



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

JUN 26 1996

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS



The Honorable Alan K. Simpson
United States Senate
Washington, D.C. 20510

Dear Senator Simpson:

Section 234 of the Clean Air Act Amendments of 1990 requires that the Environmental Protection Agency (EPA) analyze the accuracy of the Industrial Source Complex atmospheric dispersion model and the AP-42 Compilation of Air Pollutant Emissions Factors and to make appropriate revisions prior to using it for determining air quality impacts of fugitive particulate emissions from surface coal mine operations.

Over the past four years, the EPA has worked closely with the mining industry and other stakeholders to conduct the study called for by Section 234. With help from the industry, extensive field studies were conducted at a typical surface coal mine in Wyoming's Powder River Basin to collect the data needed to evaluate the accuracy of the model and emission factors. The stakeholders also cooperated by reviewing draft documents, providing comments, and meeting frequently with EPA staff to help plan the study. The enclosed reports are testimony to our joint accomplishments.

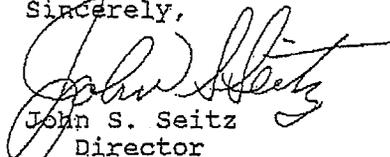
Our work to date indicates that emission factors ought to be revised, primarily due to changes in operations such as the use of larger equipment at surface coal mines. The changes are now being drafted for inclusion in the AP-42 Compilation of Air Pollutant Emission Factors and are being coordinated with the parties involved in and impacted by the changes.

The results of our study indicate that the new emission factors coupled with the improvements to the model, which include better approaches to characterize releases from mine pits, haul roads and other area sources, and particulate matter deposition, have improved model performance. In spite of the improved performance, however, at this time the model does not meet the evaluation criteria that we, the industry, and the State of Wyoming had jointly agreed to. There is still a tendency for overprediction of air concentrations for particulate matter less than 10 micrometers (PM10). The same overprediction does not appear for total suspended particulate matter (TSP). The causes of the overprediction for this particular class of sources are as yet undetermined. This model, however, has been evaluated for other sources and been found accurate within accepted norms.

Since the model still appears to overpredict the impacts of surface coal mines, the Agency does not plan to use it for regulatory applications involving these sources. As a consequence, the regulatory procedures currently in place will remain in effect. These procedures are contained in the January 24, 1994 Memorandum of Agreement (MOA) between EPA Region VIII and the State (copy enclosed) and were summarized in the Federal Register on September 12, 1995 (60 FR 47290). The MOA allows the State to conduct monitoring in lieu of short term modeling for assessing coal mining-related impacts in the Powder River Basin. We believe that these procedures provide adequate protection for the environment and are also acceptable to the stakeholders. At this time, we and the various stakeholders believe that the interim procedures work well, and therefore we do not currently plan any further analyses. If in the future EPA is able to correct the model's tendency to overpredict as described above, it may, of course, review these regulatory procedures.

I appreciate this opportunity to be of service and trust this information will be helpful to you.

Sincerely,



John S. Seitz
Director

Office of Air Quality Planning
and Standards

Enclosures

cc: Congresswoman Barbara Cubin
Senator Craig Thomas