

Region 3 Plan Summary
Warren County, Pennsylvania Sulfur Dioxide (SO₂) Maintenance Plan

Title: Attainment Plan and Contingency Measures for the Warren County SO₂ Attainment Area

Federal Register Dates: April 9, 2004, 69 FR 18853 (Proposed Rule); July 1, 2004, 69 FR 39860 (Final Rule).

EPA Effective Date: August 2, 2004.

State Submittal Date: March 15, 2004, as amended on May 7, 2004.

Affected Areas: The following municipalities in Warren County: Conewango, Glade, and Pleasant Townships; City of Warren.

Summary of the Plan: On March 15, 2004 and May 7, 2004, the PADEP submitted a redesignation request and maintenance plan for the Warren County SO₂ nonattainment area, along with permit emission limitations for two stationary sources in Warren County. EPA had previously approved an attainment demonstration for the Warren County SO₂ nonattainment areas and permit emission limitations for two individual sources in Warren County as a State Implementation Plan (SIP) revision for the area through a direct final rule published on January 17, 2003 (68 FR 2454), effective March 18, 2003.

Pennsylvania's Prevention of Significant Deterioration (PSD) program was approved by EPA on August 21, 1984 (49 FR 33128). The PSD program requires new sources to implement Best Available Control Technology (BACT) and limits a new source's allowable impact on the environment. EPA granted limited approval of Pennsylvania's revised new source review (NSR) program and published a final rule in the Federal Register on December 7, 1997 (62 FR 64722). On October 19, 2001, EPA subsequently converted the limited approval to full approval for most areas of Pennsylvania, including the Warren County SO₂ nonattainment area.

The year 2015 was determined to be the appropriate year for preparation of this maintenance plan. Eight years following redesignation, Pennsylvania will submit a revised plan that will ensure attainment through 2025, pursuant to section 175A(b) of the CAA.

The improvement in air quality in the Warren County SO₂ areas is due to permanent and SIP-enforceable emissions reductions. Sulfur dioxide emissions from the United Refinery are capped by federally-enforceable permit conditions. The Reliant Energy power station has shut down and banked emission reduction credits (ERCs). If these credits were used for a new unit, the emission rate used in the attainment modeling demonstration would be the applicable emission rate limit. Therefore, the total potential SO₂ emission rates in the area are capped at the attainment demonstration levels. A PSD analysis would require that any new units be capped at

rates below the level required to ensure continued attainment. Allowable emission inventories for 2003 and 2015 show that emissions over the 10-year planning period covered by the maintenance plan will not lead to any exceedances of the standard.

Maximum Potential Emissions: 2003 and 2015

This section contains the detailed SO₂ emissions data for 2003 and 2015. No growth in emissions is possible due to the caps on existing stationary sources that are contained in a SIP revision approved by EPA (68 FR 2454) effective March 18, 2003, and the permitting requirements for potential new sources that would require NSR offsets.

2003 Base Year Emissions (emissions used in the attainment demonstration)

Source	2003 Base Year Emissions in Tons Per Year (tpy)
Reliant Energy	5197 tpy/4620 lbs/hr
United Refining (permitted allowable)	3946 tpy/ 903 lbs/hr (maximum rate)
Total	9143 tpy/5523 lbs/hr

2015 Projected Emissions

The maximum projected emissions are quantified below, and are considerably lower than the level of emissions used in the attainment demonstration. The Reliant Energy facility has been permanently shut down since September 28, 2002, and no new SO₂ emitting plants are anticipated. However, if a new plant were proposed within the five-year PSD netting window, the maximum emissions allowable would be limited to 3998 tpy, based on an offset ratio of 1.3 to 1 for the emissions. The maximum amount of emissions that could be permitted by the use of the ERCs from the Reliant Energy facility as offsets would be 3998 tpy at a maximum rate of 583 g/s or 2.31 tons/hr (the rate used in the attainment modeling). These are the only ERCs available for use in the area, and expire as offsets ten years from the shutdown date, or five years from shutdown if the emission reductions are utilized in an applicability determination.

Source	Emissions in Tons Per Year (tpy)
Reliant Energy ECCS	3998 tpy @ 4620 lbs/hr
United Refining	3946 tpy @ 903 lbs/hr
Maximum Total Emissions	7944 tpy @ 5523 lbs/hr

Pennsylvania will track the attainment status of the NAAQS for SO₂ in the Warren County area by reviewing air quality and emissions data during the maintenance period. No growth in

emissions is possible due to the caps on existing stationary sources that are contained in the SIP.

EPA approval of a transportation conformity SIP revision for these areas is not required for redesignation because the nature of the areas' previous SO₂ nonattainment problem has been determined to be overwhelmingly attributable to stationary sources. Sulfur dioxide emissions from area and mobile sources are insignificant in comparison to the emissions from stationary sources and estimated background concentrations.

Contingency Measures: If an exceedance of an SO₂ NAAQS occurs, Pennsylvania will expeditiously investigate and determine the source(s) that caused the exceedance and/or violation and enforce any SIP or permit limit that is violated. In the event that all sources are found to be in compliance with the applicable SIP and permit emission limits, Pennsylvania shall perform the necessary analysis to determine the cause(s) of the exceedance, and determine what additional control measures are necessary to impose on the area's sources to continue to maintain attainment of the NAAQS. Pennsylvania shall inform any affected source(s) of the potential need for additional control measures. If there is a violation of the NAAQS for SO₂, Pennsylvania shall, within six months of the violation, issue a permit(s) imposing additional control measures and requiring compliance with those additional control measures no later than 18 months from the date of the recorded violation. The additional control measures will be submitted to EPA for approval and incorporation into the SIP.

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