UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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APR 4 2011

REPLY TO THE ATTENTION OF:
A-18J

Keith Baugues
Assistant Commissioner
Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204

Dear Mr. Baugues:

Thank you for your July 8, 2010, letter regarding the availability of the actual-to-projected-actual (ATPA) applicability test for Prevention of Significant Deterioration (PSD) and nonattainment new source review (NNSR) permitting. You requested written guidance on using the ATPA applicability test to calculate the emissions from contemporaneous emissions increases and decreases in a netting analysis. Specifically, you ask about past permitting projects originally evaluated using an ATPA comparison when those previous projects are still within the contemporaneous period and must be considered in a netting analysis for a new permitting action. This response to your request for written guidance has been developed in consultation between the U. S. Environmental Protection Agency's Region 5 office, Office of Air Quality Planning and Standards, Office of Enforcement and Compliance Assurance (OECA), and Office of General Counsel.

The ATPA applicability test is not available for use in the netting analysis even if the project relied on the ATPA comparison in the past. Following the 2002 rule changes, all past projects falling within the contemporaneous period for a subsequent project must be evaluated using the actual-to-potential methodology to determine whether there is a creditable emissions increase that a source must include in the netting analysis. This letter explains both the policy and regulatory basis for this requirement. EPA approved Indiana's PSD and NNSR rules as consistent with the requirements of 40 C.F.R. §51.165 and 40 C.F.R. §51.166. However, this letter cites the federal PSD rule language in 40 C.F.R. §52.21 for explanation.

Background

The federal PSD rule describes the major modification applicability test as a two-step analysis. The first step of the analysis is to determine the "*significant emissions increase*"[1] (step one) and the second step of the analysis is to determine the "*significant net emissions increase*" (step two). According to 40 C.F.R. 52.21§ (a)(2)(iv)(a):

[1] All defined terms are italicized.

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...the project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

Historically, EPA generally required sources to determine if a project will result in an emissions increase by comparing the source's actual emissions before the change and its potential emissions after the change pursuant to 40 C.F.R. §52.21(b)(21)(ii)-(iv). One example of an applicability determination that compared actual emissions before a modification to potential emissions after a modification is the August 11, 1992 PSD applicability determination letter for Cyprus Northshore Mining Corporation in Silver Bay, Minnesota (available at: www.epa.gov/region07/air/nsr/nsrmemos/cyprus.pdf). The Cyprus Northshore letter cites 40 C.F.R. §52.21(b)(21)(iv) as the basis for comparing potential emissions after a modification. The rules at the time made no distinction in the method used for calculating "step one" and "step two" emissions changes.

The draft 1990 NSR Workshop Manual, also describes the calculation of net emissions increases and decreases (step two) in section A.III.B.5, Step 5. This section states that "a contemporaneous emission[s] increase is calculated as the positive difference between an emissions unit's potential to emit just after a physical or operational change at that unit (not the unit's current actual emissions) and the unit's actual emissions just prior to the change." In addition, EPA's 1998 notice of availability (NOA) to the 1996 proposal (1998 NOA) contains an explanation of the pre-2002 applicability and netting provisions (63 FR 39857-39866).

The Actual to Projected Actual (ATPA) Applicability Test

On December 31, 2002, EPA promulgated changes to the PSD and NNSR rules (67 FR 80185) (the 2002 rules) that, among other things, established the ATPA applicability test (40 C.F.R. §52.21(a)(2)(iv)(c)) for existing units. The EPA intended the 2002 rules to provide the regulated industry with greater flexibility to improve and modernize their operations in ways that will reduce both energy use and air pollution emissions. Before the 2002 rule changes, industry complained that the previous regulations often impeded such projects by confiscating existing capacity under the actual-to-potential methodology. By adding the ATPA applicability test, EPA responded to these concerns by designing an applicability test that allows projects, whose post-project emissions are not projected to (and subsequently do not) significantly increase because of the project, to avoid major NSR review in step one of the applicability analysis.

However, EPA did not extend the ATPA test to step two of the applicability test. EPA believes that it remains appropriate to subject projects that will result in a significant emissions increase under step one of the process, and, thus, are more likely to adversely impact air quality, to undergo a more conservative examination using the actual-to-potential methodology under step two of the analysis. Moreover, applying the actual-to-potential methodology in the step two netting analysis simplifies administration of the applicability determination because it is less prone to error, and avoids the need for additional regulatory instruction to reconcile the pre-project projected actual emissions with the post-project emissions actually realized. As outlined below, the 2002 rules implemented these policy considerations by retaining the previous netting provisions for determining the *significant net emissions increase*.

2002 Regulatory Text

To implement the new ATPA applicability test, EPA revised the rules by adding provisions to the regulations to implement the new test for step one, but left the existing regulatory structure in place for implementing step two. The rules explain this structure at 40 C.F.R. §52.21(a)(2)(iv)(b). Specifically, the rules point to the new provisions for determining the *significant emissions increase* and the old provisions for determining whether there is a *significant net emissions increase*. The rule states:

> *The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(c) through (f) of this section. . . . . The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in paragraph (b)(3) of this section. [40 C.F.R.§52.21(a)(2)(iv)(b)]*

Neither the definition of *significant net emissions increase* in (b)(3) or any of the definitions used to calculate a *significant net emissions increase* use projected actual emissions. Moreover, according to 40 C.F.R. §52.21(a)(2)(iv)(c) a source may project post-change emissions only for the existing units that are **part of the project**. (*Emphasis added.)* In other words, the use of projected actual emissions and the comparison with baseline actual emissions is only available for existing emissions units that are part of the current project when determining the *significant emissions increase* in step one of the applicability analysis, not for determining whether there is a contemporaneous emissions increase for a past project in step two of the applicability analysis.

As part of the 2002 rules, EPA also amended the definition of *actual emissions* to include the following exception:

> *Actual emissions means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraph(b)(21)(ii) through (iv) of this section , except that this definition shall not apply for calculating whether a* ***significant emission increase*** *has occurred, or for establishing a PAL under paragraph (aa) of this section. Instead, paragraphs (b)(41) and (b)(48) of this section shall apply for those purposes.* (Emphasis added)

This language, which applied for both step one and step two under the prior regulation, now precludes the use of actual emissions in calculating the "*significant emissions increases*" (step one) , but does not preclude "*significant net emissions increases*" (step two) from the provisions of this definition. Thus, the actual emissions definition continues to apply for purposes of step two of the applicability analysis even after the 2002 rule changes. The revision to the definition of actual emissions is consistent with the applicability rule language in 40 C.F.R. §52.21(a)(2)(iv)(b) cited above, that explicitly states that the calculation of a *significant emissions increase*, i.e., "step one"- is accomplished through a different method than step two.

Moreover, the preambles to our regulations explained EPA's intent to maintain the existing netting provisions irrespective of any changes made to the applicability test. In the 1998 NOA, EPA explained that the proposed alternatives would only be available for step one of the applicability analysis, "The alternative discussed in this notice only involves modifications that do not trigger a netting analysis," and, "[p]ost change emissions for netting purposes would continue to equal potential emissions." *See* 63 FR 39858 and 39861 respectively. Finally, in the preamble to the 2002 rules (67 FR 80203) EPA responded to comments that the ATPA methodology should be extended to netting and declined to do so, affirming that EPA did not promulgate changes to the netting provisions when adopting the ATPA methodology

> *"10. Does the Actual-To-Projected-Actual Applicability Test Apply to Netting?*
>
> *We did not specifically request comment on this issue in the 1996 proposal. Nonetheless, we received several comments that assert that use of different methods to compute an emissions increase and determine a net emissions increase would result in ``absurd results" and require two separate accounting records. Other commenters oppose using the actual-to-future-actual test for netting. One commenter says that the sole purpose of the actual-to-future-actual test was to determine if an emissions increase will occur. One commenter says we should go further and revise the definition of ``contemporaneous" to limit it to project activities (vs. plantwide) and reduce credits for shutdowns and curtailments.*
>
> *As stated previously, we did not specifically request comment on this issue and we are not promulgating amendments to the netting regulations, on this point, at this time."*

These preamble excerpts affirm that the 2002 rules did not revise the post-change emissions calculation for contemporaneous emissions increases and decreases (step two).

Post 2002 Rule Implementation

Your letter expressed concern that EPA's interpretation of this regulatory process is likely to be controversial and create additional litigation for State regulatory agencies. While EPA understands that some stakeholders encouraged EPA to extend the ATPA applicability test into the netting analysis, we declined to do so for the policy reasons stated above. Since the 2002 rules, numerous States have adopted and implemented the 2002 rules consistent with the long-established netting requirements. We are unaware of any challenges, based on the structure of the 2002 rules, which assert, contrary to the requirements that the ATPA applicability test applies to past projects in a netting analysis. In addition, over the past year OECA provided training workshops on PSD/NNSR issues to EPA and state and local permitting authority staff. EPA is not aware of any opposition to the requirement from workshop attendees. Accordingly, there is no reason to believe that permitting authorities are not implementing this requirement successfully.

Summary

The PSD and NNSR rules do not provide for the use of projected actual emissions in "step two" of the applicability test for calculating contemporaneous emissions increases and decreases. Even when a source's past permitting determinations relied on an ATPA comparison for the units at issue, the source must calculate the units' emissions increases or decreases using the units' potential to emit as defined in 40 CFR 52.21(b)(4) when such units are part of a "*significant net emissions increase*" (step two) calculation in subsequent permitting actions. If the source wishes to calculate contemporaneous emissions using any emissions rate other than the pre-change potential to emit, the source must obtain limits on the units' emissions that are both legally enforceable and enforceable as a practical matter consistent with EPA's policy. If you have any further questions, please contact Sam Portanova, of my staff, at (312) 886-3189.

Sincerely,

Cheryl L. Newton
Director
Air and Radiation Division