



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

October 23, 1987

SUBJECT: Review of WYNDvalley, GRID and Ventilated Valley Models

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

TO: Robert B. Wilson, Regional Meteorologist
Region X

In response to your request the Model Clearinghouse has reviewed the WYNDvalley and GRID models for application to PM₁₀ SIP's in Oregon and Washington. Later, at the request of the Stagnation Work Group, we also reviewed the Ventilated Valley Box model, which is being considered for application in Region VIII. In addition, we requested technical comments on all three models by Meteorology Division (MD), ORD, personnel. The MD comments, provided by Bert Eskridge, are attached.

Based primarily on the MD comments, it appears to us that only one of the three models, WYNDvalley, has sufficient technical credibility to be used for PM₁₀ SIP's. Moreover, it appears that this model will require certain meteorological input data/measurements to establish boundary conditions. Any application of WYNDvalley to PM₁₀ SIP modeling should be accompanied by a comparison between model estimates and air quality data. (This is a standard recommendation for any new model for which there has been limited evaluation.)

Upon receipt of this memorandum we recommend that you set up a conference call with the Stagnation Work Group members to discuss these findings and to propose future actions.

Attachments

cc: R. Eskridge
P. Hanrahan
J. Notar
D. Stonefield