

the primary SO₂ NAAQS. Any area designated as not attaining the primary or secondary SO₂ NAAQS as of the date of enactment of the 1990 Amendments was designated nonattainment for SO₂ by operation of law upon enactment, pursuant to section 107(d)(1)(C)(i) of the Act (April 22, 1991, at 56 FR 16274).

On February 21, 2003, the Governor of New Mexico submitted to us a revision to the New Mexico SO₂ SIP (February 21, 2003 submittal). The February 21, 2003 submittal specifically requested EPA to redesignate the portion of Grant County, New Mexico, located in the Air Quality Control Region (AQCR) No. 021, from nonattainment to attainment for the SO₂ NAAQS. This particular portion of Grant County is restricted to a 3.5 mile radius around the Kennecott Copper Corporation (now owned by the Phelps Dodge Corporation and called the Hurley smelter) and land above 6470 feet Mean Sea Level within an 8 mile radius of the Hurley Smelter in Hurley, New Mexico. The air monitoring data for this area reveals values better than national standards for SO₂. The February 21, 2003, submittal also included a maintenance plan for this area to ensure that attainment of the SO₂ NAAQS will be maintained through permitting and the applicable SIP rules. The State also submitted a contingency measures plan that consists of monitoring measures.

In this document we are approving NMED's request to redesignate the Grant County primary and secondary SO₂ nonattainment areas to attainment of the SO₂ NAAQS. We are also approving the maintenance plan and the contingency measures plan for this area into the New Mexico SO₂ SIP. See our Technical Support Document (TSD) for additional information and our evaluation of this submittal.

B. Why Was This SIP Revision Submitted?

The NMED believes that the Grant County area is now eligible for redesignation because EPA approved New Mexico's SIP in 1982, and the SO₂ monitors in the nonattainment area of Grant County have not recorded exceedances of either the primary or secondary SO₂ NAAQS since 1979.

C. What Is the NAAQS for SO₂?

Under section 109 of the Act, EPA established the NAAQS to protect public health and welfare. The NAAQS address 6 criteria pollutants, which are carbon monoxide, nitrogen dioxide, ozone, lead, particulate matter, and sulfur dioxide (SO₂).

High concentrations of SO₂ affect breathing and may aggravate existing

respiratory and cardiovascular disease. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO₂ is also a primary contributor to acid deposition or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks.

Ambient SO₂ results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters. There are 3 NAAQS for SO₂:

- An annual arithmetic mean of 0.03 ppm (80 ug/m³);
- A 24-hour level of 0.14 ppm (365 ug/m³); and
- A 3-hour level of 0.50 ppm (1300 ug/m³).

The first two standards are primary (health-related) standards, while the 3-hour NAAQS is a secondary (welfare-related) standard. The annual mean standard is not to be exceeded, while the short-term standards are not to be exceeded more than once per year. Our TSD contains the ambient SO₂ monitored values for the Grant County, New Mexico nonattainment area.

D. What Is a SIP?

Section 110 of the Act requires states to develop air pollution regulations and control strategies to ensure that state air quality meets the NAAQS that EPA has established.

Each state must submit these regulations and control strategies to us for approval and incorporation into the federally enforceable SIP. Each federally approved SIP is designed to protect air quality. These SIPs can be extensive, containing state regulations or other enforceable documents and supporting information such as emission inventories, monitoring networks, and modeling demonstrations.

E. What Is the Federal Approval Process for a SIP?

When a state wants to incorporate its regulations into the federally enforceable SIP, the state must formally adopt the regulations and control strategies consistent with state and Federal requirements. This process includes a public notice, a public hearing, a public comment period, and a formal adoption by a state-authorized rulemaking body.

Once a state adopts a rule, regulation, or control strategy, the state may submit the adopted provisions to us and request

that we include these provisions in the federally enforceable SIP. We must then decide on an appropriate Federal action, provide public notice on this action, and seek additional public comment regarding this action. If we receive relevant adverse comments, we must address them prior to taking a final action.

Under section 110 of the Act, when we approve all state regulations and supporting information, those state regulations and supporting information become a part of the federally approved SIP. You can find records of these SIP actions in the Code of Federal Regulations (CFR) at Title 40, part 52, entitled "Approval and Promulgation of Implementation Plans." The actual state regulations that we approved are not reproduced in their entirety in the CFR but are "incorporated by reference," which means that we have approved a given state regulation with a specific effective date.

F. What Does Federal Approval of a SIP Mean to Me?

A state may enforce state regulations before and after we incorporate those regulations into a federally approved SIP. After we incorporate those regulations into a federally approved SIP, both EPA and the public may also take enforcement action against violators of these regulations.

G. What Requirements Must the State Meet for Approval of a Redesignation and How Did the State Meet Them?

1. The State Must Show That the Area Is Attaining the Applicable NAAQS

An area is considered to be in attainment of the SO₂ NAAQS provided that the primary and secondary standards have not been violated within the last three years. Grant County has had two monitors in place that have shown no violations since 1997; these monitors are in Bayard, NM and Hurley, NM. The monitor in Bayard has been in place since 1974 (and has shown no violations since 1979) and the monitor in Hurley has been in place since 1997. These monitors meet the requirements of 40 CFR Parts 53 and 58.

The monitor in Hurley is located in the area of highest concentration for SO₂ within the nonattainment area, as studied by the EPA Regional Office and NMED before deployment of the monitor in 1997. The monitor was placed where modeling indicated the highest concentration was likely to occur. As a result of this modeling, NMED does not have to submit additional material reproving that the data is representative of the point of