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

March 1, 1990

MEMORANDUM

SUBJECT: East Helena Lead SIP

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

Robert Bauman, Chief
SO_2/Particulate Matter Programs Branch (MD-15)

TO: Douglas M. Skie, Chief
Air Programs Branch, Region VIII (8AT-AP)

In response to your request we have reviewed the February 14, 1990 letter from ASARCO to you as well as your comments on the Company's proposal concerning development of the SIP for lead (Pb). We agree with your position and your specific comments on the Company's proposal. In that regard, we would like to stress the importance of continuing the every day sampling through the first two quarters of 1991, as mentioned in your Comment 3. We also agree that the schedule leading up to a February 1992 SIP submittal should be maintained.

Based on the historical monitored data we believe that it is important, if at all possible within the schedule, to include ambient data, based on every day sampling, from the first quarter of 1991 in the receptor modeling analysis and reconcilation process. The first and fourth quarters seem to typically contain some of the highest Pb levels. This result is also consistent with meteorological considerations; Spring and Summer are climatologically good dispersion seasons.

It is our belief that the biggest uncertainty in modeling the smelter lies in the emissions quantification and characterization (e.g. point, area, volume sources) and not in the dispersion models themselves. The reconciliation of receptor modeling with the dispersion modeling is important in that it will foster the refinement of these emission uncertainties. Also the collection of on-site meteorological data should alleviate past uncertainties associated with the use of off-site data.

Thus it is our position that the ISCST model is the most appropriate dispersion model for application to the simple terrain areas near the smelter. If the Company wishes to consider an alternative model to ISCST, it will be necessary to conduct a formal comparative evaluation of such an alternative model with the ISCST model. Procedures for planning and conducting such an evaluation are provided for in EPA guidance. Please note that EPA policy on model evaluation studies is that such studies may not be used to postpone

deadlines for SIP submittal where existing guideline models are applicable. Thus, while we will consider the results of any model evaluation submitted to us subsequently, we will continue to expect a complete SIP revision to be submitted by February 1992.

As a final note, we wish to remind you that the source is subject to reevaluation under the 1985 stack height rules. For purposes of reconciliation of dispersion and receptor models, actual stack height should be used. However, to set an emission limit, it must be shown that the existing stack meets Good Engineering Practice (GEP) or the plant must be modeled at a height equal to GEP.

If you have any questions, please contact Dean Wilson at 629-5683.

cc: J. Calcagni
W. Laxton
M. Smith
D. Stonefield

bcc: Regional Modeling Contact, Regions I-X (with copy of incoming memorandum and list of FY-90 Clearinghouse memoranda)

FY 90 MODEL CLEARINGHOUSE MEMORANDA

Date	Region	Subject
10/17/89	VI	Ambient Air
11/7/89	II	Interpretation of On-site Meteorological Data Requirements and the Use of RTDM for a PSD Source
11/28/89	VIII	Utah PM-10 Secondary Sulfate and Nitrate Calculations
01/02/90	IV	Effect of Changing Stack Heights on Prevention of Significant Deterioration (PSD) Modeling and Monitoring
01/10/90	VIII	Utah PM-10, Secondary Sulfate and Projections
01/10/90	VIII	Review of The Utah County PM-10 Draft SIP
01/11/90	VI	Alternative Emission Reduction (Bubble) SIP Revision Authorizing Operation of a New Sulfur Recovery Plant at the Conoco Inc. Ponca City Refinery
01/16/90	VI	Recent Texas Air Control Board (TACB) Evaluation of the ISC Area Source Algorithm
01/16/90	V	Refined Metals Lead Modeling Analysis
02/22/90	III	Approval of Equivalence Demonstration Plan Integrated Intermediate Terrain Model
03/01/90	VIII	East Helena Lead SIP