



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

NOV 07 1988

MEMORANDUM

SUBJECT: Compilation of Most Recent, Available 5-Year  
Meteorological Data by Texas

FROM: *Dean A. Wilson*  
Dean A. Wilson, Meteorologist,  
Techniques Evaluation Section, SRAB (MD-14)

TO: James W. Yarbrough  
SIP New Source Section (6T-AN), Region VI

The Model Clearinghouse has reviewed your position with respect to the appropriate meteorological data bases to be used by the State of Texas for regulatory modeling. For the most part we agree with your position, but do have a couple of comments/clarifications.

Our understanding of the State's position is that they would like to model both short-term and long-term using 4 individual years (1982-1985) of recent, readily available meteorological data and then, for the 5th year, use 1964 data for the short-term, or existing historical multiple year composite STAR data for the long-term. Their reasoning is that it is important in permitting, from an equity standpoint, to use the same years of meteorological data, regardless of the data station.

Our understanding of the Region VI position is that the State need not specify the same meteorological data bases across the State and 5 years of recent readily available meteorological data be used. The data bases would be 1981-1985 or 1982-1986, depending on the station. Furthermore, you recommend that, for modifications of existing emission limits that were originally based on earlier meteorological data, these data bases be included in any remodeling. The historical data bases would be 1964 for the short-term and the existing composite STAR data for the long-term.

The Guideline on Air Quality Models (Revised) indicates that consecutive years from the most recent readily available 5-year period be used when estimating concentrations with an air quality model. This statement supports the Region VI position to use 1981-1985 or 1982-1986 data, depending on which 5-year period is readily available for a given NWS station. The Clearinghouse agrees with the Region VI position. However, it should be noted that the data bases identified in Attachments 2 and 3 to your

memorandum only represent the current readily available data. At some point in the future it may be necessary to update the data base to something more current.

The Guideline on Air Quality Models (Revised) also indicates that for permitted sources whose emission limits are based on a specific year of meteorological data, that year should be added to any longer period being used (e.g., 5 years of NWS data) when modeling the facility at a later time. Thus, since previous Texas modeling was done using data bases from an earlier time period, e.g. 1964, it would seem logical to retain these data bases for future remodeling of existing facilities. The Model Clearinghouse agrees with your position that the 1964 data base should be included in any modeling done that would potentially modify existing emission limits.

Regarding the use of historical multiple year STAR data, the Model Clearinghouse has long held the position that composite STARS are not appropriate for use in analyzing the annual mean for most pollutants. (It is possible that such data could be used for making estimates for standards that written in statistical form, e.g.  $PM_{10}$ .) Thus from a regulatory standpoint we do not believe that it is useful to require any modeling using historical composite STAR data bases, since we would not be able to defend emission limits based on these data.

In summary, the Model Clearinghouse agrees with your position with respect to use of the data bases identified in Attachments 2 and 3 to your October 26, 1988 memorandum. We also agree that, for the short-term analyses for existing sources, it is appropriate to add the 1964 data base to the most recent, available 5-year data bases (currently those data bases identified in Attachments 2 and 3). However, for the long-term analyses, emission limits should be based solely on individual years of STAR data from the most recent readily available 5-year period.

If you have any further questions, please contact me.

cc: D. Grano (MD-15)  
D. deRoock (MD-15)  
S. Reinders (MD-14)  
Regional Modeling Contact, Regions I-V, VII-X (with incoming memo and list of FY-89 Clearinghouse memos)

**FY 89 MODEL CLEARINGHOUSE MEMORANDA**

<u>Date</u>	<u>Region</u>	<u>Subject</u>
10/11/88	VI	Use of ISC UNAMAP 6, Change 7
11/07/88	VI	Compilation of Most Recent, Available 5-Year Meteorological Data By Texas