



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 09 2011

File

REPLY TO THE ATTENTION OF:

(A-18J)

Laurel L. Kroack
Chief
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

RECEIVED
STATE OF ILLINOIS

MAR 15 2011

Environmental Protection Agency
BUREAU OF AIR

Dear Ms. Kroack:

This letter provides pre-rulemaking feedback on Illinois Environmental Protection Agency submittals dated September 1, 2009 and September 2, 2009, which document State-adopted Nitrogen Oxide (NOx) emission control rule revisions intended to meet Clean Air Act (CAA) and U.S. Environmental Protection Agency requirements for NOx Reasonably Available Control Technology (RACT). Although we have found these rule revisions to generally meet the NOx RACT requirements, we have noted certain deficiencies or problems with the rules that would prevent us from approving these rule revisions as a revision of the Illinois State Implementation Plan fully meeting the CAA and EPA NOx RACT requirements.

Our comments on your submitted NOx RACT rule revisions are attached. If you have any questions on these comments or wish to further discuss the bases for these comments, please contact Edward Doty of my staff, at 312-886-6057, or via email at doty.edward@epa.gov.

Sincerely,

Cheryl L. Newton
Director

Air and Radiation Division

Attachment

Attachment

Nitrogen Oxide Reasonably Available Control Technology (RACT) Rule Deficiencies and Issues Noted in Illinois' September 1, 2009 and September 2, Submittals

SEPTEMBER 1, 2009 SUBMITTAL:

Nitrogen Oxide (NOx) Emissions from Stationary Reciprocating Internal Combustion Engines and Turbines

Part 211 Definitions and General Provisions:

1. Section 211.1920 defines "Emergency or Standby Unit." These units are exempted from NOx emission control under section 211.386(b)(1). The exemption of these units from the NOx RACT emission controls is not the problem here. The problem noted here stems from the fact that section 211.1920 has been amended to allow these sources to operate for an additional 50 hours per year in non-emergency situations and still retain their exempted status. We understand that additional hours of operation for these units is needed to test the engines in advance of emergency situations. Therefore, we find the additional hours of operation to be acceptable. We note, however, that the recordkeeping section of the NOx RACT rules does not require the owners/operators of these units to keep records of the number of hours these units are used in non-emergency mode. Without such recordkeeping, the 50 hour non-emergency use limit is unenforceable. The recordkeeping requirements in section 217.396 must be amended to require the owners/operators of these units to keep records documenting the annual hours of operation of these units in non-emergency situations.

Part 217 Nitrogen Oxides Emissions:

Section 217.386 Applicability

2. Section 217.386(b) exempts any unit that is or has been [emphasis added] used for a specified purpose (purposes specified in sections 217.386(b)(1)-(5)) from the NOx RACT requirements. The term "has been" is confusing and seems to conflict with the intent of section 217.386(c), which requires an owner/operator to notify the Illinois Environmental Protection Agency (IEPA) when an exemption no longer applies to an exempted unit. Illinois should remove the term "has been" from the start of section 217.386(b), and should make it clear that a unit that is no longer used for an exempted purpose may be subject to a NOx emission control requirement.

Section 217.388 Control and Maintenance Requirements

3. Section 217.388(a)(2)(B) refers to section 217.386(a)(1)(B), which does not exist in the rule set documented in the September 1, 2009, submittal.

4. Section 217.388(a)(3) allows a unit to qualify for exemption from NOx emission limits (but not from testing and recordkeeping requirements) if the source facility meets one of two possible low usage limits. Subsection (A) of this section states that the unit is defined to be a low usage unit if ... the potential to emit (PTE) is no more than 100 tons per year NOx aggregated from all engines and turbines located at the source that are not otherwise exempt pursuant to section 217.386(b), and not complying with the emission control requirements of section 217.386, and the NOx PTE limit is contained in a Federally enforceable permit. The NOx emission limit of this low usage unit definition seems to conflict with the unit applicability limit expressed in section 217.386(a)(2), which sets a lower source facility applicability emission limit at 100 tons NOx per year PTE regardless of the unit types contributing to the potential NOx emission rate.
5. Section 217.388(b)(2) refers to section 217.388(c), which does not exist in the rule set submitted on September 1, 2009.

Section 217.390 Emission Averaging Plans

6. Section 217.390(b)(1) should require the emissions averaging plan to include the applicable NOx emission limit, per section 217.388, for each participating unit. This will facilitate the calculation of allowable emissions and support subsequent enforcement tests.
7. Note that an emission averaging plan is a type of Economic Incentive Program (EIP) covered by EPA's January 2001 "Improving Air Quality with Economic Incentive Programs" (EPA-452/R-01-001), which provides EPA's guideline requirements for emissions trading programs. As such, the emissions averaging plan requirements must meet certain EIP requirements. The documentation supplied with September 1, 2009, rule submittal does not document that the NOx emissions averaging plan requirements comply with the EIP requirements.

Two specific EIP shortfalls or problems noted in Illinois' emissions averaging plan requirements are the following:

- a. The EIP guidelines require EIPs, including emissions averaging plans, to provide for a specific emissions cap or an environmental write-off of 10 percent on calculated allowable emissions to generate a benefit to the environment. Illinois' emissions averaging plan requirements do not provide for this environmental benefit.
- b. In section 16.3 of the appendices of the EIP guidelines, which address requirements for EIPs involving RACT sources, it is stated that the EIP for VOC or NOx sources controlled for purposes of attaining the ozone attainment cannot allow averaging times longer than 30 days. It is noted Illinois' NOx emissions averaging plan requirements would allow averaging of NOx emissions over an entire ozone season, and, therefore, well over 30 days. Illinois must support the need for this longer averaging period or must shorten the averaging period of the NOx emissions averaging plan requirements to no more than 30 days.

Section 217.392 Compliance

7. • Section 217.392(c) allows the use of NOx trading program emission allowances to offset emission control shortfalls and to meet the NOx emission control requirements of section 217.388 (these NOx allowances can originate in any NOx trading program in which the State of Illinois participates). Given the current uncertainty of the NOx emissions trading program for the Clean Air Interstate Rule (CAIR), we are not in a position to approve the use of NOx emission allowances originating in the CAIR-based NOx allowance trading program.
8. Section 217.392(c)(1) specifies the circumstances under which NOx allowances may be used for compliance. Note that this section would allow the owner/operator of a source to define a situation as “an anomalous or unforeseen operating scenario inconsistent with historical operations for a particular ozone season.” The rule does not require the documentation of historical operation information. In addition, the rule places no constraint on how inconsistent the ozone season operation must be. These rule shortfalls will allow abuse of the intent of this rule section and will allow the source owner/operator to use granted NOx emission allowances, which do not necessarily reflect any NOx emission reductions to offset NOx emission control shortfalls. We do not consider this approach to reflect the intent of the Clean Air Act RACT requirements to achieve a certain minimum NOx emission reduction in the ozone nonattainment area through the application of RACT emission reduction requirements.

SEPTEMBER 2, 2009 SUBMITTAL

Nitrogen Oxides Emissions From Various Source Categories

Part 217 Nitrogen Oxides Emissions

Section 217.152 Compliance Date

9. Section 217.152(a) establishes a compliance date of January 1, 2012, for the implementation of the NOx RACT requirements in Subparts E, F, G, H, I, and M. As noted in EPA’s November 29, 2005, Phase 2 ozone implementation policy (70 FR 71617 and 70 FR 71658-71659), the deadline for implementation of NOx RACT rules is the start of the ozone season in 2009, or more specifically, May 1, 2009, well before the January 1, 2012, implementation deadline in this section of Illinois’ NOx RACT rules.

The Phase 2 ozone implementation rule makes it very clear that EPA cannot approve as NOx RACT rules that provide for implementation after May 1, 2009. To achieve approval of the rules as NOx RACT, the State must defend the January 12, 2012 implementation date as being as expeditious as practical. At minimum, given the late implementation date, EPA cannot approve the rules as RACT prior to the scheduled implementation date of the rules.

Section 217.156 Recordkeeping and Reporting

10. Section 217.156(i) requires compliance records for source units in emission averaging plans to cover only ozone season and yearly emissions. Therefore, this rule section supports a minimum emissions averaging period of an entire ozone season, longer than the maximum 30 day averaging period allowed in emission averaging plans under EPA's EIP guidelines (see comment 7.b above). This rule section should require a 30 day averaging period or Illinois must document why an extended averaging period is required.

Section 217.158 Emissions Averaging Plans

11. Section 217.158(b) should also require the listed units included in an emissions averaging plan to also include the allowable emission rate for each unit, as provided in sections 217.164, 217.184, 217.204, 217.224, 217.244, and 217.344, as applicable.
12. Section 217.158(d)(2) should start with "If a unit that was exempt from the requirements of Subpart E, F, G, H, I, or M of this Part pursuant to Section 217.162, 217.182, 217.202, 217.222, 217.242, or 217.342, of this Part, and was not included in an emissions averaging plan as an affected unit, no longer qualifies ..."
13. See Comment 7 above. This comment also applies for emissions averaging plans for miscellaneous NOx sources.

Subpart E: Industrial Boilers

Section 217.164 Emission Limitations

14. As noted above, January 1, 2012, is currently an unacceptable implementation date for NOx RACT.
15. Check the units used at the top of the table column for Emission Unit Type and Rated Heat Input Capacity. Should this not be mmBtu/hr?

Subpart F: Process Heaters

Section 217.184 Emission Limitations

16. As noted above, January 1, 2012, is currently an unacceptable implementation date for NOx RACT.
17. Check the units used at the top of the table column for Emission Unit Type and Rated Heat Input Capacity. Should this not be mmBtu/hr?

Subpart G.: Glass Melting Furnaces

Section 217.204 Emission Limitations

18. As noted above, January 1, 2012, is currently an unacceptable implementation date for NOx RACT.

Subpart H: Cement and Lime Kilns

Section 217.224 Emissions Limitations

19. As noted above, January 1, 2012, is currently an unacceptable implementation date for NOx RACT.

Subpart I: Iron and Steel and Aluminum Manufacturing

Section 217.244 Emissions Limitations

20. As noted above, January 1, 2012, is currently an unacceptable implementation date for NOx RACT.

Subpart M: Electrical Generating Units

Section 217.344 Emissions Limitations

21. As noted above, January 1, 2012, is currently an unacceptable implementation date for NOx RACT.