

Region III Plan Summary

Title: Redesignation of the Harrisburg-Lebanon-Carlisle-York Nonattainment Areas to Attainment for the 1997 Annual and 2006 24-Hour Fine Particulate Matter Standard

Federal Register Dates: (Final Rule) - December 8, 2014 79 FR 72552; with two corrections dated February 11, 2015 80 FR 7540 and April 28, 2015 80 FR 23449; Proposed Rule - October 17, 2014 79 FR 62389

EPA Effective date: The final and correcting rules were effective on the respective dates of publication

State Submittal Date: April 22, 2014

Affected Area: Harrisburg Carlisle-Lebanon-York, Pennsylvania

Key Features:

EPA found that the Areas meet the requirements for redesignation for the 1997 annual and the 2006 24-hour PM_{2.5} NAAQS under section 107(d)(3)(E) of the CAA. EPA approved Pennsylvania's requests to change the legal definition for the Harrisburg and York Areas from nonattainment to attainment for the 1997 annual PM_{2.5} NAAQS, and the Harrisburg-York Area for the 2006 24-hour PM_{2.5} NAAQS. EPA also approved the associated maintenance plans for the Areas as revisions to the Pennsylvania SIP for the 1997 annual and the 2006 24-hour PM_{2.5} NAAQS, including the 2017 and 2025 PM_{2.5} and NO_x MVEBs for the Areas.

Monitoring Network:

Pennsylvania's maintenance plans include a commitment to continue to operate its EPA-approved monitoring network, as necessary to demonstrate ongoing compliance with the NAAQS. Pennsylvania currently operates a PM_{2.5} monitor in each of the counties in the Harrisburg Area, namely Cumberland, Dauphin, and Lebanon Counties, and a PM_{2.5} monitor on Hill Street in the York Area. In its April 22, 2014 submittals, Pennsylvania stated that it will consult with EPA prior to making any necessary changes to the network and will continue to quality assure the monitoring data in accordance with the requirements of 40 CFR part 58.

Contingency Plan Triggers and Contingency Measures:

A first level response is triggered for when the annual mean PM_{2.5} concentration exceeds 15.5 µg/m³ in a single calendar year within the Areas, or if the periodic emissions inventory for the Areas exceed the attainment year inventory by more than ten percent. The first level response will consist of a study to determine if the emissions trends show increasing concentrations of PM_{2.5}, and whether this trend is likely to continue. If it is determined through the study that action is necessary to reverse a trend of emissions increases, Pennsylvania will, as expeditiously as possible, implement necessary and appropriate control measures to reverse the trend.

A second level response will be prompted if the two-year average of the annual mean concentration exceeds 15.0 µg/m³ within the Areas. This would trigger an evaluation of the conditions causing the exceedence, whether additional emission control measures should be implemented to prevent a violation of the standard, and analysis of potential measures that could be implemented to prevent a violation. Pennsylvania would then begin its adoption process to implement the measures as expeditiously as practicable.

Pennsylvania’s candidate contingency measures include the following: (1) A regulation based on the Ozone Transport Commission (OTC) Model Rule to update requirements for consumer products; (2) a regulation based on the Control Techniques Guidelines (CTG) for industrial 65 cleaning solvents; (3) voluntary diesel projects such as diesel retrofit for public or private local onroad or offroad fleets, idling reduction technology for Class 2 yard locomotives, and idling reduction technologies or strategies for truck stops, warehouses, and other freight-handling facilities; (4) promotion of accelerated turnover of lawn and garden equipment, focusing on commercial equipment; and (5) promotion of alternative fuels for fleets, home heating and agricultural use. Pennsylvania’s rulemaking process and schedule for adoption and implementation of any necessary contingency measure is shown in the SIP submittals as being 18 months from PADEP’s approval to initiate rulemaking. For all of the reasons discussed in this section, EPA approved Pennsylvania’s 1997 annual and 2006 24-hour PM_{2.5} maintenance plans for the Harrisburg, York, and Harrisburg-York Areas as meeting the requirements of section 175A of the CAA

Schedule:

Pennsylvania’s rulemaking process and schedule for adoption and implementation of any necessary contingency measure is shown in the SIP submittals as being 18 months from PADEP’s approval to initiate rulemaking. For all of the reasons discussed in this section, EPA approved Pennsylvania’s 1997 annual and 2006 24-hour PM_{2.5} maintenance plans for the Harrisburg, York, and Harrisburg-York Areas as meeting the requirements of section 175A of the CAA.

Emission Inventories:

| Table 4. Harrisburg Area 2007 Emissions by Source Sector Sector | PM10 | PM2.5 | NOx | SO2 | NH3 | VOC |
|--|---------------|--------------|---------------|--------------|--------------|---------------|
| Point | 1,260 | 584 | 4,786 | 1,808 | 17 | 840 |
| Area | 8,944 | 3,059 | 2,194 | 3,216 | 6,935 | 8,768 |
| Nonroad | 369 | 346 | 4,443 | 188 | 4 | 4,489 |
| Onroad | 1,013 | 866 | 25,194 | 175 | 347 | 8,220 |
| Total | 11,586 | 4,855 | 36,617 | 5,388 | 7,302 | 22,317 |

| Table 5. York Area 2007 Emissions by Source Sector Sector | PM10 | PM2.5 | NOx | SO2 | NH3 | VOC |
|--|---------------|--------------|---------------|----------------|--------------|---------------|
| Point | 3,556 | 2,462 | 22,164 | 115,901 | 80 | 1,320 |
| Area | 8,093 | 2,394 | 1,680 | 1,684 | 3,316 | 5,956 |
| Nonroad | 214 | 202 | 2,660 | 135 | 2 | 1,833 |
| Onroad | 430 | 358 | 10,684 | 78 | 161 | 4,810 |
| Total | 12,292 | 5,417 | 37,189 | 117,798 | 3,559 | 13,920 |

| Table 6. Harrisburg- York Area 2007 Emissions by Source Sector Sector | PM10 | PM2.5 | NOx | SO2 | NH3 | VOC |
|--|---------------|---------------|---------------|----------------|---------------|---------------|
| Point | 4,815 | 3,046 | 26,950 | 117,709 | 96 | 2,160 |
| Area | 17,037 | 5,452 | 3,874 | 4,900 | 10,250 | 14,724 |
| Nonroad | 582 | 548 | 7,104 | 323 | 6 | 6,322 |
| Onroad | 1,443 | 1,225 | 35,878 | 254 | 509 | 13,030 |
| Total | 23,878 | 10,271 | 73,806 | 123,185 | 10,861 | 36,236 |