

Florida's Comments on WESTAR's PSD Reform Recommendations

Overview

Florida appreciates the effort that WESTAR has made in addressing some of the issues related to implementation of the PSD program. It is generally recognized that there are some problems with the current regulations and guidance implementing the PSD program. These include ambiguous rules and guidance, and data requirements that are difficult to comply with. WESTAR, in the recommendations we are responding to here, constrained itself to reform within the current laws, regulations, and guidance. While we support a number of the WESTAR recommendations, they represent only clarifications of these existing regulations and guidance. For some recommendations WESTAR simply defers the clarification to the EPA. The key question is whether simple clarifications are sufficient to "fix" the problems with the PSD program. Florida believes that any significant reform will require, at the very least, regulation and guidance changes, and possibly statutory changes. We understand that WESTAR is also looking at PSD reform unconstrained by the current laws and regulations, and we look forward to reviewing those recommendations.

Background

What's the problem? Why is reform of PSD an issue? Here are some of the issues that we believe are at the heart of the problem with the current PSD program.

1. The Clean Air Act (CAA) is not specific on how this increment degradation is to be calculated, and is often ambiguous or even contradictory in what it does explain. Thus, EPA had a difficult challenge to implement Congress' intent, and in some cases may have got it wrong.
2. EPA's rules and guidance are not as clear as they could be, sometimes containing ambiguous or difficult to interpret language.
3. The PSD program is based on determining concentration changes from a historic baseline date. Adequate information on the emissions and source characteristics of sources operating 30 years ago is often not available or highly uncertain.
4. There continues to be confusion over whether PSD increment consumption is based on allowable or actual emissions, and whether these values should be the maximum short-term level or some averaged level. The EPA guidance on this is unclear. That is, it talks about all combinations of these in various places. A related issue is the almost certain "apples to oranges" comparisons in a multi-source application of the models. You are almost never able to use the same emissions (e.g., allowable) for all sources being modeled, either for the same source (baseline and current) or among all sources currently or historically.
5. Because of the above, implementation of the PSD rule is not consistent among states or regions.

In general, Florida believes that the first step in PSD reform is the reevaluation of the Clean Air Act statutory language and the intent of Congress of that language.

Despite Florida's reservations about the ability of clarifications to solve all of the problems with the PSD program, we offer comments and suggestions of WESTAR's recommendations. We remain willing to work with other states, EPA, and others to help make the PSD program work, whether it be through clarification of the current program or reform of the entire program.

Response to WESTAR Recommendations

Recommendation 1: THE PSD WORKGROUP recommends that applicants of proposed PSD major sources and major modifications with ambient impacts greater than significant impact levels should be required to perform cumulative increment consumption analyses and should follow procedures consistent with other recommendations included in this document. To facilitate this recommendation, the PSD WORKGROUP recommends that EPA promulgate the significant impact levels for Class I, II, and III areas that are contained in EPA's 1996 proposed PSD rule.

This recommendation represents no change from current policy. While conceptually this is a desired recommendation, the details of how this analysis can be made doable in a reasonable time period, with available information, for a reasonable cost by a permit applicant are important. For example, what is included in the term "cumulative?" Neither the CAA nor the implementing regulations in any way limit what should be considered. Thus, all sources of the PSD pollutant are to be considered, yet information about all these sources may not be readily available. In addition, the models being used in these analyses have been evaluated only for large point sources. While these models can address other source types, there is no knowledge of how well they perform.

Recommendation 2: THE PSD WORKGROUP recommends that permitting authorities conduct Periodic Review of increment consumption, and that Periodic Reviews be implemented using a "tiered" approach with the rigor and cycle of analysis tied to increment consumption conditions in the air quality planning area.

This is a good recommendation, but for Class I areas only. It should replace, or substantially reduce, the cumulative assessment required of individual permit applicants. It seems appropriate that the permitting authority do this assessment outside of the time constraints of a permit application. It also seems likely that the permitting authority would do a more thorough and thoughtful assessment than a permit applicant who is more interested in doing what is requisite for obtaining a permit, and not particularly interested in uncovering something that may be negative to their goal. The cumulative assessment completed by a permit applicant could be limited, for example, to include only major stationary point sources.

We would limit this recommendation to Class I areas because their fixed location make it a practical exercise. Because of the very low PSD increment allowed in these areas, smaller sources from greater distances may have a relatively greater impact. Periodically evaluating the growth over this larger area of influence makes sense. In Class II areas, PSD increment is usually dominated by individual sources near the fence line. Other large PSD consuming sources nearby would also contribute. The impact of small sources over a wide area, and their growth would not typically have a significant influence on the higher amount of Class II PSD increment allowable.

Recommendation 3: THE PSD WORKGROUP recommends that cumulative increment analyses should be consistent within and across states with regard to the geographic scope and type of sources that are included in the PSD baseline and current emissions inventories. The PSD WORKGROUP recommends that EPA, with input from the PSD WORKGROUP, prepare guidelines that delineate the categories of sources that should be included in emissions inventories, and how they should be included, for use in PSD program implementation.

We agree with the basic recommendation but not with all the details in the WESTAR discussion. The primary source type that should be included in the analysis is major stationary point sources. These sources are the focus of the PSD rule and are the ones that have the most complete and reliable data. They are also the source types that the models have been designed and evaluated against. Nearby minor point sources and other on-site source types that would have a significant concentration gradient in the area of PSD review should also be included. The inclusion of mobile and general area sources should not be included. Unless it can be shown that these source types have any significant bearing on PSD increment consumption, we should just make it a rule or policy that they need not be included except in special situations.

Recommendation 4: The PSD WORKGROUP recommends that EPA work with states and FLMs to develop a menu of acceptable emissions calculation approaches and guiding principles for use when preparing emissions inventories for cumulative PSD increment analyses.

The problem with the list of acceptable approaches in the WESTAR recommendations is that it promotes inconsistency if any and all of the approaches are allowed with no implication of a hierarchy. We realize that in a multi-source application, it is virtually impossible to have all sources emissions calculated the same way. Even at a single source, it may be difficult to have consistency between the baseline and the current emissions calculation. But because the PSD increment is based on a difference between the current and baseline years, it is especially important to have consistent methods to facilitate an apples to apples comparison. In Florida, we have used the maximum allowable short-term emission rate as the basis for PSD increment calculation because it generally provides the best chance of having a consistent (across all sources) emissions inventory. Problems with this approach include its inconsistency with the CAA for judging the actual concentration changes from the baseline date and the fact that not all

sources have allowable emission rates, especially at the time of the baseline date. The first problem leads to an over-estimate of the PSD increment. This is not so much an issue in Class II areas where there is a fair amount of increment available, but in Class I areas, where the allowed increment is quite low, this over-estimation may be overly restrictive (i.e., leading to a false determination of PSD violation). The second problem (i.e., no baseline maximum allowable rate) leads to an apples and oranges subtraction that can lead to an incorrect (typically over-estimation) of the PSD increment. On the other end of the spectrum is the use of annual average emission rates based on actual operation. This has the advantage of data availability (often better in the baseline year), but calculations of short-term PSD increment consumption could be under-estimated.

In general, we believe that consistency in the difference calculation is more important than the accuracy of the model result. This is because the PSD maximum allowable increases are purely arbitrary values that have no relationship to any adverse environmental consequence. If by virtue of using consistent emissions data (and thereby consistently calculated concentration changes) results in an over or under estimation, then that is just the price of consistency. The spirit of limiting the air quality degradation in an area remains. We would recommend that the emissions methodology rule be the one that is most readily available for most sources. That is, choose one primary method (maximum allowable, average actual, etc.) and only use this method if available. There would of course still be some inconsistency for lack of some data, and a hierarchy of other methods should be established based on the best estimate of the primary method.

Recommendation 12: The PSD WORKGROUP recommends that EPA explicitly acknowledge the roles that ambient monitoring information can play in PSD program implementation.

In general, monitoring has very little role in the determination of PSD increment consumption in the current rules and guidance. Ironically, this is somewhat contrary, we believe, to the intent of the Congress and the Clean Air Act which envisioned monitoring as playing a central role. Nevertheless, there may be certain situations where monitoring data may be used to make a case for the actual changes versus the modeled changes in an area and to argue whether variances are appropriate.