

Notice of Public Comment Period

Sections 110(a) (1) and (2) of the Clean Air Act (CAA) require states to submit revisions to their State Implementation Plans (SIPs) within three years after the promulgation of a new or revised National Ambient Air Quality Standard (NAAQS) to demonstrate that the state meets the procedural, timing and infrastructure requirements necessary for implementing the NAAQS. In January 2013 and June 2014, the Rhode Island Department of Environmental Management submitted SIP amendments that fulfilled all but two of the requirements of those sections for the revised NAAQS for sulfur dioxide (SO₂) and nitrogen dioxide (NO₂), respectively, which were promulgated in 2010.

The 2013 and 2014 SIP submittals did not fulfill the requirements of Section 110(a)(2)(D)(i)(I) of the CAA, which addresses the effect of emissions in one state on nonattainment and maintenance of attainment of the NAAQS in downwind states (interstate transport). The Rhode Island Department of Environmental Management, Office of Air Resources, is now accepting public comments on the proposed "Section 110(a)(2)(D)(i)(I) Transport Certification for the 2010 National Ambient Air Quality Standards for Sulfur Dioxide and Nitrogen," which will fulfill those requirements.

The proposed SIP revision is available on the Office of Air Resources' web page at: www.dem.ri.gov/programs/benviron/air/pdf/siprev15r.pdf.

Comments on this document will be accepted until 4:00 PM on October 9, 2015 and can be submitted electronically or in hard copy to:

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**Section 110(a)(2)(D)(i)(I) Transport Certification for the
2010 National Ambient Air Quality Standards
for Sulfur Dioxide and Nitrogen Dioxide**

**Rhode Island Department of Environmental Management
Office of Air Resources**



**Posted for Public Comment: September 8, 2015
Submitted as a SIP Revision:**

Section 110(a)(2)(D)(i)(I) Transport Certification for the
2010 National Ambient Air Quality Standards
for Sulfur Dioxide and Nitrogen Dioxide

Sections 110(a)(1) and (2) of the Clean Air Act (CAA) require states to submit a State Implementation Plan (SIP) amendment to address the procedural, timing and infrastructure elements identified in those sections within three years of promulgation of a new National Ambient Air Quality Standard (NAAQS). The U.S. Environmental Protection Agency (EPA) revised the primary NAAQS for nitrogen dioxide (NO₂) on January 22, 2010 and the primary NAAQS for sulfur dioxide (SO₂) on June 2, 2010 to include one-hour average standards for those pollutants. The Rhode Island Department of Environmental Management (RI DEM) submitted the “Rhode Island Infrastructure Certification for the 2010 One-Hour National Ambient Air Quality Standard for Sulfur Dioxide” to the EPA on January 2, 2013 and the “Infrastructure Certification for the 2010 One-Hour National Ambient Air Quality Standard for Nitrogen Dioxide” on June 27, 2014. The EPA has determined that, with those SIP amendments, Rhode Island completed all but two of the elements required by Section 110(a)(1) and (2) for the 2010 NO₂ and SO₂ NAAQS.¹

The elements not fulfilled by the January 2013 and June 2014 submittals, Prongs 1 and 2 of Section 110(a)(2)(D)(i)(I), address the effect of emissions in one state on nonattainment and maintenance of attainment, respectively, in downwind states (interstate transport). In a November 19, 2012 memo², the EPA stated that it would not issue deficiency findings for those elements, the so-called “Good Neighbor” Provision, until litigation related to the vacatur of the Cross-State Air Pollution Rule (CSAPR) was resolved. Since a decision on that litigation has since been reached, RI DEM is now submitting this demonstration as a SIP revision to address the Good Neighbor elements of Section 110(a)(2)(D)(i)(I).

Although RI DEM did not formally address interstate transport in the 2013 and 2014 infrastructure SIP submittals, the NO₂ infrastructure SIP noted that:

...the EPA has designated all areas of the US as unclassifiable/attainment for the 2010 one-hour NO₂ NAAQS based on current monitoring data and the NAAQS analysis indicates that monitored violations are most likely to occur in close proximity to major roadways. Therefore, emissions from local mobile sources, rather than interstate transport, are likely to be the significant determinant of elevated short-term NO₂.

Similarly, the 2014 SO₂ infrastructure SIP stated that:

Rhode Island is not addressing CAA Section 110(a)(2)(D)(i)(I), which requires the evaluation of the effect of emissions in one state on nonattainment in downwind states (Good Neighbor SIPs), in this submittal.... Note, however, that, in a February 6, 2013 policy discussion entitled “Next Steps for Area Designations and Implementation of the Sulfur Dioxide National Ambient Air Quality Standard,” EPA cited actual annual

¹ USEPA, Status of SIP Infrastructure Requirements, Rhode Island Infrastructure Requirements by Pollutant, Rhode Island, http://www.epa.gov/airquality/urbanair/sipstatus/reports/ri_infrabypoll.html

² Memo from Gina McCarthy, Assistant Administrator, EPA, to Air Division Directors, “Next Steps for Pending Redesignation Requests and State Implementation Plan Actions Affected by the Recent Court Decision Vacating the 2011 Cross-State Air Pollution Rule, November 19, 2012. http://www.epa.gov/airtransport/pdfs/CSAPR_Memo_to_Regions.pdf

emissions of 2,000 tons of SO₂ as a threshold that may be used to identify significant sources of SO₂ when determining whether an area is in attainment of the 1-hour SO₂ NAAQS. Since the largest SO₂ source in Rhode Island emitted 352 tons of that pollutant in 2011 and, due to the installation of control equipment, those emissions will be further reduced beginning in 2013, it is very unlikely that Rhode Island sources contribute significantly to one-hour SO₂ violations in Rhode Island, let alone in other states.

Recent data support RI DEM's assertion that the State does not contribute significantly to nonattainment or interfere with maintenance of the 2010 NAAQS for NO₂ and SO₂. As discussed above, all areas of the United States have been designated as unclassifiable/attainment for the 2010 one-hour NO₂ NAAQS. Monitoring data show continuing compliance with that standard in New England; the one-hour NO₂ design values for the most recent three-year period, 2012 – 2014, for all sites in Rhode Island and other New England states were less than 50% of the NO₂ NAAQS of 100 ppb. Therefore, Rhode Island emissions clearly do not contribute to nonattainment or interfere with maintenance of attainment of the NO₂ NAAQS in other states.

Similarly, ambient SO₂ levels currently measured in Rhode Island and in downwind and adjacent states are substantially below the 2010 SO₂ one-hour average NAAQS. In July 2013, the EPA designated 29 areas in 16 states as nonattainment for the one-hour SO₂ NAAQS, based on monitored exceedances of that standard, 75 ppb. The areas designated as nonattainment include one area in New England, Central New Hampshire. Monitored SO₂ levels in Central New Hampshire have since declined; the 2012–2014 one-hour SO₂ design value for that area was only 23 ppb, 31% of the NAAQS.³ The highest 2012-2014 one-hour SO₂ design value in New England, 47 ppb, 63% of the NAAQS, was measured by a monitor in Fall River, MA, near the Brayton Point coal-fired power plant in Somerset, MA. SO₂ levels measured by that monitor decreased significantly in 2014 (the 98th percentile one-hour value in 2014 was 13.4 ppb), a decline that is likely to continue if the Brayton Point facility ceases operation in early 2017, as planned.

On August 10, 2015, EPA Administrator Gina McCarthy signed the “Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard (NAAQS).” That rule specifies modeling and monitoring requirements for characterization of air quality in areas with large sources of SO₂ emissions to determine whether those areas are in attainment of the 2010 NAAQS. Consistent with the 2013 policy discussion memo cited in the 2014 SO₂ infrastructure SIP, the 2015 Data Requirements Rule requires such analyses only for sources that emit at least 2,000 tons per year of SO₂, except in special circumstances. Since the largest SO₂ source in Rhode Island, Rhode Island Hospital, emitted only 60 tons of SO₂ in 2014 (3% of the 2,000 ton threshold), Rhode Island is not required to conduct additional monitoring or modeling analyses to demonstrate compliance with the SO₂ NAAQS in the State or in downwind areas.

Since there are no large sources of SO₂ emissions in Rhode Island and monitored SO₂ levels in adjacent and downwind states are substantially below the 2010 SO₂ NAAQS, Rhode clearly is not contributing to nonattainment or interfering with maintenance of attainment in downwind and adjacent states. Note also that, in June 2014, RI DEM amended Rhode Island Air Pollution Control Regulation No. 8 to further limit the sulfur content of fuel oil sold and used in the State. The limits take effect in two phases; the first phase was effective in July 2014 and a second phase will be effective in July 2018. Those limitations will ensure that Rhode Island's SO₂ emissions continue to have no significant impact on downwind nonattainment and maintenance areas in future years.

³ EPA Design Values, <http://www.epa.gov/airtrends/values.html>

The submittal of this document to the EPA as an amendment to the Rhode Island SIP fulfills the “Good Neighbor” Provision requirements in Section 110(a)(2)(D)(i)(I) of the CAA and completes Rhode Island’s fulfillment of the elements specified in Sections 110(a) (1) and (2) of the CAA for the 2010 NO₂ and SO₂ NAAQS. A notice of a public comment period and the opportunity to request a public hearing on the Section 110(a)(2)(D)(i)(I) Transport Certification for the 2010 National Ambient Air Quality Standard for Sulfur Dioxide and Nitrogen Dioxide was posted on the web site of the Rhode Island Department of Environmental Management (RI DEM) and sent electronically to the RI DEM Office of Air Resource’s mailing list on September XX, 2015. Comments were accepted through October XX, 2015.