developing implementation plans and plan revisions for submission to EPA. Section 110(a)(2) of the Act provides that each implementation plan submitted by a State must be adopted after reasonable notice and public hearing.3 Section 110(1) of the Act similarly provides that each revision to an implementation plan submitted by a State under the Act must be adopted by such State after reasonable notice and public hearing. The EPA also must determine whether a submittal is complete and therefore warrants further EPA review and action (see section 110(k)(1) and 57 FR 13565). The EPA's completeness criteria for SIP submittals are set out at 40 CFR Part 51, Appendix V. The EPA attempts to make completeness determinations within 60 days of receiving a submission. However, a submittal is deemed complete by operation of law if a completeness determination is not made by EPA six months after receipt of the submission.

To entertain public comment on the implementation plan for East Helena, the State of Montana, after providing adequate notice, held a public hearing on March 18, 1994, to address the stipulation between the MDHES and Asarco, and the East Helena primary SO₂ NAAQS SIP. Following the public hearing, the stipulation and SIP were adopted by the State. The Governor of Montana submitted the SIP to EPA on March 30, 1994. The SIP submittal was reviewed by EPA to determine completeness in accordance with the completeness criteria set out at 40 CFR Part 51, Appendix V. The submittal was found to be complete, and a letter dated May 12, 1994, was forwarded to the Governor indicating the completeness of the submittal and the next steps to be taken in the review process.

2. Accurate Emission Inventory

Section 172(c)(3) of the Act 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 emission inventory also should include a comprehensive, accurate, and current inventory of allowable emissions in the

The MDHES identified two major sources of SO₂ in the East Helena area: the Asarco Smelter complex and the Ash Grove cement plant. Emission inventory information for the Ash Grove Kiln stack was derived from an

engineering calculation to determine potential SO₂ emissions. Assuming all heat input to the kiln is supplied by 6% sulfur coke, a potential emission rate of 2.7 tons SO₂/day was used for this facility in this SIP revision. Actual SO₂ emissions for this source are approximately 1.0 ton per day.

A detailed SO₂ emission inventory of the Asarco smelter facility was conducted in the fall of 1991. A complete testing protocol was approved by EPA along with the final emission inventory report. The report provided a complete and accurate SO₂ emission inventory of the entire facility for use in dispersion modeling studies.

In general, the SO₂ emission sources were separated into three major categories: Point sources, volume sources, and fugitive sources. The results of the point source tests confirmed Asarco's three major sources of SO₂ emissions to be the Sinter Plant Baghouse stack, Acid Plant stack, and Blast Furnace Baghouse stack. Volume and fugitive sources were also quantified.

The MDHES also maintains an annual SO₂ emission inventory for the Asarco facility. This inventory does not include all sources that were measured in the field sampling study, but does include the major sources of SO₂ emissions Totals for 1990 (including only the three major point sources) were 17,491.0 tpy; totals for 1991 (with building volume and fugitive area sources included) were 18,031.7 tpy. Thus, annual SO₂ emissions for the Asarco facility are approximately 18,000 tpy. For the Ash Grove kiln stacks, emissions for the same years were less than 280 tpy.

EPA is approving the emissions inventory because it is accurate and comprehensive and provides a sufficient basis for determining the adequacy of the attainment demonstration for this area consistent with the requirements of sections 172(c)(3) and 110(a)(2)(K) of the Act. For further details see the TSD.

3. RACM (Including RACT)

As noted, the initial SO₂ nonattainment areas must submit provisions to assure that RACM (including RACT) are implemented as expeditiously as possible (see section 172(c)(1)). The General Preamble contains a detailed discussion of EPA's interpretation of the RACM (including RACT) requirement (see 57 FR 13547 and 13560-13561), and defines RACT for SO₂ as that control technology which is necessary to achieve the NAAQS.

The Asarco, East Helena, primary lead smelter was identified as the major source of the SO₂ nonattainment problem in East Helena. The control

strategy includes setting operational SO₂ emission limits for several of the major emission points of the Asarco facility.

Asarco developed a set of emissions parameters for combined emissions from the two largest SO₂ emission points, the sinter and blast furnace stacks, in order to provide maximum operating flexibility while still protecting the NAAQS. The set of compliance parameters for combined emissions from the Blast Furnace Stack and Sinter Plant Stack consists of the following relationships:

 $0 < S \le 22.93$, B=29.64 – (0.180) S $22.93 < S \le 54.54$, B=38.74 - (0.577) S $54.54 < S \le 60.27$, B=76.60 - (1.271) S

B=Daily emissions of SO₂ from the Blast Furnace Stack in tons per calendar

S=Daily emissions of SO₂ from the Sinter Plant Stack in tons per calendar day

In addition to the compliance parameters for combined emissions from the sinter and blast furnace stacks, the March 18, 1994, stipulation also sets absolute SO₂ emission limitations for the sinter and blast furnace stacks at 60.27 tons per calendar day and 29.64 tons per calendar day, respectively. Daily emissions of SO₂ from the Acid Plant Stack shall not exceed 4.30 tons per calendar day. SO₂ emissions from the Concentrate Storage and Handling Building Stack (including the exhaust from the new Sinter Plant Ventilation System baghouse) shall not exceed 46.00 pounds per hour or 0.552 tons per calendar day. All of these emission limits, including the compliance parameters for the combined emissions of the sinter and blast furnace stacks, were effective September 1, 1994.

Two additional emission limitations on minor stack sources at the Asarco facility take effect June 30, 1995: SO₂ emissions from the Crushing Mill Baghouse Stacks #1 and #2 shall not exceed 0.19 and 0.37 tons per calendar day, respectively.

The stipulation details the use of continuous emission monitoring systems to determine compliance with the emission limitations for the sinter plant stack, blast furnace stack, and acid plant stack. Emission testing provisions for the remaining stacks are also specified.

Provisions have also been incorporated into the stipulation to insure that sulfur dioxide emissions from miscellaneous volume and fugitive sources do not increase beyond their current levels. Those provisions include: limiting fugitive emissions of

³ Also Section 172(c)(7) of the Act requires that plan provisions for nonattainment areas meet the applicable provisions of Section 110(a)(2).