6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R10-OAR-2016-0590; FRL-9977-06-Region 10]

Air Plan Approval; AK; Interstate Transport Requirements for the 2010 Nitrogen Dioxide and Sulfur Dioxide National Ambient Air Quality Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve the State Implementation Plan (SIP) submittal from the Alaska Department of Environmental Conservation (Alaska DEC) demonstrating that the SIP meets certain interstate transport requirements of the Clean Air Act (CAA) for the National Ambient Air Quality Standards (NAAQS) promulgated in 2010 for nitrogen dioxide (NO_2) and sulfur dioxide (SO_2). The EPA proposes to determine that Alaska's SIP contains adequate provisions to ensure that air emissions in Alaska do not significantly contribute to nonattainment or interfere with the maintenance of the 2010 NO_2 and SO_2 NAAQS in any other state.

DATES: Comments must be received on or before [**insert date 30 days after date of publication in the Federal Register**].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R10-OAR-2016-0590, at *https://www.regulations.gov*. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *regulations.gov*. The EPA may publish any comment received to its public docket. Do not submit electronically any information

you consider to be Confidential Business Information (CBI) or other information the disclosure of which is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets*.

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SUPPLEMENTARY INFORMATION: Throughout this document whenever "we," "us," or "our" is used, it is intended to refer to the EPA. Information is organized as follows:

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I. Background

On January 22, 2010, the EPA established a primary NO_2 NAAQS at 100 parts per billion (ppb), averaged over one hour and based on a 3-year average, supplementing the existing annual standard (75 FR 6474). On June 22, 2010, the EPA established a new primary 1-hour SO_2

NAAQS at 75 ppb based on a 3-year average (75 FR 35520). Within three years after promulgation of a new or revised NAAQS, states must submit SIPs meeting the requirements of CAA sections 110(a)(1) and (2), often referred to as infrastructure requirements. Section 110(a) of the CAA requires states to make a SIP submission to the EPA for a new or revised NAAQS, but the contents of individual state submissions may vary depending upon the facts and circumstances. The content of the revisions proposed in such SIP submissions may also vary depending upon what provisions the state's approved SIP already contains. The EPA approved the Alaska SIP as meeting all infrastructure requirements for the 2010 NO_2 and SO_2 NAAQS, except for the CAA section 110(a)(2)(D)(i)(I) interstate transport provisions which we explained we would address in a separate action (82 FR 22081, May 12, 2017).

The EPA's most recent infrastructure SIP guidance, the September 13, 2013, "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2)," did not explicitly include criteria for how the Agency would evaluate infrastructure SIP submissions intended to address section 110(a)(2)(D)(i)(I).[1] With respect to certain pollutants, such as ozone and particulate matter, the EPA has addressed interstate transport in eastern states in the context of regional rulemaking actions that quantify state

[1] At the time the September 13, 2013, guidance was issued, EPA was litigating challenges raised with respect to its Cross State Air Pollution Rule ("CSAPR"), 76 FR 48208 (Aug. 8, 2011), designed to address the CAA section 110(a)(2)(D)(i)(I) interstate transport requirements with respect to the 1997 ozone and the 1997 and 2006 $PM_{2.5}$ NAAQS. CSAPR was vacated and remanded by the D.C. Circuit in 2012 pursuant to *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7. EPA subsequently sought review of the D.C. Circuit's decision by the Supreme Court, which was granted in June 2013. As EPA was in the process of litigating the interpretation of section 110(a)(2)(D)(i)(I) at the time the infrastructure SIP guidance was issued, EPA did not issue guidance specific to that provision. The Supreme Court subsequently vacated the D.C. Circuit's decision and remanded the case to that court for further review. 134 S. Ct. 1584 (2014). On July 28, 2015, the D.C. Circuit issued a decision upholding CSAPR, but remanding certain elements for reconsideration. 795 F.3d 118.

emission reduction obligations.[2] In other actions, such as EPA action on western state SIPs addressing ozone and particulate matter, the EPA has considered a variety of factors on a case-by-case basis to determine whether emissions from one state interfere with the attainment and maintenance of the NAAQS in another state. In such actions, the EPA has considered available information such as current air quality, emissions data and trends, meteorology, and topography.[3]

For other pollutants such as lead (Pb), the EPA has suggested that the applicable interstate transport requirements of section 110(a)(2)(D)(i)(I) can be met through a state's assessment as to whether or not emissions from Pb sources located in close proximity to its borders have emissions that impact a neighboring state such that they contribute significantly to nonattainment or interfere with maintenance in that state. For example, the EPA noted in an October 14, 2011, memorandum titled, "Guidance on Infrastructure State Implementation Plan (SIP) Elements Required Under Sections 110(a)(1) and 110(a)(2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS),"[4] that the physical properties of Pb prevent its emissions from experiencing the same travel or formation phenomena as $PM_{2.5}$ or ozone, and there is a sharp decrease in Pb concentrations, at least in the coarse fraction, as the distance from a Pb source increases. Accordingly, while it may be possible for a source in a state to emit Pb in a location and in quantities that may contribute significantly to nonattainment in, or interfere with

[2] Nitrogen Oxides (NO_x) SIP Call, 63 FR 57371 (October 27, 1998); Clean Air Interstate Rule (CAIR), 70 FR 25172 (May 12, 2005); CSAPR, 76 FR 48208 (August 8, 2011).

[3] *See, e.g.*, Approval and Promulgation of Implementation Plans; State of California; Interstate Transport of Pollution; Significant Contribution to Nonattainment and Interference With Maintenance Requirements, Proposed Rule, 76 FR 146516, 14616-14626 (March 17, 2011); Final Rule, 76 FR 34872 (June 15, 2011); Approval and Promulgation of State Implementation Plans; State of Colorado; Interstate Transport of Pollution for the 2006 24-Hour $PM_{2.5}$ NAAQS, Proposed Rule, 80 FR 27121, 27124-27125 (May 12, 2015); Final Rule, 80 FR 47862 (August 10, 2015).

[4] https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20111014_page_lead_caa_110_infrastructure_guidance.pdf.

maintenance by, any other state, the EPA anticipates that this would be a rare situation, e.g., where large sources are in close proximity to state boundaries.[5] Our rationale and explanation for approving the applicable interstate transport requirements under section 110(a)(2)(D)(i)(I) for the 2008 Pb NAAQS, consistent with the EPA's interpretation of the October 14, 2011, guidance document, can be found, among other instances, in the proposed approval and a subsequent final approval of interstate transport SIPs submitted by Illinois, Michigan, Minnesota, and Wisconsin.[6] In summary, the EPA's approaches to addressing interstate transport for NAAQS pollutants has been based on the characteristics of the pollutant, the interstate problem presented by emissions of that pollutant, the sources that emit the pollutant, and the information available to assess transport of that pollutant. The EPA's review and action on Alaska's CAA section 110(a)(2)(D)(i)(I) interstate transport SIP revisions for the 2010 NO_2 and SO_2 NAAQS is informed by these considerations.

On March 10, 2016, the Alaska DEC submitted a SIP revision to address these remaining CAA section 110(a)(2)(D)(i)(I) interstate transport provisions, also called "good neighbor" provisions. The first element of CAA section 110(a)(2)(D)(i)(I) requires that for a new or revised NAAQS the SIP contains adequate measures to prohibit any source or other type of emissions activity within the state from emitting air pollutants that will "contribute significantly to nonattainment" of the NAAQS in another state. The second element of CAA section 110(a)(2)(D)(i)(I) requires that the SIP prohibits any source or other type of emissions activity in the state from emitting pollutants that will "interfere with maintenance" of the applicable NAAQS in any other state.

[5] Id. at pp 7-8.
[6] *See* 79 FR 27241 at 27249 (May 13, 2014) and 79 FR 41439 (July 16, 2014).

II. State Submittal

The state addressed CAA section 110(a)(2)(D)(i)(I) by providing information supporting the conclusion that emissions from Alaska do not significantly contribute to nonattainment or interfere with maintenance of the 2010 1-hour NO_2 and 1-hour SO_2 NAAQS. The Alaska DEC provided the same justification to address both SO_2 and NO_2 interstate transport.[7]

The state's submittal noted that Alaska's southern-most border is separated by over 600 miles (966 km) of mountainous terrain in Canada's Province of British Columbia separating the southeastern border of Alaska from the nearest state, Washington. The state's submittal also noted that in Alaska, the regional, predominant low pressure wind patterns emanate from the Gulf of Alaska in the west and travel inland towards the east, circulating in a counterclockwise direction. The Alaska DEC concluded that based on distance from other states and weather patterns, Alaska does not significantly contribute to nonattainment, or interfere with maintenance, of the 2010 NO_2, and SO_2 NAAQS in any other state.

III. EPA Evaluation

A. NO_2 Interstate Transport

In addition to reviewing Alaska's submittal, the EPA reviewed recent monitoring data for NO_2 throughout the United States. Using previous EPA methodology, the EPA evaluated specific monitors identified as having nonattainment and/or maintenance problems, which we refer to as "receptors."[8] The EPA identifies nonattainment receptors as any monitor that has

[7] EPA notes Alaska's submission with respect to the SO2 NAAQS indicates that the state is not subject to EPA's Clean Air Interstate Rule (CAIR) or Cross-State Air Pollution Rule (CSAPR). While EPA appreciates this information, neither CAIR nor CSAPR addressed the 2010 SO2 NAAQS.

[8] *See* NO_x SIP Call, 63 FR 57371 (October 27, 1998); CAIR, 70 FR 25172 (May 12, 2005); and Transport Rule or Cross-State Air Pollution Rule, 76 FR 48208 (August 8, 2011).

violated the NO_2 NAAQS in the most recent three-year period (2014-2016). Meanwhile, the EPA identifies NO_2 maintenance receptors as any monitor that violated the NO_2 NAAQS in - either of the prior monitoring cycles (2012-2014 and 2013-2015), but attained in the most recent monitoring cycle. During the three most recent design value[9] periods of 2012 through 2014, 2013 through 2015, and 2014 through 2016, we found no monitors violating the 2010 NO_2 NAAQS in the United States.[10] Accordingly, the EPA found no monitors meeting the criteria as a nonattainment receptor and/or as a maintenance receptor. Furthermore, we note that available information indicates that monitored values are well below the 100 ppb 1-hour NO_2 NAAQS in Washington, the state closest to Alaska, with a 3-year average of 28 ppb during 2014-2016 at the Mount Vernon-Anacortes, WA, monitor (AQS Site ID 530570018).[4]

The EPA also reviewed regulatory provisions to control future new sources of NO_x emissions in Alaska. Alaska's Prevention of Significant Deterioration (PSD)/New Source Review (NSR) program was originally approved by the EPA on February 16, 1995 (60 FR 8943). Updates to Alaska's PSD/NSR program were most recently approved by the EPA on January 7, 2015 (80 FR 832). The minor NSR program was most recently updated on May 27, 2016 (80 FR 30161). These rules help ensure that no new or modified source of NO_x will cause or contribute to violation of the 2010 NO_2 NAAQS. The EPA proposes to conclude that emissions from Alaska will not significantly contribute to nonattainment, or interfere with maintenance, of the 2010 NO_2 NAAQS in any other state. As previously noted, the EPA already

[9] A "Design Value" is a statistic that describes the air quality status of a given location relative to the level of the NAAQS. The interpretation of the primary 2010 SO_2 NAAQS (set at 75 parts per billion (ppb)) including the data handling conventions and calculations necessary for determining compliance with the NAAQS can be found in Appendix T to 40 CFR Part 50.

[10] *http://www.epa.gov/airtrends/values.html*

approved the Alaska SIP as meeting the CAA section 110(a)(2)(D)(i)(II) interstate transport provisions (commonly called prongs 3 & 4) on May 12, 2017 (82 FR 22081).

B. SO_2 Interstate Transport

In addition to reviewing Alaska's submittal, the EPA reviewed: 1) SO_2 ambient air quality and emissions trends; 2) SIP-approved regulations specific to SO_2 and permitting requirements; and, 3) other SIP-approved or federally enforceable regulations that while not directly intended to address or reduce SO_2, may yield reductions of the pollutant.

Despite being emitted from a similar universe of point and nonpoint sources, interstate transport of SO_2 is unlike the transport of fine particulate matter ($PM_{2.5}$) or ozone. As the EPA has addressed in other actions, SO_2 is not a regional mixing pollutant that commonly contributes to widespread nonattainment of the SO_2 NAAQS over a large (and often multi-state) area. From an air quality management perspective, the 2010 SO_2 NAAQS can be considered to be a largely "source-oriented" NAAQS rather than a "regional" one (79 FR 27445). Geographically, Alaska is approximately 850 km (528 miles) from the nearest state, Washington, and approximately 2,800 km (1,740 miles) from the nearest SO_2 nonattainment area in Gilia County, Arizona, for the 2010 SO_2 NAAQS. Given the distance from the nearest state, Washington, the EPA believes that emissions from Alaska will not interfere with the maintenance in another states. Therefore, the EPA proposes to agree with Alaska DEC that based on distance, emissions activity from Alaska will not significantly contribute to nonattainment or interfere with maintenance of the SO_2 NAAQS in any other state.

While the State of Alaska has no areas which would require SO_2 monitoring under 40 CFR 58, Appendix D, paragraph 4.4.2 (requirement for monitoring by the population weighted

emissions index), monitored ambient air quality values for SO_2 are available at Alaska's National Core Multi-pollutant Monitoring Station, (NCore), in Fairbanks, Alaska. These data indicate the monitored values of SO_2 at this site have remained below the 2010 1-hour SO_2 NAAQS. Relevant data from EPA's Air Quality System[11] (AQS) Design Value (DV)[12] reports for recent and complete 3-year periods are summarized in Table 1. The design value for the Fairbanks monitor has decreased from 42 ppb in 2014 to 36 ppb in 2016, below 50% of the NAAQS.

Table 1: Trend in 3-Year SO_2 Design Values for AQS Monitor in Alaska

AQS Monitor Site	City	2012-2014 (ppb)	2013-2015 (ppb)	2014-2016 (ppb)
02-090-0034	Fairbanks	42	37	36

The NEI data summaries for Alaska have shown a decrease in the total statewide SO_2 emissions by 6,447 tons per year, from 2011 to 2014 (Table 2). The highest source sector for both 2011 and 2014 inventory years was natural wildfires. The decreasing trend in the NEI data support our proposed conclusion that Alaska does not contribute to the nonattainment of SO_2 in other states and does not interfere with the maintenance of SO_2 in others states.

Table 2: Summary of NEI SO_2 Data for Alaska

Source Sector	**2011 (tpy)**	**2014 (tpy)**
Area, Excluding Wildfires	1,728	1,336

[11] EPA's Air Quality System (AQS) contains ambient air pollution data collected by EPA, state, local, and tribal air pollution control agencies. See https://www.epa.gov/aqs.

[12] A "Design Value" is a statistic that describes the air quality status of a given location relative to the level of the NAAQS. The interpretation of the primary 2010 1-hour SO_2 NAAQS (set at 75 parts per billion [ppb]) including the data handling conventions and calculations necessary for determining compliance with the NAAQS can be found in Appendix T to 40 CFR Part 50.

Non-Road	65	20
On-Road	51	50
Commercial Marine Vessels	7,148	2,471
Aviation (Aircraft & GSE)	429	399
Point	5,795	5,211
Wildfires, Prescribed	203	79
Wildfires, Natural	13,095	12,501
TOTAL - All Sources	**28,513**	**22,066**

Lastly, Alaska has various provisions and regulations to ensure that SO_2 emissions are not expected to substantially increase in the future, further supporting the EPA's proposed conclusion that emissions from the state will not have downwind interstate transport impacts. The EPA reviewed regulatory provisions to control future new sources of SO_2 emissions in Alaska. As previously discussed with respect to NO_2, Alaska's PSD/NSR program was originally approved by the EPA on February 16, 1995 (60 FR 8943) and updates to Alaska's PSD/NSR program were most recently approved by the EPA on August 28, 2017 (82 FR 40712). The minor NSR program was also updated on August 28, 2017 (82 FR 40712). These rules help ensure that no new or modified source of SO_2 will cause or contribute to violation of the 2010 SO_2 NAAQS.

Based on the analysis provided by Alaska DEC in its SIP submission and the factors discussed above, the EPA proposes to find that sources or emissions activity within the state will not contribute significantly to nonattainment, or interfere with maintenance, of the 2010 SO_2 NAAQS in any other state.

IV. Proposed Action

The EPA has reviewed the March 10, 2016, submittal from the Alaska DEC demonstrating that sources in Alaska do not significantly contribute to nonattainment, or

interfere with maintenance, of the 2010 NO_2 and SO_2 NAAQS in any other state. Based on our review, we are proposing to find that the Alaska SIP meets the CAA section 110(a)(2)(D)(i)(I) interstate transport requirements for the 2010 NO_2 and SO_2 NAAQS.

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations.[13] Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action merely approves state law as meeting Federal requirements, and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because actions such as SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

[13] 42 U.S.C. 7410(k); 40 CFR 52.02(a).

- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because this rulemaking does not involve technical standards; and
- Does not provide the EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed action does not apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Sulfur dioxide, Reporting and recordkeeping requirements.

Dated: April 13, 2018.

Chris Hladick,
Regional Administrator,
Region 10.

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