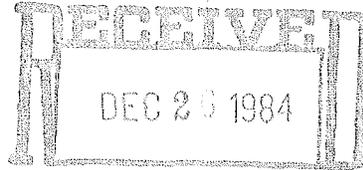




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

December 19, 1984



MEMORANDUM

SUBJECT: Review of ARMCO--Ashland, KY TSP Bubble

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

TO: Grady T. Helms, Chief
Control Programs Operations Branch (MD-15)

Pursuant to the December 5, 1984, request from Region IV to you, we have reviewed the documents which summarize the modeling as transmitted directly from ARMCO Steel to Region IV. In the Region IV transmittal to CPDD, we note that Region IV provided neither a technical review nor a position as to whether the submittal is adequate/satisfactory. Listed below are a few comments we have on these documents.

1. In the ISCLT model runs the gradual plume rise option was exercised. This is not in accordance with current modeling guidance since building downwash is not treated. Discussions with Region IV revealed that they were not aware that this option was chosen. Subsequent discussions between Region IV and ARMCO revealed that the use of the gradual plume rise option was inadvertent and that final plume rise was used in the ISCST runs. As it turns out, ISCST runs also produced annual average incremental concentration estimates. These estimates were all negative as a result of the trade. Thus, while the ISCLT estimates, on which the study conclusions were based, were incorrect, the outcome does not change.

2. We have not reviewed the emissions, emission characterizations, particle size distributions or related quantities. Any review in that level of detail is normally the responsibility of the Region.

3. We assume that a technical support document (TSD) will accompany the SIP revision when it is forwarded. Such a TSD should contain the rationale used to decide on the modeling protocol contents, e.g. the rationale for the choice of models, the choice of urban instead of rural dispersion rates, the source characterization scheme, etc.

4. We have also reviewed the October 23, 1984, addendum to the package which contains the analysis of the 46 calm days using the CALMPRO program. While the results seem to indicate that the days did not result in a higher maximum incremental impact, there are numerous printed concentrations/other

data which do not make sense and are different from what we would have expected. Several telephone conversations with Region IV failed to resolve all of the questions on the printout. The Region should pursue this matter further so the EPA can be satisfied that the apparent conclusion of "no additional impacts" is correct.

If you have further questions, please contact Dean Wilson.

cc: B. Gilbert
S. Reinders
D. Rhoads
D. Wilson

bcc: Regional Modeling Contacts, Regions I-X

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