

## Environmental Protection Agency

## § 51.1009

data analysis requirements in 40 CFR part 50, appendix N).

### **§ 51.1006 Redesignation to nonattainment following initial designations for the PM<sub>2.5</sub> NAAQS.**

Any area that is initially designated “attainment/unclassifiable” for the PM<sub>2.5</sub> NAAQS may be subsequently redesignated to nonattainment if ambient air quality data in future years indicate that such a redesignation is appropriate. For any such area that is redesignated to nonattainment for the PM<sub>2.5</sub> NAAQS, any absolute, fixed date that is applicable in connection with the requirements of this part is extended by a period of time equal to the length of time between the effective date of the initial designation for the PM<sub>2.5</sub> NAAQS and the effective date of redesignation, except as otherwise provided in this subpart.

### **§ 51.1007 Attainment demonstration and modeling requirements.**

(a) For any area designated as nonattainment for the PM<sub>2.5</sub> NAAQS, the State must submit an attainment demonstration showing that the area will attain the annual and 24-hour standards as expeditiously as practicable. The demonstration must meet the requirements of § 51.112 and Appendix W of this part and must include inventory data, modeling results, and emission reduction analyses on which the State has based its projected attainment date. The attainment date justified by the demonstration must be consistent with the requirements of § 51.1004(a). The modeled strategies must be consistent with requirements in § 51.1009 for RFP and in § 51.1010 for RACT and RACM. The attainment demonstration and supporting air quality modeling should be consistent with EPA’s PM<sub>2.5</sub> modeling guidance.

(b) *Required time frame for obtaining emissions reductions.* For each nonattainment area, the State implementation plan must provide for implementation of all control measures needed for attainment as expeditiously as practicable, but no later than the beginning of the year prior to the attainment date. Consistent with section 172(c)(1) of the Act, the plan must provide for implementation of all RACM

and RACT as expeditiously as practicable. The plan also must include RFP milestones in accordance with § 51.1009, and control measures needed to meet these milestones, as necessary.

### **§ 51.1008 Emission inventory requirements for the PM<sub>2.5</sub> NAAQS.**

(a) For purposes of meeting the emission inventory requirements of section 172(c)(3) of the Act for nonattainment areas, the State shall, no later than three years after designation:

(1) Submit to EPA Statewide emission inventories for direct PM<sub>2.5</sub> emissions and emissions of PM<sub>2.5</sub> precursors. For purposes of defining the data elements for these inventories, the PM<sub>2.5</sub> and PM<sub>2.5</sub> precursor-relevant data element requirements under subpart A of this part shall apply.

(2) Submit any additional emission inventory information needed to support an attainment demonstration and RFP plan ensuring expeditious attainment of the annual and 24-hour PM<sub>2.5</sub> standards.

(b) For inventories required for submission under paragraph (a) of this section, a baseline emission inventory is required for the attainment demonstration required under § 51.1007 and for meeting RFP requirements under § 51.1009. As determined on the date of designation, the base year for this inventory shall be the most recent calendar year for which a complete inventory was required to be submitted to EPA pursuant to subpart A of this part. The baseline emission inventory for calendar year 2002 or other suitable year shall be used for attainment planning and RFP plans for areas initially designated nonattainment for the PM<sub>2.5</sub> NAAQS in 2004–2005.

### **§ 51.1009 Reasonable further progress (RFP) requirements.**

(a) Consistent with section 172(c)(2) of the Act, State implementation plans for areas designated nonattainment for the PM<sub>2.5</sub> NAAQS must demonstrate reasonable further progress as provided in § 51.1009(b) through (h).

(b) If the State submits to EPA an attainment demonstration and State implementation plan for an area which demonstrates that it will attain the PM NAAQS within five years of the

date of designation, the State is not required to submit a separate RFP plan. Compliance with the emission reduction measures in the attainment demonstration and State implementation plan will meet the requirements for achieving reasonable further progress for the area.

(c) For any area for which the State submits to EPA an approvable attainment demonstration and State implementation plan that demonstrates the area needs an attainment date of more than five years from the date of designation, the State also must submit an RFP plan. The RFP plan must describe the control measures that provide for meeting the reasonable further progress milestones for the area, the timing of implementation of those measures, and the expected reductions in emissions of direct PM<sub>2.5</sub> and PM<sub>2.5</sub> attainment plan precursors. The RFP plan is due to EPA within three years of the date of designation.

(1) For any State that submits to EPA an approvable attainment demonstration and State implementation plan justifying an attainment date of more than five and less than nine years from the date of designation, the RFP plan must include 2009 emissions milestones for direct PM<sub>2.5</sub> and PM<sub>2.5</sub> attainment plan precursors demonstrating that reasonable further progress will be achieved for the 2009 emissions year.

(2) For any area that submits to EPA an approvable attainment demonstration and State implementation plan justifying an attainment date of nine or ten years from the date of designation, the RFP plan must include 2009 and 2012 emissions milestones for direct PM<sub>2.5</sub> and PM<sub>2.5</sub> attainment plan precursors demonstrating that reasonable further progress will be achieved for the 2009 and 2012 emissions years.

(d) The RFP plan must demonstrate that in each applicable milestone year, emissions will be at a level consistent with generally linear progress in reducing emissions between the base year and the attainment year.

(e) For a multi-State nonattainment area, the RFP plans for each State represented in the nonattainment area must demonstrate RFP on the basis of common multi-State inventories. The

States within which the area is located must provide a coordinated RFP plan. Each State in a multi-State nonattainment area must ensure that the sources within its boundaries comply with enforceable emission levels and other requirements that in combination with the reductions planned in other state(s) will provide for attainment as expeditiously as practicable and demonstrate reasonable further progress.

(f) In the benchmark RFP plan, the State must identify direct PM<sub>2.5</sub> emissions and PM<sub>2.5</sub> attainment plan precursors regulated under the PM<sub>2.5</sub> attainment plan and specify target emission reduction levels to be achieved during the milestone years. In developing the benchmark RFP plan, the State must develop emission inventory information for the geographic area included in the plan and conduct the following calculations:

(1) For direct PM<sub>2.5</sub> emissions and each PM<sub>2.5</sub> attainment plan precursor addressed in the attainment strategy, the full implementation reduction is calculated by subtracting the full implementation inventory from the baseline year inventory.

(2) The “milestone date fraction” is the ratio of the number of years from the baseline year to the milestone inventory year divided by the number of years from the baseline year to the full implementation year.

(3) For direct PM<sub>2.5</sub> emissions and each PM<sub>2.5</sub> attainment plan precursor addressed in the attainment strategy, a benchmark emission reduction is calculated by multiplying the full implementation reduction by the milestone date fraction.

(4) The benchmark emission level in the milestone year is calculated for direct PM<sub>2.5</sub> emissions and each PM<sub>2.5</sub> attainment plan precursor by subtracting the benchmark emission reduction from the baseline year emission level. The benchmark RFP plan is defined as a plan that achieves benchmark emission levels for direct PM<sub>2.5</sub> emissions and each PM<sub>2.5</sub> attainment plan precursor addressed in the attainment strategy for the area.

(5) In comparing inventories between baseline and future years for direct

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PM<sub>2.5</sub> emissions and each PM<sub>2.5</sub> attainment plan precursor, the inventories must be derived from the same geographic area. The plan must include emissions estimates for all types of emitting sources and activities in the geographic area from which the emission inventories for direct PM<sub>2.5</sub> emissions and each PM<sub>2.5</sub> attainment plan precursor addressed in the plan are derived.

(6) For purposes of establishing motor vehicle emissions budgets for transportation conformity purposes (as required in 40 CFR part 93) for a PM<sub>2.5</sub> nonattainment area, the State shall include in its RFP submittal an inventory of on-road mobile source emissions in the nonattainment area.

(g) The RFP plan due three years after designation must demonstrate that emissions for the milestone year are either:

(1) At levels that are roughly equivalent to the benchmark emission levels for direct PM<sub>2.5</sub> emissions and each PM<sub>2.5</sub> attainment plan precursor to be addressed in the plan; or

(2) At levels included in an alternative scenario that is projected to result in a generally equivalent improvement in air quality by the milestone year as would be achieved under the benchmark RFP plan.

(h) The equivalence of an alternative scenario to the corresponding benchmark plan must be determined by comparing the expected air quality changes of the two scenarios at the design value monitor location. This comparison must use the information developed for the attainment plan to assess the relationship between emissions reductions of the direct PM<sub>2.5</sub> emissions and each PM<sub>2.5</sub> attainment plan precursor addressed in the attainment strategy and the ambient air quality improvement for the associated ambient species.

### **§51.1010 Requirements for reasonably available control technology (RACT) and reasonably available control measures (RACM).**

(a) For each PM<sub>2.5</sub> nonattainment area, the State shall submit with the attainment demonstration a SIP revision demonstrating that it has adopted all reasonably available control measures (including RACT for stationary

sources) necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements. The SIP revision shall contain the list of the potential measures considered by the State, and information and analysis sufficient to support the State's judgment that it has adopted all RACM, including RACT.

(b) In determining whether a particular emission reduction measure or set of measures must be adopted as RACM under section 172(c)(1) of the Act, the State must consider the cumulative impact of implementing the available measures. Potential measures that are reasonably available considering technical and economic feasibility must be adopted as RACM if, considered collectively, they would advance the attainment date by one year or more.

### **§51.1011 Requirements for mid-course review.**

(a) Any State that submits to EPA an approvable attainment plan for a PM<sub>2.5</sub> nonattainment area justifying an attainment date of nine or ten years from the date of designation also must submit to EPA a mid-course review six years from the date of designation.

(b) The mid-course review for an area must include:

(1) A review of emissions reductions and progress made in implementing control measures to reduce emissions of direct PM<sub>2.5</sub> and PM<sub>2.5</sub> attainment plan precursors contributing to PM<sub>2.5</sub> concentrations in the area;

(2) An analysis of changes in ambient air quality data for the area;

(3) Revised air quality modeling analysis to demonstrate attainment;

(4) Any new or revised control measures adopted by the State, as necessary to ensure attainment by the attainment date in the approved SIP of the nonattainment area.

### **§51.1012 Requirement for contingency measures.**

Consistent with section 172(c)(9) of the Act, the State must submit in each attainment plan specific contingency measures to be undertaken if the area fails to make reasonable further progress, or fails to attain the PM<sub>2.5</sub> NAAQS by its attainment date. The