for causing or contributing to high 5minute peak SO₂ concentrations. As discussed below and in the part 58 notice, a key element of this strategy will be to relocate existing SO₂ monitors to areas in proximity of point sources of concern. The relocation of monitors is necessary because the existing SO₂ monitoring network is designed to characterize urban ambient air quality associated with 3-hour, 24-hour, and annual SO₂ concentrations. These monitors are not located to measure peak SO₂ concentrations from point sources. As a result, EPA's existing guidance on siting criteria, the spanning of SO₂ instruments, and instrument response time likely leads to underestimates of high 5-minute peak SO₂ concentrations. To address these concerns, EPA is proposing revisions to the ambient air quality surveillance requirements (40 CFR part 58) and proposed certain technical changes to the requirements for Ambient Air Monitoring Reference and Equivalent Methods (40 CFR part 53) in the part 50/ 53 document.

In addition to outlining the targeted implementation strategy, this notice presents EPA's proposed program for implementing the section 303 program and the 5-minute SO2 NAAQS alternative. Regardless of the alternative selected (i.e., retain the existing standards but augment their implementation, establish a new 303 program, or add a new 5-minute NAAQS), the targeted implementation strategy would be used to identify areas that may be subject to high 5-minute SO₂ concentrations. The measures that sources must take if they cause or contribute to such high peaks and the actions that the States must take will vary depending on the proposed alternative, if any, selected.

The following discussion gives statutory background information on the regulatory approach used in addressing air pollution. Under sections 108 and 109 of the Act, EPA is responsible for issuing air quality criteria and for proposing and promulgating NAAQS. Under section 110(a)(1) and part D of title I, the States then have primary responsibility for implementing the NAAQS. In broad outline, each State must develop and submit to EPA a plan that provides for attainment of each NAAQS within certain time limits. The EPA must review the SIP submittal and approve or disapprove its provisions. If States fail to submit required SIP's or submit inadequate SIP's, and the deficiencies are not cured within specified time periods, the States become subject to certain sanctions under section 179, and EPA ultimately

becomes subject to an obligation to promulgate a Federal implementation plan (FiP). For a more complete discussion of the provisions of title I of the Act, see the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990 published in the Federal Register on April 16, 1992 (57 FR 13498).

The 1990 Amendments preserved the existing framework of the SIP process, i.e., States are still responsible for preparing and submitting SIP's, and EPA is still responsible for reviewing and approving or disapproving SIP's. In addition, the 1990 Amendments, among other things, provide EPA with the unilateral authority to designate areas as either attainment, nonattainment or unclassifiable with respect to any NAAQS (see generally, section 107(d)(1)). States with areas designated nonattainment for a NAAQS are required to submit SIP's which provide for attainment of that NAAQS. States can face sanctions and other repercussions if they fail to meet the various SIP requirements of title I.

In general, for each of the proposed regulatory alternatives, the Act may or may not require specific actions on the part of EPA or the States. If the existing NAAQS is retained, then the Act imposes no new SIP requirements on EPA and the States, although EPA will use its discretionary authority to effectuate the Act's protective purposes by requiring States to implement targeted monitoring around sources capable of producing short-term high concentrations of SO₂ to the extent that those sources contribute to ambient concentrations of SO₂. If the existing NAAQS is retained along with a trigger level for implementing an emergency program under section 303, then the State would be principally responsible for developing and implementing the necessary prevention and/or abatement strategies. If a new 5-minute NAAQS is established, States would have to develop and submit SIP's which provide for implementation, maintenance and enforcement of the new NAAQS.

Further discussion of the requirements that are to be met by the States is provided below with regard to each of the additional regulatory alternatives to be considered by EPA.

II. Targeted Implementation Strategy

This section principally proposes EPA's strategy to identify those areas where the potential exists for exceedances of the current SO_2 NAAQS as well as the potential for high 5-minute concentrations of SO_2 . This strategy has two stages. The first stage is to identify potential problem areas

and then to conduct ambient monitoring at those areas. The second stage is to take corrective action should monitoring conducted during the first stage reveal concentrations in excess of the appropriate SO₂ NAAQS or trigger level. To begin this strategy, EPA intends to refocus Agency monitoring resources into those areas with potential 5-minute SO₂ peaks. The development and implementation of this strategy relies on the ability of the States to identify the specific emission and operating characteristics of sources which can contribute to violations of the existing NAAQS as well as contribute to high 5minute SO₂ concentrations. Successful implementation of this strategy will result in either the identification of additional SO₂ problem areas or the conclusion that the ambient SO₂ problem is largely solved. It also allows EPA to apply finite resources in an efficient way where public health is most likely to be jeopardized by air pollution. The EPA intends to pursue this targeted strategy regardless of the outcome of the NAAQS proposal published in the part 50/53 notice and solicits comments on the targeted implementation strategy.

A. Background

1. Modeling

For implementing the current SO₂ program, EPA has historically relied on mathematical dispersion models for predicting air pollutant concentrations for the following needs: (1) For redesignating areas to nonattainment or attainment under section 107 of the Act; (2) for setting emission limits for an attainment strategy as required per 14 section 110(a)(2)(K) and part 40 of the Code of Federal Regulations, § 51.115 (40 CFR 51.115); (3) for predicting locations of maximum concentrations for siting monitors; (4) for determining boundaries of nonattainment areas: (5) for predicting consumption of ambient air increments under prevention of significant deterioration (PSD); and (6) for determining, under nonattainment NSR, if the significance level, used for determining if a major source or modification is considered to cause or contribute to a violation of the NAAQS, is exceeded.

The "Guideline on Air Quality Models (Revised)," EPA-450/2-78-027R, hereinafter referred to as "the Modeling Guideline," has provided a common basis for conducting such modeling. The Modeling Guideline was incorporated into 40 CFR part 51 on July 20, 1993 (58 FR 38816) as appendix W. However, modeling is not currently feasible for predicting 5-minute ambient