

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 51

[AH-FRL-7478-3]

RIN 2060-AF01

Revision to the Guideline on Air Quality Models: Adoption of a Preferred Long Range Transport Model and Other Revisions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA's *Guideline on Air Quality Models* ("Guideline") addresses the regulatory application of air quality models for assessing criteria pollutants under the Clean Air Act. In today's action we promulgate several additions and changes to the *Guideline*. We adopt a new dispersion model, CALPUFF, in appendix A of the *Guideline*. CALPUFF becomes the preferred technique for assessing long range transport of pollutants and their impacts on Federal Class I areas. Action on AERMOD and the Emissions and Dispersion Modeling System (EDMS) is deferred. We make various editorial changes to update and reorganize information, and remove obsolete models.

DATES: This rule is effective May 15, 2003. Beginning April 15, 2003 the new model (*i.e.*, CALPUFF) *should be used* for its intended purposes, in accordance with today's document. The period before required implementation of a new model allows user's sufficient time to prepare meteorological data bases and to become familiar with model operation. The new model *may be used* sooner, if desired.

ADDRESSES: All documents relevant to this rule have been placed in Docket No. A-99-05 at the following address: EPA Docket Center, (EPA/DC) EPA West (MC 6102T), 1301 Constitution Ave., NW., Washington, DC. The EPA Docket Center Public Reading Room (B102) is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Air Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Joseph A. Tikvart, Leader, Air Quality Modeling Group (MD-14), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone (919) 541-5562 (Tikvart.Joe@epa.gov).

SUPPLEMENTARY INFORMATION:

I. General Information

A. How Can I Get Copies of Related Information?

EPA established an official public docket for this action under Docket ID No. A-99-05. The official public docket is the collection of materials that is available for public viewing at the Air Docket in the EPA Docket Center, (EPA/DC) EPA West (MC 6102T), 1301 Constitution Ave., NW., Washington, DC. The EPA Docket Center Public Reading Room (B102) is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

Our Air Quality Modeling Group maintains an Internet Web site (Support Center for Regulatory Air Models—SCRAM) at: <http://www.epa.gov/scram001>. You may find codes and documentation for models referenced in today's action on the SCRAM Web site. We have also uploaded various support documents (*e.g.*, evaluation reports).

II. Background

The *Guideline* is used by EPA, States, and industry to prepare and review new source permits and State Implementation Plan revisions. The *Guideline* is intended to ensure consistent air quality analyses for activities regulated at 40 CFR 51.112, 51.117, 51.150, 51.160, 51.166, and 52.21. We originally published the *Guideline* in April 1978 and it was incorporated by reference in the regulations for the Prevention of Significant Deterioration (PSD) of Air Quality in June 1978. We revised the *Guideline* in 1986, and updated it with supplement A in 1987, supplement B in July 1993, and supplement C in August 1995. We published the *Guideline* as appendix W to 40 CFR part 51 when we issued supplement B. We republished the *Guideline* in August 1996 (61 FR 41838) to adopt the CFR system for labeling paragraphs. On April 21, 2000 we published proposed revisions in the **Federal Register** (65 FR 21506), which is the basis for today's promulgation.

Today's notice promulgates those components of the proposal that were clearly supported by public comments and that were otherwise not controversial, notably:

- Adoption of CALPUFF in appendix A, as proposed, for assessing long range transport of pollutants and their impacts on Federal Class I areas;
- Removal of the Climatological Dispersion Model (CDM), RAM and the

Urban Airshed Model (UAM) from appendix A, as proposed;

- Simplification of complex terrain screening techniques in section 5;
- Revision of section 9 to reflect our October 1997 settlement with the Utility Air Regulatory Group regarding specification of emissions from background sources, as proposed;
- Updating information in appendix W and reorganizing its structure; and
- Transfer of appendix B and appendix C to our Web site, as proposed.

The proposal also included (1) adopting AERMOD¹ to replace the Industrial Source Complex (ISC3) model in many assessments that now use it, (2) revising ISC3 by incorporating a new downwash algorithm (PRIME) and renaming the model ISC-PRIME, and (3) updating the Emissions Dispersion Modeling System (EDMS) by incorporating improved emissions and dispersion modules. Regarding AERMOD, nearly every commenter urged EPA to integrate aerodynamic downwash into AERMOD (*i.e.*, not to require two models for some analyses). The only cautions were associated with the need for documentation, evaluation and review of the downwash enhancement to AERMOD. As a result of AERMIC's (the American Meteorological Society (AMS)/ EPA Regulatory Model Improvement Committee) efforts to revise AERMOD, incorporating the PRIME algorithm and making a few other incidental modifications and to respond to the public's cautions, we believe that AERMOD, as modified for downwash, merits another public examination of performance results. Also, since the April 2000 proposal, the Federal Aviation Administration decided to configure EDMS3.1 to incorporate the AERMOD dispersion model, and results of its performance with AERMOD only recently became available. Consequently, AERMOD and EDMS4.0, as well as other conforming changes for the *Guideline*, will be reconsidered in a Supplemental Notice of Proposed Rulemaking (SNPR) in the near future. Note that since AERMOD is not included in today's promulgation, the proposed merger of the *Guideline's* sections 4 and 5 will be deferred to AERMOD's adoption in the future.

III. Public Hearing on the Proposal

We held the 7th Conference on Air Quality Modeling (7th conference) in Washington, DC on June 28-29, 2000. As required by section 320 of the Clean Air Act, these conferences take place

¹ AMS/EPA Regulatory MODel.