

revision on March 6, 1992 (57 FR 8076). EPA explained that the basis for the limited approval was that the state would be required to submit a supplemental SIP revision meeting the applicable Part D requirements.

On July 2, 1993, the state of Missouri submitted a SIP revision addressing the applicable Part D requirements of the CAA. The revision provided for additional control measures in response to unanticipated emissions associated with the control measures implemented under the 1990 SIP revision. These emissions resulted in violations of the lead NAAQS after the 1990 SIP revision attainment date of February 1, 1993. The July 1993 SIP revision was adopted by the Missouri Air Conservation Commission (MACC), after proper notice and public hearing, on June 29, 1993.

In a letter dated September 30, 1993, EPA informed the state that the proposed amendment to Missouri rule 10 CSR 10-6.120 lacked sufficient emission limits to ensure attainment of the standard. On October 7, 1993, EPA notified the state that the SIP revision did not contain contingency measures which adequately addressed the requirements of section 172(c)(9). Missouri and Doe Run agreed to the required changes at meetings held October 18 and 19, 1993. The changes to the SIP were adopted by the MACC at a public hearing held on March 31, 1994. Final changes to Missouri rule 10 CSR 10-6.120 were adopted by the MACC, after proper notice and public hearing, on April 28, 1994, and became effective on August 28, 1994.

The state submitted supplemental material to EPA on June 30, 1994. Upon review, it was noted that the Consent Order signed by the MACC on March 31, 1994, did not contain implementation language for contingency measures. EPA had informed the state of the need for such language in a letter dated February 23, 1994. The implementation language had been included in a prior order adopted by the MACC in June 1993, and had been available for public review. The language was inadvertently omitted from the final order signed by the MACC in March 1994. A new Consent Order, which included the missing language, was signed by the MACC on September 29, 1994, and submitted to EPA on November 23, 1994.

The July 2, 1993, SIP, as revised and adopted in March 1994, and the revised September 29, 1994, Consent Order, satisfy the Part D requirements of the CAA. The revised plan also contains a control strategy to address the violations of the NAAQS which occurred upon

implementation of the control measures in the 1990 SIP revision. Dispersion modeling indicates that the subsequent control measures will result in attainment of the NAAQS for lead. The new attainment date for the 1993 SIP revision is June 30, 1995. In addition, the submittal includes an amendment to Missouri rule 10 CSR 10-6.120 that revises all point source emission limits to a lbs./24-hour basis, and establishes enforceable criteria for determining compliance.

II. Criteria for Approval

This SIP revision was reviewed using the criteria established by the CAA. The requirements for all SIPs are contained in section 110(a)(2) of the CAA. Section 172(c) of the CAA specifies the provisions applicable to areas designated as nonattainment for any of the NAAQS. Further guidance and criteria are set forth in the "State Implementation Plans for Lead Nonattainment Areas; Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (58 FR 67748).

III. Review of State Submittal

A. Control Strategy

In the 1993 SIP revision, the state generally used the emission inventory which was used in the 1990 SIP revision. However, it was necessary to reanalyze the facility because previously unanticipated emission points had been discovered and several existing emission sources had been relocated. Air dispersion modeling was used to determine that the additional controls were sufficient to attain the lead NAAQS.

The SIP contains the June 24, 1993, Consent Order, and a subsequent amendment to the Consent Order, dated March 1994, which were entered into by the Missouri Department of Natural Resources (MDNR) and the Doe Run Company. Both of these documents set forth the administrative requirements for the implementation of the control measures. The submittal also includes Missouri rule 10 CSR 10-6.120, which establishes enforceable emission limits and work practice requirements. The reader is referred to the EPA-prepared technical support document for a more complete discussion of the specific control measures to be implemented in the Consent Orders.

B. Attainment Demonstration

Section 192(a) of the CAA requires that SIPs must provide for attainment of the lead NAAQS as expeditiously as

practicable but not later than five years from the date of an area's nonattainment designation. The lead nonattainment designation for the Herculaneum area was effective on January 6, 1992; therefore, the latest attainment date permissible by statute would be January 6, 1997. The Doe Run lead SIP demonstrates attainment by June 30, 1995, which meets the statutory requirement. This plan shows a predicted maximum ambient air lead concentration of 1.47 $\mu\text{g}/\text{m}^3$ which is below the NAAQS for lead of 1.5 $\mu\text{g}/\text{m}^3$.

The Industrial Source Complex Long-Term Model was used to demonstrate the adequacy of the control strategy. The procedures recommended in EPA's *Guideline on Air Quality Models (Revised)*, EPA 450/2-78-027R, July 1986, and *Supplement A to the Guideline on Air Quality Models (Revised)*, EPA 450/2-78-027R, July 1987, were followed.

C. Emission Inventory and Air Quality Data

Section 172(c)(3) of the CAA requires that nonattainment plan provisions include a comprehensive, accurate, current inventory of actual emissions from all sources of relevant pollutants in the nonattainment area.

The 1993 SIP revision emissions inventory (EI) relies heavily upon the 1990 SIP revision EI, which is based upon 1987 data. The 1990 baseline emissions were quantified through a review of journal articles, stack testing, personnel monitoring, and evaluation of post-1985 equipment and procedures. Dispersion modeling was employed in deriving the 1990 SIP control strategy which resulted in the 1990 postcontrol EI. The 1993 baseline EI was obtained by adjusting the 1990 postcontrol EI to account for dust surging problems associated with the installation of certain 1990 SIP controls, and the replacement of four scrubbers with a baghouse.

The state submittal provides a historical summary of the air quality from 1988 through the first calendar quarter of 1993. Ambient lead concentrations have fallen significantly with the implementation of the 1990 SIP controls; however, the average quarterly ambient lead concentrations at several monitors continue to remain above the NAAQS.

D. Reasonably Available Control Measures (RACM) (Including Reasonably Available Control Technology (RACT))

The submittal must contain provisions to assure that RACM (including RACT) are implemented (see