

303 program. If a State does not exercise its responsibility under section 303 once a trigger level has been violated, EPA intends to consult with the State prior to taking action itself.

The EPA is proposing to add an Appendix X to 40 CFR part 51 which explains the computations necessary to determine from monitoring data whether the 5-minute trigger level has been exceeded or violated. Appendix X defines several terms, among them, "5-minute hourly maximum," "exceedance," "expected exceedance," and "violation." Appendix X explains the convention used to calculate expected exceedances, which essentially is a procedure which makes an adjustment for missing monitoring data.

In brief, the 5-minute trigger level is not violated when the number of expected exceedances per year is less than or equal to one. In general, this determination is made by recording the number of 5-minute hourly maximum exceedances at a monitoring site for each year, making the adjustment for missing data (if required), averaging the number of exceedances over a 2-year period, and comparing the number calculated to the allowable number of exceedances (one). The 2-year period reduces the likelihood of a source being penalized for a violation that may be attributed to a one-time event. Aside from changes in terminology to make the language appropriate for a section 303 program rather than a NAAQS, the proposed Appendix X is identical to the Appendix I to 40 CFR part 50 for interpreting the 5-minute NAAQS for SO₂ that was proposed in the part 50/53 document. The EPA is soliciting comments on Appendix X.

V. Requirements Associated With New 5-Minute SO₂ NAAQS

The EPA proposed in the part 50/53 document a new primary 5-minute SO₂ NAAQS which would be in addition to the 24-hour and annual primary SO₂ NAAQS. Should this new 5-minute NAAQS be promulgated, EPA intends to initiate the targeted implementation strategy previously described to determine which areas are not meeting the new 5-minute NAAQS. In addition, EPA and the States will need to initially meet statutory requirements under sections 107 and 110. In general, these requirements are that the States must submit their initial suggested designations and statewide SIP's to EPA. Later, if areas are designated or redesignated to nonattainment, then EPA and the States must meet the requirements under section 172. The requirements under sections 107, 110,

and 172 of the Act are discussed in detail below. The rationale for any requirements which are discretionary, such as setting timeframes, or which need interpretation, are also discussed. Since the current annual, 24-hour, and 3-hour NAAQS are retained under this option, all existing requirements, such as SIP submittal and attainment dates, will remain in place as to the current NAAQS.

A. Targeted Implementation Strategy

Should a new 5-minute NAAQS be promulgated, EPA intends to initiate the targeted implementation strategy previously described to determine which areas are not meeting the revised 5-minute NAAQS. And as described, the States should initially attempt to address any violations through compliance inspection and, if necessary, enforcement actions.

Because of the modeling issues discussed previously (II.A.1.), the targeted implementation strategy relies principally on monitoring. The use of models is not advocated at this time for establishing section 107 designations under a 5-minute SO₂ NAAQS due to a lack of evaluation results concerning model performance, or defining the precision and bias of modeled 5-minute ambient SO₂ concentrations. However, models may still be used under a new 5-minute SO₂ NAAQS program for the following purposes:

(1) Models may be useful as a tool for developing control strategies. When evaluating emissions from complex sources, they may provide information on the relative contributions to ambient SO₂ concentrations from various sources of emissions. Receptor modeling may be a useful tool for developing control strategies for complex sources. The use of tracers or "tramp elements" in association with these models would be needed for SO₂ emission sources to determine source locations and relative contributions to ambient SO₂ concentrations.

(2) Models can be and are recommended as a useful tool for evaluating the design of monitoring networks for a 5-minute SO₂ standard. They can provide useful information in a relative sense for determining points of maximum impact providing the characteristics of the emission source are not too complex or uncertain.

B. Designations—Section 107

1. Statutory Requirements

The 1990 Amendments require EPA to promulgate designations, of areas for new or revised NAAQS. Section 107(d)(1)(A) of the Act requires States to submit designations, and section

107(d)(1)(B) requires EPA to promulgate designations of all areas (or portions thereof) with respect to new or revised NAAQS as nonattainment, attainment or unclassifiable. The specific requirements of section 107(d)(1) (A) and (B) of the Act are described below. An area which is designated nonattainment is one that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the NAAQS for the pollutant. An area which is designated attainment is one which meets the NAAQS for the pollutant. An area which is designated unclassifiable is one that cannot be classified on the basis of available information as meeting or not meeting the NAAQS for the pollutant. Also, while section 107(d)(1) provides for States to submit a list of areas designated, it authorizes EPA to modify the designations submitted by the States. Once an area's initial designation is promulgated, any change in the designation status is accomplished pursuant to section 107(d)(3) of the Act.

2. Timeframe for Submittal of Designations by State

As mentioned above, section 107(d)(1)(A) of the Act requires States to submit a list of all areas (or portions thereof) in the State designating them as nonattainment, attainment or unclassifiable for SO₂. States must submit such list of areas (or portions thereof) in a timeframe EPA deems reasonable but not later than 1 year after the effective promulgation date of the new or revised NAAQS. The EPA cannot require the States to submit the list of areas in less than 120 days, however.

The EPA intends to require that the initial SO₂ designations be submitted not later than 1 year from the effective date of promulgation of the revised standard in order to allow the States as much time as possible to gather the necessary data to make the designation determinations. The EPA believes that, in most instances, areas will need to be initially designated unclassifiable due to lack of adequate ambient air monitoring data and the inability to rely on models for predicting 5-minute SO₂ concentrations. By giving the maximum time allowed under the Act, States may have enough time to gather the data needed to make an adequate determination of an area's designation status. Nonetheless, EPA encourages States to submit designations sooner, wherever possible, in order to provide improved protection of public health.