

(e) For a PM<sub>2.5</sub> nonattainment area located in two or more states or jurisdictions, all states and/or jurisdictions in which such area is located shall submit separate attainment date extension requests for the area consistent with the requirements set forth at paragraph (d) of this section.

**§ 51.1006 Optional PM<sub>2.5</sub> precursor demonstrations**

(a) A state may elect to submit to the EPA one or more precursor demonstrations for a specific nonattainment area. The analyses conducted in support of any precursor demonstration must be based on precursor emissions attributed to sources and activities in the nonattainment area.

(1) A comprehensive precursor demonstration must show that emissions of a particular precursor from all existing stationary, area, and mobile sources located in the nonattainment area do not contribute significantly to PM<sub>2.5</sub> levels that exceed the standard in the area. If the state chooses to conduct a comprehensive precursor demonstration, the state must conduct the analysis in paragraph (a)(1)(i) of this section and it may conduct the analysis in paragraph (a)(1)(ii) of this section.

(i) *Concentration-based contribution analysis.* The comprehensive precursor demonstration must evaluate the contribution of a particular precursor to PM<sub>2.5</sub> levels in the area. If the contribution of the precursor to PM<sub>2.5</sub> levels in the area is not significant, based on the facts and circumstances of the area, then the EPA may approve the demonstration.

(ii) *Sensitivity-based contribution analysis.* If the concentration-based contribution analysis does not support a finding of insignificant contribution, based on the facts and circumstances of the area, then the state may choose to submit an analysis evaluating the sensitivity of PM<sub>2.5</sub> levels in the area to a decrease in emissions of the precursor in order to determine whether the resulting air quality changes are significant. If the estimated air quality changes determined in the sensitivity analysis are not significant, based on the facts and circumstances of the area, then the EPA may approve the demonstration.

(iii) If a comprehensive precursor demonstration is approved by the EPA, the state will not be required to control emissions of the relevant precursor from existing sources in the current attainment plan.

(2) A major stationary source precursor demonstration must show that emissions of a particular precursor from all existing major stationary sources located in the nonattainment area do not contribute significantly to PM<sub>2.5</sub> levels that exceed the standard in the area. If the state chooses to conduct a major stationary source precursor demonstration, the state must conduct the analysis in paragraph (a)(2)(i) of this section and it may conduct the analysis in paragraph (a)(2)(ii) of this section.

(i) *Concentration-based contribution analysis.* The major stationary source precursor demonstration must evaluate the contribution of major source emissions of a particular precursor to PM<sub>2.5</sub> levels in the area. If the contribution of the precursor to PM<sub>2.5</sub> levels in the area is not significant, based on the facts and circumstances of the area, then the EPA may approve the demonstration.

(ii) *Sensitivity-based contribution analysis.* If the concentration-based contribution analysis does not support a finding of insignificant contribution, based on the facts and circumstances of the area, then the state may choose to submit an analysis evaluating the sensitivity of PM<sub>2.5</sub> levels in the area to a decrease in emissions of the precursor in order to determine whether the resulting air quality changes are significant. If the estimated air quality changes determined in the sensitivity analysis are not significant, based on the facts and circumstances of the area, then the EPA may approve the demonstration.

(iii) If a major stationary source precursor demonstration is approved by the EPA, the state will not be required to control emissions of the relevant precursor from existing major stationary sources in the current attainment plan.

(3)(i) A NNSR precursor demonstration must evaluate the sensitivity of PM<sub>2.5</sub> levels in the nonattainment area

to an increase in emissions of a particular precursor in order to determine whether the resulting air quality changes are significant. If the estimated air quality changes determined in the sensitivity analysis are not significant, based on the facts and circumstances of the area, the state may use that information to identify new major stationary sources and major modifications of a precursor that will not be considered to contribute significantly to PM<sub>2.5</sub> levels that exceed the standard in the nonattainment area.

(ii) If a NNSR precursor demonstration for a particular PM<sub>2.5</sub> nonattainment area is approved, the state may exempt such new major stationary sources or major modifications of the particular precursor from the requirements for PM<sub>2.5</sub> in §51.165.

(b) If an area with one or more precursor demonstrations approved by the EPA is required to submit another PM<sub>2.5</sub> attainment plan in accordance with §51.1003 of this part, the current precursor demonstration(s) will not apply to the new plan. The state must submit the appropriate updated precursor demonstration(s) if it seeks to exempt sources of a particular precursor from control requirements in the new Serious area attainment demonstration or in the NNSR program for the Serious area.

#### §51.1007 [Reserved]

#### §51.1008 Emissions inventory requirements.

(a) For any nonattainment area initially classified as Moderate, the state shall submit to the EPA all of the following:

(1) A base year inventory for the nonattainment area for all emissions sources that meets the following minimum criteria:

(i) The inventory year shall be one of the 3 years for which monitored data were used for designations or another technically appropriate inventory year if justified by the state in the plan submission.

(ii) The inventory shall include actual emissions of all sources within the nonattainment area.

(iii) The emissions values shall be either annual total emissions, average-

season-day emissions, or both, as appropriate for the relevant PM<sub>2.5</sub> NAAQS. The state shall include as part of the plan a rationale for providing annual or seasonal emissions, and the justification for the period used for any seasonal emissions calculations.

(iv) The inventory shall include direct PM<sub>2.5</sub> emissions, separately reported PM<sub>2.5</sub> filterable and condensable emissions, and emissions of the scientific PM<sub>2.5</sub> precursors, including precursors that are not PM<sub>2.5</sub> plan precursors pursuant to a precursor demonstration under §51.1006.

(v) The state shall report emissions as point sources according to the point source emissions thresholds of the Air Emissions Reporting Requirements (AERR), 40 CFR part 51, subpart A.

(vi) The detail of the emissions inventory shall be consistent with the detail and data elements required by 40 CFR part 51, subpart A.

(2) An attainment projected inventory for the nonattainment area that meets the following minimum criteria:

(i) The year of the projected inventory shall be the most expeditious year for which projected emissions show modeled PM<sub>2.5</sub> concentrations below the level of the NAAQS.

(ii) The emissions values shall be projected emissions of the same sources included in the base year inventory for the nonattainment area (*i.e.*, those only within the nonattainment area) and any new sources. The state shall include in this inventory projected emissions growth and contraction from both controls and other causes during the relevant period.

(iii) The temporal period of emissions shall be the same temporal period (annual, average-season-day, or both) as the base year inventory for the nonattainment area.

(iv) Consistent with the base year inventory for the nonattainment area, the inventory shall include direct PM<sub>2.5</sub> emissions, separately reported PM<sub>2.5</sub> filterable and condensable emissions, and emissions of the scientific PM<sub>2.5</sub> precursors, including precursors that are not PM<sub>2.5</sub> plan precursors pursuant to a precursor demonstration under §51.1006 of this part.