

**Region 2 Comments on the July 2008 draft final rule, "Refinements of Increment
Modeling Procedures"
July 29, 2008**

**Issue 1: Annual Average Emission Rates are inappropriate for Short Term
Increments Calculations:**

Region 2 does not believe that one of the options for determining the short term emission data is technically defensible. It would allow a source to estimate its 3 or 24 hour impact by pro-rating annual emissions. For example, emissions over a 24 hour period could be determined by dividing the yearly emissions by the annual operating hours. Since emission rates are typically much higher during the short term, this approach could significantly underestimate the emission and therefore underestimate the actual impacts. Region 2 believes that all actual emission data must be based on sound science/engineering.

While we understand that the existing guidance on this subject has been "draft" since 1990, we do not agree that using annual average emissions for short term impacts is an improvement over the method that is in the draft guidance (*i.e.*, the NSR Workshop Manual). The NSR Workshop Manual states that short term increments are calculated by the difference between –

- the current maximum actual emission rate, and
- the maximum actual [baseline] emission rate ... (page C,49)

This guidance was also incorporated into Region 2 states' PSD modeling guidance with the input of OAQPS and OGC, and has been successfully implemented for many years.

Further, the rule itself confirms the technical inappropriateness of using the annual average as a surrogate for short term emissions by pointing out that sources with hourly Continuous Emission Monitor data in their stacks would effectively be punished for having accurate data. (Actually, this might not be correct; rather, the sources with the less accurate data would be rewarded by allowing a smaller annual average emission rate.)

**Issue 2: Which years should be used to define the baseline or current year
concentrations?**

We believe that the proposed approach which continues to be in the draft final rule for defining the baseline or current year concentrations is inappropriate and could lead to "gaming" the increment calculation.

In summary, to determine how much PSD increment is available for new sources, one would need to calculate the change in air quality in a region. It would be calculated by modeling the impact of all the sources in a base year and comparing it to the change in air quality today. The difference would be the incremental degradation that has occurred and which by law could not exceed the PSD increments specified in the Clean Air Act.

In making that "before and after" calculation there could be circumstances where one or more sources are not operating in a normal or representative manner, for example, if there was a shut down due to a labor strike. In these cases, Region 2 agrees emissions from alternative years may be used to calculate the increment. However, we believe that the choice should be allowed only when it is demonstrated that the baseline year (or current year) is not representative of normal source operation and the alternative year chosen is more representative of typical operating conditions. Our concern is that the rule would allow the source to arbitrarily pick and choose which years to model. It could allow sources to pick a year solely because it is most beneficial to the outcome of the modeling. We believe this is not consistent with the intent of Congress.

Issue 3: Use of "Proprietary Models"

The draft final rule clarified its position from the proposed rule on the use of proprietary models by stating that the model data or software could be protected from public disclosure as Confidential Business Information. Region 2 continues to believe that this would be inappropriate. EPA has historically wanted the ability to be able to examine and understand how these models work in order to evaluate their reliability as a predictive tool. Many regions, including Region 2, believe that allowing the use of proprietary models without requiring that the workings of the model be disclosed for both the reviewing agency and the public could erode the credibility of the Agency's permitting actions, with little or no benefit to EPA.

Issue 4: Revoking Guidance and Replacing it with Discretion:

There is a general theme in the rule that allows discretion at too many steps of the increment calculation. The rule even makes the statement that EPA does not read the Act to mean that the increment needs to be "precise". However, the rule claims that methodologies and data to calculate the increments should be "reliable, consistent and representative." It is difficult to see how these statements can be reconciled.

The rule claims to clarify guidance. However, what it does instead is to remove such guidance as we have for calculating increments – *i.e.*, the 1990 Draft NSR Workshop Manual – leaving a void. Although the rule claims to retain those elements from the Manual that have since been incorporated into policy memos, EAB decisions, etc, these elements should be documented so that the permit process may be effectively carried out. In addition, there are elements of the NSR Workshop Manual that do not appear elsewhere and are central to calculating an increment. For example, the concept of "Significant Impact Areas" which are based on the Significant Impact Levels (SILs) only appears in the NSR Workshop Manual. This term defines the geographic boundaries of the modeling analysis. Furthermore, the Significant Impact Levels themselves have never been formally adopted under PSD by EPA. They were proposed in 1996 with an additional proposal regarding PM_{2.5} in 2007. These values are critical to the implementation of the permit process. EPA must take a closer look at the elements it is removing when it plans to remove an entire guidance document so that the permit process is not disrupted and could continue based on sound science.

Issue 5: Use of Allowable Emissions:

The CFR will have new language that will permit an applicant to model the existing sources at their allowable emissions rather than their actual emission rate. This may be an acceptable screen provided that further instruction is specified. That is, the allowable emissions are limited to increment consumption only by any source that increased its emission or constructed after the baseline date. Allowable emissions must not be used for increment expansion, otherwise the source would take artificial credit for emissions that it did not actually emit. If the increment needs to be expanded, then the source should be modeled using its actual emissions. It must be clarified that in using this approach, the increment analysis is not looking at the change in emissions from the baseline, but rather is only assessing mathematically emissions from sources that increase their emissions since the baseline date. This section of the rule must be clarified.

Issues 6: Role of Appendix W:

The CFR and preamble makes a blanket statement that to the extent the methods outlined in f(1) of this rule conflict with 40 CFR Part 51, Appendix W (*i.e.*, the Guideline on Air Quality Models), this rule controls. The rule should, however, specify which parts of Appendix W are in question; otherwise, any part of Appendix W, including those which have been carefully written based on technical and historical science and subjected to public review, would be unjustifiably superseded.