

Michigan Department of Environmental Quality
Air Quality Division

EFFECTIVE DATE: October 7, 2010
REVISION DATE: August 18, 2011

ISSUED TO

Consumers Energy Company Thetford Combustion Turbine Plant

State Registration Number (SRN): B2918

LOCATED AT

10500 North Genesee Road, Mt. Morris, Michigan 48458

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B2918-2010a

Expiration Date: October 7, 2015

Administratively Complete ROP Renewal Application Due
Between April 18, 2014 and April 18, 2015

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-B2918-2010a

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

Teresa Seidel, Field Operations Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

In accordance with Rule 213(2)(a), all underlying applicable requirements 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.

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), R336.1214a(5))**
- Those conditions that are hereby incorporated in federally enforceable Source-wide PTI No. MI-PTI-B2918-2010 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. Semi-annually 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))**

Re-openings

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

Emission Trading

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

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. 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. SOURCE-WIDE CONDITIONS

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

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

C. EMISSION UNIT CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCOMBTURB1	Unit 1 combustion turbine Heat input rating of 555 million BTU per hour Fueled by natural gas or fuel oil	7/1/67	FGCOMBTURBS1-4
EUCOMBTURB2	Unit 2 combustion turbine Heat input rating of 555 million BTU per hour Fueled by natural gas or fuel oil	7/1/67	FGCOMBTURBS1-4
EUCOMBTURB3	Unit 3 combustion turbine Heat input rating of 555 million BTU per hour Fueled by natural gas or fuel oil	7/1/67	FGCOMBTURBS1-4
EUCOMBTURB4	Unit 4 combustion turbine Heat input rating of 555 million BTU per hour Fueled by natural gas or fuel oil	7/1/67	FGCOMBTURBS1-4
EUCOMBTURB5	Unit 5 combustion turbine Heat input rating of 265 million BTU per hour Fueled by natural gas Unit 5 startup engine Heat input rating of 2.12 million BTU per hour Fueled by fuel oil	7/1/67	FGCOMBTURBS5-9
EUCOMBTURB6	Unit 6 combustion turbine Heat input rating of 265 million BTU per hour Fueled by natural gas Unit 6 startup engine Heat input rating of 2.12 million BTU per hour Fueled by fuel oil	7/1/67	FGCOMBTURBS5-9
EUCOMBTURB7	Unit 7 combustion turbine Heat input rating of 265 million BTU per hour Fueled by natural gas Unit 7 startup engine Heat input rating of 2.12 million BTU per hour Fueled by fuel oil	7/1/67	FGCOMBTURBS5-9
EUCOMBTURB8	Unit 8 combustion turbine Heat input rating of 265 million BTU per hour Fueled by natural gas Unit 8 startup engine Heat input rating of 2.12 million BTU per hour Fueled by fuel oil	7/1/67	FGCOMBTURBS5-9

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCOMBTURB9	Unit 9 combustion turbine Heat input rating of 265 million BTU per hour Fueled by natural gas Unit 9 startup engine Heat input rating of 2.12 million BTU per hour Fueled by fuel oil	7/1/67	FGCOMBTURBS5-9

D. FLEXIBLE GROUP CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCOMBTURBS 1-4	Combustion Turbines 1-4 subject to NOx requirements. Heat input rating of 555 million BTU per hour. Fired by natural gas or fuel oil.	EUCOMBTURB1 EUCOMBTURB2 EUCOMBTURB3 EUCOMBTURB4
FGCOMBTURBS5-9	Combustion Turbines 5-9 fueled by natural gas, with startup engines fueled by fuel oil.	EUCOMBTURB5 EUCOMBTURB6 EUCOMBTURB7 EUCOMBTURB8 EUCOMBTURB9

**FGCOMBTURBS1-4
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Emission Units: Natural gas or fuel oil-fired combustion turbines rated at a heat input of 555 million BTU per hour each. (EUCOMBTURB1, EUCOMBTURB2, EUCOMBTURB3, and EUCOMBTURB4)

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur Content of Fuel Oil	≤1.5 % (by weight) <i>calculated on the basis of 18,000 BTU per pound of liquid fuel.</i>	Instantaneous	All fuels burned at any one time.	VI.2.	(R 336.1401(1) – Table 41)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. During peak operating conditions, the permittee shall record the following for each emission unit included in FGCOMBSTURBS1-4 that is firing fuel oil.
 - a. The results of a weekly visible emission survey taken from each stack.
 - b. The identity of each stack surveyed.
 - c. The megawatt (MW) load on the unit at the time of the survey.
 - d. The calendar date on which the visible emission survey was conducted. (R336.1213(3)(b))

2. The permittee shall maintain a complete record of fuel oil specifications and/or a fuel oil analysis for each delivery, or storage tank, of fuel oil, adequate to demonstrate compliance with the percent sulfur limit in 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, or analytical results from laboratory testing. **(R336.1213(3)(b))**

See Appendix 7

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the CAIR SO2 Trading Program provisions of 40 CFR Part 97.201 through 97.288, as adopted and modified by R 336.1420, and as outlined in any complete CAIR SO2 Budget Permit issued by the AQD. CAIR SO2 Budget Permit No. MI-SO2-1719-2011 is hereby incorporated into this ROP as Appendix 9. **(R 336.1420)**
2. The permittee shall hold allowances for compliance deductions in the source's compliance account as 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 Part 97.254. **(40 CFR Part 97.254)**
3. The permittee shall comply with the CAIR NOx Annual Trading Program provisions of 40 CFR Part 97.101 through 97.188, as adopted and modified by R 336.1802a, 336.1803, 336.1821, and 336.1830 through 336.1834, and as outlined in any complete CAIR Annual NOx Budget Permit issued by the AQD. CAIR Annual NOx Budget Permit No. MI-NOA-1719-2011 is hereby incorporated into this ROP as Appendix 10. **(R336.1821)**
4. The permittee shall hold allowances for compliance deductions in the source's compliance account as 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 Part 97.154. **(40 CFR Part 97.154)**

5. The permittee shall comply with the CAIR NOx Ozone Trading Program provisions of 40 CFR Part 97.301 through 97.388, as adopted and modified by R 336.1802a, 336.1803, and 336.1821 through 336.1826, and as outlined in any complete CAIR Ozone NOx Budget Permit issued by the AQD. CAIR Ozone NOx Budget Permit No. MI-NOO-1719-2011 is hereby incorporated into this ROP as Appendix 11. **(R 336.1821)**
6. The permittee shall hold allowances for compliance deductions in the source's compliance account as 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 Part 97.354. **(40 CFR Part 97.354)**
7. 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 Part 72.9(c)(1)(i).² **(R 336.1213(10))**
8. The permittee shall comply with all applicable provisions of 40 CFR 63 Subpart YYYY for a stationary combustion turbine located at a major source of HAP emissions. **(40 CFR 63.6085)**

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).

FGCOMBTURBS5-9
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Emission Units: Combustion turbines fueled by natural gas, with startup engines fueled by fuel oil. (EUCOMBTURB5, EUCOMBTURB6, EUCOMBTURB7, EUCOMBTURB8, and EUCOMBTURB9)

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur Content of Fuel Oil	≤1.5 % (by weight) <i>calculated on the basis of 18,000 BTU per pound of liquid fuel.</i>	Instantaneous	All fuels burned at any one time.	VI.1.	(R 336.1401(1) – Table 41)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The combustion turbines 5 through 9 shall only be fueled by natural gas, while the startup engines shall only be fueled by fuel oil. **(R 336.1213(3)(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a complete record of fuel oil specifications and/or a fuel oil analysis for each delivery, or storage tank, of fuel oil, adequate to demonstrate compliance with the percent sulfur limit in 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, or analytical results from laboratory testing. **(R 336.1213(3)(b))**

See Appendix 7

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of 40 CFR 63 Subpart YYYY for a stationary combustion turbine located at a major source of HAP emissions. **(40 CFR 63.6085)**
2. The permittee shall comply with 40 CFR 63 Subpart A and Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. **(40 CFR 63.1, and 40 CFR 63.6585)**

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. NON-APPLICABLE REQUIREMENTS

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

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
FGCOMBTURBS	40 CFR 60 Subpart GG Standards of Performance for Stationary Gas Turbines	The turbine engines at this facility are not subject to this subpart because they were constructed before October 3, 1977. 40 CFR Part 60 Subpart GG applies to certain stationary gas turbines which were constructed, modified, or reconstructed after October 3, 1977. The periodic repair or replacement of gas turbine components, including the gas generator, for overhaul or repair using like kind units, does not subject the facility to the requirements of Subpart GG unless the periodic replacement does meet the definition of "modification" as defined in 40 CFR 60.14 or "reconstruction" as defined in 40 CFR 60.15. Future modification and/or installation may be subject to this subpart.

APPENDICES

Appendix 1: 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	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. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate source-wide, emission unit and/or flexible group special conditions. Therefore, this appendix is not applicable.

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued since the effective date of previously issued ROP No. MI-ROP-B2918-2005.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
NA	NA	NA

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FGCOMBTURBS1-4 and FGCOMBTURBS5-9.

Values for percent sulfur and for heat value of fuel oil, which are obtained from analytical data, can be used in the following equation to determine % sulfur on the basis of 18,000 Btu per pound of oil:

$$S = \left(\frac{S_{oil}}{1} \right) * \left(\frac{18,000 \text{ Btu}}{H_{oil}} \right)$$

Where:

S = % sulfur on the basis of 18,000 Btu per pound of oil

H_{oil} = actual Heat Value of the oil in Btu per pound of oil

S_{oil} = actual percent Sulfur in the oil

Appendix 8. Reporting

A. Annual, Semi-annual, 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

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

Appendix 9. CAIR Sulfur Dioxide Budget Permit

Michigan Department Of Environmental Quality
 Air Quality Division

**CAIR Sulfur Dioxide Budget Permit
 Permit No. MI-SO2-1719-2011**

Permittee Consumers Energy – Thetford
 Address 10500 N. Genesee, Mount Morris
 SRN B2918
 ORIS code 1719
 Issue Date October 7, 2010
 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-B2918-2010a

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			
EU00019	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00020	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00021	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00022	<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 June 22, 2009

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 10. CAIR Annual Nitrogen Oxide Budget Permit

Michigan Department Of Environmental Quality
 Air Quality Division

**CAIR Annual Nitrogen Oxide Budget Permit
 Permit No. MI-NOA-1719-2011**

Permittee Consumers Energy – Thetford
 Address 10500 N. Genesee, Mount Morris
 SRN B2918
 ORIS code 1719
 Issue Date October 7, 2010
 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-B2918-2010a

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			
EU00019	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00020	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00021	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00022	<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 June 22, 2009

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 those under subpart HH 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 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 11. CAIR Ozone Nitrogen Oxide Budget Permit

Michigan Department Of Environmental Quality
 Air Quality Division

**CAIR Ozone Nitrogen Oxide Budget Permit
 Permit No. MI-NOO-1719-2011**

Permittee Consumers Energy – Thetford
 Address 10500 N. Genesee, Mount Morris
 SRN B2918
 ORIS code 1719
 Issue Date October 7, 2010
 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-B2918-2010a

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			
EU00019	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00020	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00021	<input type="checkbox"/> Stationary Boiler	<input type="checkbox"/> Combined Cycle System	<input checked="" type="checkbox"/> Combustion Turbine	<input type="checkbox"/> Other
EU00022	<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 June 22, 2009

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.