



Michigan Department of Environmental Quality
Air Quality Division

EFFECTIVE DATE: December 20, 2004
REVISION DATE: May 22, 2008

ISSUED TO
Consumers Energy Company
B.C. Cobb Electric Generating Station

State Registration Number (SRN): B2836

LOCATED AT

151 North Causeway, Muskegon, Michigan 49445 - 3301

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B2836-2004a

Expiration Date: December 20, 2009

Administratively Complete ROP Renewal Application Due
Between June 20, 2008 and June 21, 2009

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. 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 PA 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B2836-2004a

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. 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 PA 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

Exhibit 18

William A. Presson, Acting Permit Section 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 Permit to Install (PTI), are streamlined or subsumed, or are state-only enforceable will be noted as such.

In accordance with Section 5507 of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, 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.

V. TESTING/SAMPLING

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

1. Once every three years, or more frequently upon request of AQD, permittee shall verify the PM emission rate from EUBOILER4 by testing, utilizing U.S. EPA Reference Method 17 (Determination of Particulate Emissions from Stationary Sources (In-stack Filtration Method)), at permittee's expense, and in accordance with Department requirements. Verification of emission rates includes the submittal of a complete report of the test results within 60 days of test completion. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
2. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date. **(R 336.1213(3))**
3. The permittee shall notify the AQD no less than 7 days prior to the anticipated test date. **(R 336.2001(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. For the purposes of demonstrating compliance with the SO₂ limit above, the permittee shall monitor SO₂ emissions using a Continuous Emissions Monitoring System (CEMS), as installed, maintained, and operated in accordance with the provisions of **40 CFR Part 75, Appendices A and B.**

See Appendices 3.1 and 3.5

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 received by 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. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Quarterly reporting of monthly excess sulfur dioxide emissions (including the nature and cause of the periods of excess emissions), and of the dates and times of the monitoring systems being inoperative. Each quarterly report is due within 30 days of the calendar quarter reporting period. **(R 336.2170)**
5. The permittee shall submit a complete test report of the test results to the AQD within 60 days following the last date of the test. **(R 336.2001(4))**

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:

V. TESTING/SAMPLING

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

1. Once every three years, or more frequently upon request of AQD, permittee shall verify the PM emission rate from EUBOILER5 by testing, utilizing U.S. EPA Reference Method 17 (Determination of Particulate Emissions from Stationary Sources (In-stack Filtration Method)), at permittee's expense, and in accordance with Department requirements. Verification of emission rates includes the submittal of a complete report of the test results within 60 days of test completion. **(R 336.1213(3) R 336.2001, R 336.2003, R 336.2004)**
2. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date. **(R 336.1213(3))**
3. The permittee shall notify the AQD no less than 7 days prior to the anticipated test date. **(R 336.2001(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. For the purposes of demonstrating compliance with the SO₂ limit above, the permittee shall monitor SO₂ emissions using a Continuous Emissions Monitoring System (CEMS), as installed, maintained, and operated in accordance with the provisions of **40 CFR Part 75, Appendices A and B.**

See Appendices 3.1 and 3.5

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 received by 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. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Quarterly reporting of monthly excess sulfur dioxide emissions (including the nature and cause of the periods of excess emissions), and of the dates and times of the monitoring systems being inoperative. Each quarterly report is due within 30 days of the calendar quarter reporting period. **(R 336.2170)**
5. The permittee shall submit a complete test report of the test results to the District Supervisor, AQD within 60 days following the last date of the test. **(R 336.2001(4))**

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:

V. TESTING/SAMPLING

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

1. The permittee shall assess opacity using U.S. EPA Reference Method 9 - "Visual Determination of the Opacity of Emissions from Stationary Sources", upon the request of AQD. **(R 336.1213(3))**

See Appendix 5

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 monitor gas flow, SO₂, CO₂, and NO_x emissions using CEMS, as installed, maintained, and operated in accordance with the provisions of **40 CFR Part 75, Appendix B**.
2. The permittee shall monitor and record the opacity from each boiler using a Continuous Opacity Monitoring System (COMS), installed, operated and maintained in accordance with **40 CFR, Part 60, Appendix A. (R 336.2101)**
3. The permittee shall monitor and record the amount of EDTA combusted through each boiler. **(R 336.1213(3))**
4. For each precipitator, the permittee shall monitor and record the parameters included in the facility's "Precipitator Operation and Preventative Maintenance Plan." **(R 336.1213(3))**
5. The permittee shall utilize COMS-recorded opacity as an indicator of the proper functioning of the electrostatic precipitators. The appropriate range of opacity defining proper functioning of the electrostatic precipitators is 0-20% opacity. **(40 CFR 64.6(c)(1)(i and ii))**
6. The permittee shall continuously record opacity; six-minute average values shall be based on 24 or more equally spaced instantaneous opacity measurements per six-minute period. **(40 CFR 64.6(c)(1)(iii))**
7. The permittee shall complete daily zero and calibration tests; conduct necessary preventative maintenance; and demonstrate adequate performance through an annual monitor audit. **(40 CFR 64.6(c)(1)(iii))**
8. An excursion will occur if opacity in excess of 20% is recorded for a duration exceeding two hours. **(40 CFR 64.6(c)(2))**
9. The permittee shall conduct all required monitoring per the CAM Plan attached as **Appendix 3.7** and otherwise satisfy the requirements specified in 40 CFR 64.7 through 40 CFR 64.9 **(40 CFR 64.6(c)(3), 40 CFR 64.7(a))**
10. The permittee shall properly maintain the monitoring systems, including maintaining necessary parts for routine repairs of the monitoring equipment. **(40 CFR 64.7(b))**
11. The required monitoring systems shall collect data for all required intervals when the emission unit is operating. **(40 CFR 64.7(c))**
12. The permittee shall restore operation of the emission unit, control device, and associated pollutant capture system equipment to normal/compliant operation as quickly as possible in response to any noted exceedance or excursion. **(40 CFR 64.7(d))**
13. The permittee shall promptly notify AQD for the need to modify the CAM Plan if it is found to be inadequate, and shall submit a proposed modification to the ROP if necessary. **(40 CFR 64.7(e))**

See Appendices 3.5, 3.6, 3.7, 3.8, and 3.9

Rationale for Selection of Indicator Range

The selected indicator range is two continuous hours exceeding 20% opacity. This indicator is consistent with the excess emission reporting requirement of Michigan Rule 912.

Performance Test

In September 2003, particulate emission testing was completed on both units 4 and 5. An emission report was submitted to the AQD. This testing is completed once every three years to satisfy an ROP requirement. The results of this most recent PM test indicate that the emission levels, for both units, are well below the emission limit. Unit 4 and 5 average emissions were 0.07 lbs/1000 lbs gas flow each. The stack opacity during this testing was approximately 17 – 18%.

3.8 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: 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 measurement 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)**

3.9 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 recordkeeping methods for CEMS required under 40 CFR 75 are outlined in the most recent version of the Acid Rain Program - B.C. Cobb Monitoring Plan, originally dated June 13, 1994.

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.

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.