

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

DATE: FEB 12 1990

SUBJECT: Approval of Equivalence Demonstration Plan
Integrated Intermediate Terrain Model

FROM: Alan J. Cimorelli, Lead Meteorologist 
Region III (3AM12)

TO: Joseph A. Tikvart, Chief
Source Receptor Analysis Branch (MD-14)

Attached, for your review and comment, is a plan for demonstrating equivalence of an Integrated Gaussian Model (IGM) with both ISC and COMPLEX-I incorporating the intermediate terrain policy without post-processing. The Old Dominion Electric Cooperative is planning to construct two coal-fired electric generating units near Clover, Virginia. The Cooperative contracted with United Engineers and Constructors (UE&C) to complete the air quality analysis for PSD. As part of the analysis protocol, UE&C proposed to develop an integrated model to implement the intermediate terrain policy. In the review of the protocol Region III declared to the Virginia Department of Air Pollution Control that a Model Clearinghouse approval of the model equivalency would be required. Subsequently, UE&C prepared and submitted the attached plan for review and approval.

We in Region III have reviewed the plan and have found no cause for objecting to the planned demonstration of equivalency. The IGM model only incorporates the algorithms of two Guideline models and, to be demonstrated, performs the hour-by-hour selection of the higher prediction for intermediate terrain receptors. The planned demonstration will evaluate the model for the ranges of sources and terrain configurations in the Clover vicinity. The demonstration, as described in this plan, should provide an adequate assurance that the intermediate terrain policy is being correctly applied.

Please review the attached plan and comment on its acceptability.

Attachment

cc: D. Lohman
L. Felleisen