

February 25, 1994

Cindy Kemper, Staff Director
Air Pollution Control Program
Missouri Department of
Natural Resources
Jefferson State Office Building
P.O. Box 176
Jefferson City, MO 65102

Dear Ms. Kemper:

We are writing you concerning the revision to Missouri's State Implementation Plan (SIP) for lead as it pertains to the Asarco Primary lead smelter in Glover, Missouri. The SIP is scheduled to be heard by the Missouri Air Conservation Commission (MACC) on March 31, 1994.

In a November 24, 1993, letter from Lisa Haugen, Environmental Protection Agency (EPA), to Gene Cassin, Missouri Department of Natural Resources (MDNR), Air Pollution Control Program, we expressed concern regarding Asarco's use of a ratio to account for mass lost during analysis of filters in the chemical mass balance apportionment process. We requested further justification for the procedure so that we could determine the approvability of the method and the subsequent control strategy. Asarco provided an explanation in a December 15, 1993, letter to Mr. Cassin, MDNR, from Gregory A. Knapp, Senior Environmental Scientist, Asarco.

The Region VII Lead Team has considered the explanation of the loss of mass which occurred during the analysis of source and ambient filter data at two different laboratories. We have also considered the explanation offered by Asarco, and the company's contractor Chester Labnet, regarding the factor which was applied to the analytical data to correct for this loss of mass. We have discussed the issue with our Regional Laboratory and the Source Receptor Analysis Branch at EPA's Office of Air Quality Planning and Standards. We have concluded that EPA will not approve a control strategy based on Asarco's Chemical Mass Balance (CMB) modeling exercise for the following reasons:

1. Such a procedure was not identified in the CMB Modeling Protocol, dated September 18, 1992.
2. Such a procedure is not consistent with EPA guidance which addresses receptor modeling.

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Haugen
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3. Such a procedure is not a generally acceptable laboratory/data management practice.

The fact that Asarco and Chester Labnet have consistently lost filter material with a known mass, but an unknown elemental composition, significantly lowers the level of confidence in the CMB study. Regrettably, neither Asarco nor EPA can fully correct for a loss of mass which has an unknown elemental composition. Any attempt to do so would introduce an additional bias of unknown magnitude to the CMB study.

Given the compromised integrity of this CMB study, it is not appropriate scientifically, or otherwise, to use the study to modify (reconcile) the original dispersion model and emission inventory. This exercise will introduce the CMB error to these entities, as well. Consequently, EPA will not approve any changes to the original emission inventory and dispersion model which were made for reconciliation purposes. This means that the modifications listed on pages 4-16 and 4-17 and Appendix B of Asarco's October 12, 1993, modeling report are not approvable.

At this point, the state's SIP development schedule will not allow Asarco sufficient time to perform a new CMB study. EPA suggests that the state require Asarco to use the modeling that was conducted with the original, unreconciled emission inventory and dispersion model to determine a design value, and to develop a control strategy and attainment demonstration.

As mentioned above, this SIP is to be heard by the MACC on March 31, 1994. We will have additional comments based on the materials which will be heard on that date. If you have any questions, please call Lisa Haugen at (913) 551-7877 or Josh Tapp at (913) 551-7606.

Sincerely,

Gale A. Wright
Chief, Air Branch

cc: Todd Crawford
Missouri Department of Natural Resources

bcc: Josh Tapp, AIRQ
Tom Coulter, OAQPS (MD-14)
G. Wright, ARBR

ARTX/ARBR/PLDE/AIRQ: Haugen: ctn: 2/24/94: Disk 4, #07