. Emission factors developed from previous formaldehyde and PM-10 stack test will be used along with hourly fuel usage data to demonstrate compliance with annual limits.² **(R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall continuously monitor, and record hourly, the natural gas usage from each turbine included in FG-CTGS in a manner and with instrumentation acceptable to the District Supervisor, Air Quality Division.² **(R 336.1205(1)(a) and (b); 40 CFR §52.21(x)(6)(v))**
2. The permittee shall record the total number of start-up and shutdown hours per month for each turbine included in FG-CTGS. Startup and shutdown hours are defined as those periods of time in which the turbine is not operating in a premix mode of operation.² **(R 336.1213(3))**
3. The permittee shall keep records, for each turbine included in FG-CTGS, of the calendar day average, monthly, and previous 12-month emission calculations for the following pollutants:
 - a. NOx **(R 336.1205(1)(a) and (b), 40 CFR §52.21(x)(6)(v) and 40 CFR Part 60 Subpart GG)**
 - b. CO **(R 336.1205(1)(a) and (b), 40 CFR §52.21)**
 - c. PM-10 **(R 336.1205(1)(a) and (b), 40 CFR §52.21)**
 - d. HCOH **(R 336.1205(2) and R 336.1225)**

All such records and calculations are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the AQD upon request.²

See Appendix 2-7.

4. Results of the visible emission readings shall be kept on file for a period of at least five years and made available to the AQD upon request.² **(R 336.1301 and 40 CFR §52.21)**
5. The permittee shall monitor and record the capacity factor of each turbine included in FG-CTGS each calendar year. If the capacity factor for each individual turbine exceeds 20% in any calendar year, or exceeds 10% averaged over the previous three calendar years, a continuous emission monitor for NO_x must be installed, certified and operated no later than December 31 of the following calendar year. These records shall be kept on file for a period of at least five years and made available to the AQD upon request.² **(40 CFR §75.12(c)(2) and 40 CFR §52.21(x)(6)(v))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be postmarked by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. If the due date falls on a weekend or a legal holiday, then the next business day becomes the due date. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be postmarked by March 15 for the previous calendar year. If the due date falls on a weekend or a legal holiday, then the next business day becomes the due date. **(R 336.1213(4)(c))**

See Appendix 2-8.

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions(inches)	Minimum Height Above Ground(feet)	Underlying Applicable Requirements ²
1. SV-CTG-111	228 x 108 ²	56 ²	40 CFR §52.21(c) and (d) R 336.1225 R 336.1201(3)
2. SV-CTG-112	228 x 108 ²	56 ²	
3. SV-CTG-121	228 x 108 ²	56 ²	

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and GG, as they apply to FG-CTGS.² **(40 CFR Part 60, Subparts A and GG and 40 CFR §52.21(x)(6)(iv))**
2. The permittee shall comply with the acid rain permitting provisions of 40 CFR §72.1 to §72.94 as outlined in a complete Phase II Acid Rain Permit issued by the AQD. Phase II Acid Rain Permit No. MI-AR-6035-2011 is hereby incorporated into this ROP.² **(R 336.1299(d))**

NOTE: Acid Rain Permit No. MI-AR-6035-2011 is in Appendix 1-9, Section 1, Main Boiler.

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 R 336.1299(d) and 40 CFR §72.9(c)(1)(i).² **(R 336.1213(10))**
4. The permittee shall comply with the CAIR SO₂ Trading Program provisions of 40 CFR, Part 97.201 through 40 CFR, Part 97.288 as adopted and modified by R 336.1420 and as outlined in any complete CAIR SO₂ Budget Permit issued by the AQD. The CAIR SO₂ Budget Permit No. MI-SO₂-6035-2011 is hereby incorporated into this ROP. **(R 336.1420)**

NOTE: CAIR SO₂ Budget Permit No. MI-SO₂-6035-2011 is in Appendix 1-10, Section 1, Main Boiler.

5. The permittee shall hold allowances for compliance deductions in the source's compliance account of the allowance transfer deadline in an amount not less than the total NO_x emissions for the control period from the source pursuant to 40 CFR, Part 97.254. **(40 CFR §97.254)**
6. The permittee shall comply with the CAIR Annual NO_x Trading Program provisions of 40 CFR, Part 97-101 through 40 CFR, Part 97-188 as adopted and modified by R 336.1802a, R 336.1803, R 336.1821 and R 336.1830 through R 336.1834 and as outlined in any complete CAIR Annual NO_x Budget Permit issued by the AQD. The CAIR Annual NO_x Budget Permit No. MI-NOA-6035-2011 is hereby incorporated into the ROP.

(R 336.1821)

NOTE: CAIR Annual NO_x Budget Permit No. MI-NOA-6035-2011 is in Appendix 1-11, Section 1, Main Boiler.

7. The permittee shall hold allowances for compliance deductions in the source's compliance account of the allowance transfer deadline in an amount not less than the total NO_x emissions for the control period from the source pursuant to 40 CFR §97.154. **(40 CFR §97.154)**
8. The permittee shall comply with the CAIR Ozone NO_x Trading Program provisions of 40 CFR, Part 97.301 through 40 CFR, 97.388 as adopted and modified by R 336.1802a, R 336.1803 and R 336.1821 through R 336.1826 and as outlined in any complete CAIR Ozone NO_x Budget Permit issued by the AQD. The CAIR Ozone NO_x Budget Permit No. MI-NOO-6035-2011 is hereby incorporated into this ROP. **(R 336.1821)**

NOTE: CAIR Ozone NO_x Budget Permit No. MI-NOO-6035-2011 is in Appendix 1-12, Section 1, Main Boiler.

9. The permittee shall hold allowances for compliance deductions in the source's compliance account of the allowance transfer deadline in an amount not less than the total NO_x emissions for the control period from the source pursuant to 40 CFR §97.354.² **(40 CFR §97.354)**

Footnotes:

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

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

E-2. NON-APPLICABLE REQUIREMENTS

At the time of 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-S2. Abbreviations & Acronyms

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

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	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	NO _x	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in 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
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
hp	Horsepower	ROP	Renewable Operating Permit
H ₂ S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO ₂	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfuction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

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

Appendix 2-S2. 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-S2. Monitoring Requirements

Specific monitoring requirements 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-S2. 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-S2. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6-S2. Permits to Install

The following table lists any PTIs issued since the effective date of previously issued ROP No. MI-ROP-B6145-2006. This includes any PTI that were incorporated into the Source-Wide PTI No MI-PTI-B6145-2006a through amendments or modifications and any PTI that remained off-permit until this ROP renewal.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
MI-PTI-B6145	Three natural gas-fired combustion turbine generators equipped with dry low-NO _x combustors.	EUCTG11-1, EUCTG11-2 EUCTG12-1
MI-PTI-B6145a	Three natural gas-fired combustion turbine generators equipped with dry low-NO _x combustors.	EUCTG11-1, EUCTG11-2 EUCTG12-1
65-08	Three natural gas-fired combustion turbine generators equipped with dry low-NO _x combustors.	EUCTG11-1, EUCTG11-2 EUCTG12-1

Appendix 7-S2. Emission Calculations

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

Natural gas usage is monitored continuously but recorded once per hour and tracked on a monthly basis.

The NO_x and CO, calendar day ppmv limits are assured by the latest stack testing results. The worst case concentration data (in ppmv) from the tested operating loads are compared to permit limits.

From stack testing, emission factors for CO, PM-10 and formaldehyde are developed in lbs pollutant/million cubic feet of natural gas for each corresponding loads specified in stack test protocol. Emission factors for each pollutant are calculated using the worst-case emissions recorded during the last representative stack test on a pollutant-specific basis. The emission factors, along with the fuel monitoring requirement, shall be applied to each hour to ensure compliance with PM-10's calendar day average and CO's, PM-10's and formaldehyde's rolling 12-month period emission limits.

From stack testing at the four load points, correlation curves are developed from NO_x emissions (lb/MMBtu) and heat input (MMBtu/hr) for each CTG. Consistent with Part 75, Appendix E, an hourly NO_x emission rate (lb/MMBtu) is applied to each operating hour. Each QA-QC validated hour either has the NO_x emission rate from the correlation curve applied or the appropriate substitute NO_x emission rate applied if the hour is outside operational and control equipment parameters, per Appendix E, section 2.5.2. The product of the hourly NO_x emission rates and heat inputs are aggregated monthly to report the tons of NO_x on a rolling 12-month basis.

Appendix 8-S2. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ 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

The permittee shall use formats approved by the AQD District Supervisor for all other reporting. The MDEQ Report Certification form (EQP 5736) shall accompany all such reports (e.g., MAERS submittals).