

4APJ-APB

Mr. Richard E. Grusnick,
Deputy Director
Alabama, Department of
Environmental Management
1751 Cong. W. L. Dickinson Drive
Montgomery, Alabama 336109-2608

Dear Mr. Grusnick:

On May 9, 1996, Region 4's comments on Alabama's "PDD Air Quality Analysis Modeling Guidelines" were sent to your Air Division. Upon a recent review of this document, we offer the following recommendations for revising this document. Incorporating these comments would make the document more consistent with the Alabama State Implementation Plan (section 335-3-14-.04(11)) and EPA modeling requirements.

1. The discussion in section IV. Modeling Methodology (page 7) should be expanded to require the applicant to document their rationale for choosing a particular model, models or modeling system for all applicable PDD analyses and averaging times. The discussion should be explicit and with enough detail to allow the public and any reviewing agency to assess its appropriateness for the sources, terrain, averaging periods and pollutants under consideration. The section should state that any model chosen must be consistent with 40 CFR, Appendix W to Part 51: Guideline on Air Quality Models (EPA Modeling Guideline).
procedure for model selection described in
2. The last sentence of the first paragraph and the next paragraph immediately following in item 1 in Section A on page 7, must be deleted to ensure consistency with the Alabama SIP and the EPA Modeling Guideline. According to section 3.2 of the EPA Guidelines, the determination of the acceptability of a model for regulatory applications is the Regional Office responsibility.
2. Section "A. Applicable Models" (page 7) should state that the selection of models to be used in the PDD demonstration must be consistent with the EPA Modeling Guideline.
3. The entire section on the "Breton Modeling Protocol" must be deleted since many of the assumptions and recommendations for model use and modeling options/input are inconsistent with the Alabama SIP and the EPA Modeling Guideline. The following should be substituted for the "Breton Modeling Protocol" section.

For modeling sources, which are beyond 50 km of a Class I areas, in assessing the NAAQS and increments the document should specifically state that models for this purpose must be consistent with sections 7.2.6 and 3.2.1 of the EPA Modeling Guideline and must be approved in consultation with the EPA Regional Office and the appropriate Federal Land Manager. An EPA Appendix A or B model currently does not exist that is entirely suitable for assessing the Breton Class I impacts. Until such a recommendation can be made, the applicant must provide public notice and opportunity for the public to comment on the modeling methodology chosen.

~~exists for this situation~~
We hesitate to recommend a specific model at this time since ~~no~~ an EPA-approved model ~~does not exist~~. It is believed that such a recommendation must be jointly made from all stakeholders involved in this region.

4. The guideline must expand or develop a discussion on the procedures used to determine the modeling inventories for the Class I and II national ambient air quality standards (NAAQS) and PSD increments analyses. All increment consuming or expanding sources affecting the Class I areas should be included in the modeling demonstration. This would require the source/or state to contact the appropriate states to ensure the modeling inventory is complete.

5. Even though, the ADEM guideline will be used to develop the modeling demonstration for a PSD application, the applicant should be encouraged to submit a protocol documenting their intentions in performing the demonstration.

6. Tables 5 and 6 (page 16) list discrete receptors for the Breton and Dipsy Class I areas. ADEM should consult the appropriate FLM for the appropriateness of these receptors for assessing their Class I areas.

7. Consultation with the FLM is recommended on the appropriateness of the significance levels in Table 7 for assessing their Class I areas since these numbers, although proposed, have not been finalized by EPA.

8. The title in section B on page 7 should be changed to "Significant Impact Area Analysis". This would remove the implication of the ISC model to be used as a screening model. Such a use goes beyond the purpose of this model. It is not a screening tool. This section does, however, addresses the significant impact area analysis.

9. The modeling input options for the COMPLEX 3 model on page 14 should be changed to be consistent with section 5.2.1.3 of the EPA Modeling Guideline.

10. Use of a decay rate, even with the necessary documentation, is not allowed for regulatory applications. Use of this rate is inconsistent with the ISC regulatory default options,

11. The Visibility Analysis section on page 18 should be revised to incorporate the Interagency Workgroup on Air Quality Modeling (IAWQM) recommendation for assessing visibility impacts in Class I areas. (~~Not approved guidance~~)

We would appreciate a copy of the revised guideline upon revision. A copy of the document should also be sent to Molly Ross of.... If questions arise, please do not hesitate to call Brenda Johnson of my staff at (404) 562-9037.

Sincerely, with
The applicant should consult the appropriate state agency and ~~person~~ Regional Office ~~personal~~ and the appropriate FLM regarding the procedures to be used for a visibility analysis for a proposed source locating within 100 Km of a Class I area.

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Director
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cc: Christopher M. Howard, ADEM
Molly Ross, DOD