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

March 20, 1986

MEMORANDUM

SUBJECT: Meteorological Data Record to be Used With the Valley and Complex I Models

FROM: Dean A. Wilson
Techniques Evaluation Section

TO: Lewis Nagler, Regional Meteorologist
Region IV

In response to your request we agree with your definition of the requisite meteorological inputs to Valley and requisite data inputs to the Complex I model.

Whether or not an analysis with Valley for the 24-hour averaging time will constitute a complete evaluation in complex terrain needs to be determined on a case-by-case basis. Current guidance states that the initial screen for the 24-hour averaging time is Valley. If a violation of any NAAQS or the controlling increment is indicated, a second level screening technique may be used. The key words (underlined) imply that the controlling averaging time must be established in each case. In most instances where the source is isolated, a simple case can usually be made that the 24-hour averaging time is "controlling" and there is no need to look at the annual or 3-hour averaging times. However, we are aware of some multi-source situations where the annual mean can be controlling; then an annual NAAQS analysis would be required. We are also aware of some cases where the 3-hour SO_2 standard is controlling and, depending on the magnitude of the 24-hour estimate, it may be necessary to independently establish compliance with the 3-hour standard/increment.

Thus, while we agree that the 24-hour Valley estimate usually will suffice, there is a regulatory requirement to establish compliance with NAAQS/PSD increments for other averaging times. Some technical justification for not explicitly modeling these averaging times should be included in each regulatory action.

If you have any further questions, please contact me.

cc: J. Tikvart
R. Rhoads
bcc: Regional Modeling Contact, Regions I-III, V-X (w/incoming memo)