TO: M. Kearney
E. Romagnoli
G. Welch

DATE: November 19, 1985

FROM: R. Gosik

SUBJECT: Ambient Lead Standard Study

Attached is the final Bureau of Mines Workplan for their Ambient Lead Standard Study. It has been approved by USBM headquarters. In order to meet the tight deadline for completion of the study it is recommended that the Bureau be forwarded all available data requested in their workplan by the end of this month. The data should be sent directly to:

Richard D. Smith, Metallurgical Engineer
U.S. Bureau of Mines
Building 20
Denver Federal Center
Denver, Colorado 80225

Please use overnight mail if possible. Mr. Smith's telephone number is (303) 236-5210. It would also be advisable to provide a technical contact for him to call if he should have any questions about the transmittal.

Two other issues have been discussed with Mr. Smith in regard to the workplan. First, it was pointed out that it may be inappropriate to assume that all smelters can meet the 1.5 standard or that all smelters have adequate ambient data. The Bureau recognizes this and are not making these assumptions in their study. Second, it was pointed out that it is unlikely that much particle size or inlet loading data are available other than possibly some engineering estimates used in specifying existing equipment. The Bureau also recognizes this limitation and have only stated "idealized" data requirements in their workplan.

Please contact me at (303) 231-0683 if you have any further questions or concerns about the timing and approach discussed above.

RJG:nc
Attachment

cc: R. Crosser
M. Poling
R. Smith

# AMBIENT LEAD STANDARD STUDY

Scope, Workplan, and Schedule
(revised 11/18/85)

Scope: The purpose of this study is to examine the technical feasibility and the anticipated costs of modifying all existing U.S. primary lead plants from current EPA ambient air lead compliance of 1.5 ug/$M^3$ to anticipated EPA ambient air compliance of 0.5 ug/$M^3$. The project is planned to commence the week of 11/17/85 and end the week of 02/23/85. Plant evaluations will include Herculaneum, MO (St. Joe); Buick, MO (AMAX); Glover, MO (ASARCO) smelter/refiner complexes and the East Helena, MT (ASARCO) smelter. The El Paso, TX, smelter and the Omaha, NE, refiner (both ASARCO) are not included.

Workplan:

I. Data collection
   A. Plant specific data
      1. Plot plans locating ambient air monitoring stations
      2. Quarterly average data for each monitoring station
      3. Significant non-compliance data for each monitoring station
         a. Identify point and fugitive source(s) of non-compliance
         b. Identify time frame
      4. Plant plan views showing each source
      5. Emission data
         a. Test data for point source(s)
         b. Best available data or estimates for fugitive source(s)

Note: Ideal data would include inlet and outlet loadings at conditions, particle size distribution at inlet and outlet, lead analysis by particle size

      6. Any available engineered designs for fugitive dust control
      7. Any performance data, curves, etc. relative to control devices
   B. Vendor performance data on control devices
      1. Efficiency curves
      2. Energy curves

II. Vendor and plant performance data analysis

Note: If analysis indicates 0.5 ug/$M^3$ IS NOT TECHNICALLY FEASIBLE using existing technology, present conclusions and end project. If analysis indicates 0.5 ug/$M^3$ IS TECHNICALLY FEASIBLE using existing technology, proceed to III.

III. Individual plant analysis. Analysis will include change in capital and operating costs. No economic computer modeling is included.
   A. Analysis of Glover, MO (ASARCO)
   B. Analysis of Herculaneum, MO (St. Joe)
   C. Analysis of Buick, MO (AMAX)
   D. Analysis of E. Helena, MT (ASARCO)

IV. Conclusions