

Region III Plan Summary
Approval of the 2011 Base Year Emissions Inventory for the 2008 Lead National Ambient Air Quality Standard for the Lyons Nonattainment Area

Title: Approval of the 2011 Base Year Emissions Inventory for the 2008 Lead National Ambient Air Quality Standard for the Lyons Nonattainment Area

Federal Register Dates: Direct Final Rule 80 FR 32474 (June 9, 2015) Proposed Rule 80 FR 32522 (June 9, 2015)

EPA Effective date: August 10, 2015

State Submittal Date: February 9, 2015

Affected Area: Lyons, PA Nonattainment Area (Berks County and is bounded by Kutztown Borough, Lyons Borough, Maxatawny Township, and Richmond Township, was designated nonattainment for the 2008 Pb NAAQS. See 40 CFR 81.339.)

Summary of the Plan

The Environmental Protection Agency (EPA) took a direct final action to approve a revision to the Commonwealth of Pennsylvania (Pennsylvania) State Implementation Plan (SIP). EPA is proposing to approve the 2011 base year emissions inventory SIP revision submittal for the 2008 lead National Ambient Air Quality Standards (NAAQS). The base year emissions inventory SIP revision was submitted by the Pennsylvania Department of Environmental Protection (PADEP) on February 9, 2015 to meet the requirements of the Clean Air Act (CAA) for the Lyons 2008 lead NAAQS nonattainment area (hereafter referred to as the “Lyons Area” or “Area”).

On November 12, 2008 (73 FR 66964), EPA revised the lead NAAQS, lowering the level from 1.5 micrograms per cubic meter (mg/m³) to 0.15 mg/m³ calculated over a three-month rolling average. EPA established the NAAQS based on significant evidence and numerous health studies demonstrating that serious health effects are associated with exposures to lead emissions. Following promulgation of a new or revised NAAQS, EPA is required by the CAA to designate areas throughout the United States as attaining or not attaining the NAAQS; this designation process is described in section 107(d)(1) of the CAA. On November 22, 2010 (75 FR 71033), EPA promulgated initial air quality designations for the 2008 lead NAAQS, which became effective on December 31, 2010, based on air quality monitoring data for calendar years 2007–2009, where there was sufficient data to support a nonattainment designation. Designations for all remaining areas were completed on November 22, 2011, based on air quality monitoring data for calendar years 2008–2010. Effective December 31, 2010, the Lyons Area was designated as nonattainment for the 2008 lead NAAQS. This designation triggered a requirement for Pennsylvania to submit a SIP revision with a plan for how the Lyons Area would attain the 2008 lead NAAQS as expeditiously as practicable, but no later than December 31, 2015. Designation of an area as nonattainment starts the process for a state to develop and submit to EPA a SIP revision under title I, part D of the CAA. This SIP revision must include, among other elements, a demonstration of how the NAAQS will be attained in the nonattainment area as expeditiously as practicable, but no later than the date required by the CAA, together with a

base year emissions inventory, reasonably available control measures (RACM), a reasonable further progress (RFP) plan, and contingency measures for failure to meet RFP and attainment deadlines. Under CAA section 172(b), a state has up to three years after an area's designation as nonattainment to submit its SIP revision to EPA. On December 29, 2014 (79 FR 77911), EPA took final action to determine that the Lyons Area (comprised of Kutztown Borough, Lyon Borough, Maxatawny Township, and Richmond Township) has ambient air quality monitoring data that shows the Area meets the 2008 lead NAAQS.

This clean data determination was based upon quality assured, quality controlled and certified ambient air monitoring data that shows the Area has monitored attainment of the 2008 lead NAAQS based on the calendar years 2009–2011 data. Pursuant to EPA's Clean Data Policy, once EPA finalizes a clean data determination, the requirements for the Area to submit an attainment demonstration, RACM, a RFP plan, and contingency measures for failure to meet RFP and attainment deadlines are suspended for so long as the Area continues to attain the 2008 lead NAAQS. Since 1995, EPA has applied its interpretation under the Clean Data Policy in many rulemakings, suspending certain attainment-related planning requirements for individual areas, based on a determination of attainment. However, EPA noted that a final determination of attainment does not suspend requirements not related to attaining the NAAQS, such as the emissions inventory requirement found in CAA section 172(c)(3), which requires submission and approval of an inventory of actual emissions of lead from all sources in the nonattainment area (i.e., base year emissions inventory).

Emissions Inventory Requirements

States are required under section 172(c)(3) of the CAA to develop comprehensive, accurate and current emissions inventories of all sources of the relevant pollutant or pollutants in the nonattainment area. These inventories provide a detailed accounting of all emissions and emission sources by precursor or pollutant. In the November 12, 2008 lead NAAQS rulemaking, EPA finalized the guidance related to the emissions inventories requirements. The current regulations are located at 40 CFR 51.117(e).

EPA Analysis of the Lyons 2011 Lead Base Year Emissions Inventory

EPA guidance for emissions inventory development provides that actual emissions should be used for purposes of the base year inventory. On February 9, 2015, Pennsylvania submitted to EPA the 2011 base year emissions inventory for the lead point sources located within the Lyons Area. The Lyons Area has the following point sources of lead emissions: East Penn Manufacturing Company's Richmond Township Facility; East Penn Manufacturing Company's Kutztown Facility; and McConway & Torley Kutztown Foundry. PADEP requires larger emitting facilities to report production figures and emission calculations annually.

Throughput data are multiplied by emission factors based on source classification codes (SCC) to develop emission estimates. PADEP submitted EPA's 2011 National Emissions Inventory (NEI) v2 data for nonpoint source lead emissions. The nonpoint source values for the Lyons Area were calculated using Berks County data apportioned by population, of which 4.1 percent (%) is included in the Lyons Area. EPA reviewed the results, procedures, and methodologies for Pennsylvania's submission and found them to be reasonable for calculating the lead base year inventory for CAA section 172(c)(3) and in accordance with 40 CFR

1.117(e). A more detailed description of the SIP submittal and EPA's evaluation is included in a Technical Support Document (TSD) prepared in support of this rulemaking action.

Final Action

EPA approved Pennsylvania's submission consisting of the base year emissions inventory for the Lyons Area for the 2008 lead NAAQS. This submittal consisted of the 2011 base year inventories for all relevant sources in the Lyons, Pennsylvania nonattainment area for the pollutant lead (Pb).

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