Special Conditions for Emission Units Subject to Rule 801

Background

What is the purpose of Rule 801?

This rule is to regulate the NOx emissions during the ozone control period, which is May 1 through September 30 each year, for subject facilities and/or emission units.

Who is subject?

Applicability: This rule applies to NOx emission sources in USEPA's "coarse grid" modeling area and to any sources in the "fine grid" that were not subject to the NOx Budget Permit program. Primarily sources of NOx in the upper peninsula and in the lower peninsula, the counties of Alcona, Alpena, Antrim, Arenac, Benzie, Charlevoix, Cheboygan, Clare, Crawford, Emmet, Gladwin, Grand Traverse, Huron, Iosco, Kalkaska, Lake, Leelanau, Manistee, Mason, Missaukee, Montmorency, Ogemaw, Osceola, Oscoda, Otsego, Presque Isle, Roscommon and Wexford.

Rule 801(2): Fossil fuel fired electric generating units that have a potential to emit of more than 25 tons of NOx during each ozone control period and have a name plate capacity of 25 MW or more. The only exceptions are those units that are subject to a Federal Implementation Program (FIP) or Clean Air Act (CAA) Section 126 petition and those that are subject to Rule 801(14).

Rule 801(4): Fossil fuel fired emission units that have a potential to emit of more than 25 tons of NOx during each ozone control period and have a maximum rated heat input capacity of more than 250 MMBTU/hour must comply with the requirements for each category as specified in the following subrules:

(a) Fossil fuel fired electric generating units that have a name plate capacity of less than 25 MW.
(b) Fossil fuel fired boiler or process heater
(c) Gas fired boiler or process heater that fires gaseous fuel which contains more than 50% hydrogen.
(d) Stationary internal combustion engines.
(e) Cement kilns.
(f) Stationary gas turbines unless subject to 40 CFR 60 Subpart GG.
(g) Emission units that are subject to Rule 801 but are not subject to 801(2) and 801(4)(a) – (f).

(See ROP Language on the following page for condition wording for each affected source.)

Rule 801(14): Provisions of Rule 801 do not apply to any unit(s):

1. That is subject to any NOx standard that has been promulgated in FIP under Section 110(c) of the CAA, required under Section 126 of the CAA, or promulgated in a federal regulation under 40 CFR, Part 51 or Part 60 and which are equally stringent or more stringent than this rule.
2. Subject to any other rule in Part 8.
3. A peaking unit.

Compliance Dates

The compliance date in this rule may be extended up to 2 years if the owner or operator makes an acceptable demonstration to the AQD that additional time is necessary to avoid disruption of the energy supply in the state or to comply with the provisions of Rule 801.

If you have any questions concerning this rule please call Brian Carley (517-416-4631).

ROP language for emission unit(s) subject to Rule 801: Select all that are appropriate:

EMISSION LIMIT(S) requirements

For facilities subject to Rule 801(2)
The emission unit shall meet the least stringent of a utility system-wide average NOx emission rate of 0.25 lbs/mmBTUs heat input or an emission rate based upon a 65% reduction of NOx from 1990 levels. The facility shall comply with this emission limit during the ozone control period.[1] **(R 336.1801(2)(b))**

For facilities subject to Rule 801 (4)(a) and (b)
The emission unit shall not exceed the NOx emission limit specified in Table 81. Compliance with the emission limit shall be based upon the pounds of NOx emitted per million BTU averaged over the ozone control period. See Appendix 7.[1] **(R 336.1801(4))** *{If the unit(s) can only use a specific fuel, you can put that in instead of referencing Table 81. If the facility uses multiple fuels put Table 81 in Appendix 7}*

For facilities subject to Rule 801 (4)(c) through (f) *{See specific subrule for emission limit}*
The emission unit shall not exceed the NOx emission limit of _____. Compliance with the emission limit shall be based upon the NOx emissions that occurred during the ozone control period.[1] **(R 336.1801(4)( ))**

For facilities subject to Rule 801(4)(g)
The facility shall implement the NOx control program approved by AQD. See Appendix ___.[1]
(R 336.1801(4)(g))

TESTING/SAMPLING and/or MONITORING/RECORDKEEPING requirements

For facilities subject to Rule 801(2)
The permittee shall monitor and record the NOx emissions from the emission unit with a continuous emission monitoring system in accordance with the provisions of R 336.1801(11). All data shall be made available to the AQD upon request. *{They may also use an alternate method described in 40 CFR 60 or 75 or a method currently in use that is acceptable to the department, including methods contained in existing permits.}*[1] **(R 336.1801(7))**

For facilities subject to Rule 801(4)
The permittee can measure oxides of nitrogen emissions in one of three ways:

A. Performance Testing
{CHOOSE ONE}
For emission units currently in service:
During the ozone control period, the permittee shall conduct an initial performance test using EPA Method 7 or other method approved by AQD not later than 180 days after the compliance deadline.[1] **(R 336.1801(9)(a))**

For emission units not in service on or after the compliance deadline:
The permittee shall conduct an initial performance test using EPA Method 7 or other method approved by AQD during the ozone control period of the year _____.[1] **(R 336.1801(9)(a))**

{ALWAYS INCLUDE THE FOLLOWING WITH PERFORMANCE TESTING}
After the initial performance test, the permittee shall conduct a compliance performance test each ozone control period or according to the schedule in Appendix 3.[1] **(R 336.1801(9)(b))**

B. The permittee shall monitor and record the NOx emissions from the emission unit with a continuous emission monitoring system in accordance with the provisions of R 336.1801(11). All data shall be made available to the AQD upon request.[1] **(R 336.1801(8)(b))**

C. According to a schedule and using a method acceptable to the department.[1] **(R 336.1801(8)(c))**

{ADD THE FOLLOWING TO APPENDIX 3 IF USING PERFORMANCE TESTING – OPTION A}

Appendix 3. Monitoring Requirements

After 2 consecutive ozone control periods in which the emission unit demonstrates compliance, the permittee shall conduct performance tests at least once every 2 years during the ozone control period.[1] **(R 336.1801(9)(b)(i))**

After a total of 4 consecutive ozone control periods in which the emission unit demonstrates compliance, the permittee shall conduct performance tests at least once every 5 years during the ozone control period.[1] **(R 336.1801(9)(b)(ii))**

If an emission unit is in noncompliance at the end of the ozone control period, the permittee shall conduct a compliance performance test each ozone control period, but can again elect to use the alternative schedule specified in R 336.1801(9)(b).[1] **(R 336.1801(9)(c))**

REPORTING requirements

If conducting performance testing:
The permittee shall submit two copies of the performance test results to the department within 60 days of the completion of the testing.[1] **(R 336.1801(9)(d))**

All subject facilities:
The permittee shall submit a summary report, in an acceptable format, to the department within 60 days after the end of the ozone control period. The report shall include the following information:

a) The date, time, magnitude of emissions and emission rate where applicable, of the specified emission unit or utility system.
b) If there any exceedances of the allowed emissions or emission rates in the ozone control period, the cause, if known, and any corrective action taken.
c) The total operating time of the emission unit during the ozone control period.
d) For continuous emission monitoring systems, system performance information, including the date and time of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments. When the continuous monitoring system has not been inoperative, repaired, or adjusted, the information shall be stated in the report.[1] **(R 336.1801(12))**

For peaking unit(s) subject to Rule 801(14)
The owner or operator shall retain records of capacity for a period of 5 years demonstrating that the unit meets the definition of peaking unit. The unit shall become subject to Rule 801 on January 1 of the year following failure to meet the peaking unit definition.[1] **(R 336.1801(14))**

Appendix 7. Emission Calculations

For facilities subject to Rule 801(2)

To calculate the utility system-wide average emission rate from all units owned or operated by a utility that is subject to Rule 801(2), the permittee shall take the sum of the mass emissions from the subject units which occurred during the ozone control period divided by the sum of the heat input from the subject units which occurred during the ozone control period.

To demonstrate compliance with the percent reduction requirements of Rule 801(2), the permittee shall provide calculations showing that the utility system average emission rate during the compliance ozone control period has been reduced below the 1990 ozone control period average emission rate by the applicable percent reduction listed in Rule 801(2). The 1990 ozone control period average emission rate from all units owned or operated by a utility that is subject to Rule 801(2) is the sum of the mass emissions which occurred during the 1990 ozone control period divided by the sum of the heat input which occurred during the 1990 ozone control period.

Table 81

Boilers and process heaters with heat input capacity of 250 million Btu or more oxides of nitrogen (NOx) emission limitations (pounds NOx per million Btu of heat input averaged over the ozone control period)	
Fuel type	Emission limit
Natural gas	0.20
Distillate oil	0.30
Residual oil	0.40
Coal (1) Coal spreader stoker (2) Pulverized coal fired	 0.40 0.40
Gas (other than natural gas)[1]	0.25
For units operating with a combination of gas, oil, or coal, a variable emission limit calculated as the heat input weighted average of the applicable emission limits shall be used. The emission limit shall be determined as follows: Emission limit = a(0.20) + b(applicable oil limit) + c(applicable coal limit) + d(0.25) Where: a = Is the percentage of total heat input from natural gas b = Is the percentage of total heat input from oil c = Is the percentage of total heat input from coal d = Is the percentage of total heat input from gas (other than natural gas)	

[1]This may include a mixture of gases. In this case, natural gas may be part of the mixture.