

**DEPARTMENT OF
ENVIRONMENTAL CONSERVATION**



Amendments to:

**State Air Quality Control Plan, Volume II, Section III.L
“Interstate Transport of Pollution”
Draft**

January 18, 2018

Bill Walker, Governor

Larry Hartig, Commissioner

Amendments to State Air Quality Control Plan, Volume II: Section III.L. Interstate Transport of Air Pollutants is amended to update Table 1 and add new table, Table 5.

Table 1

Alaska's State Air Quality Control Plan CAA §110 Interstate Transport Regulation Certifications

Table 5

Alaska's Compliance with CAA §110 Interstate Transport Requirements for the 2015 8-hour Ozone NAAQS

Acronyms, Abbreviations, and Symbols

| | |
|-----------------|--|
| AAC | Alaska Administrative Code |
| AMQA | Air Monitoring & Quality Assurance |
| CAA | Clean Air Act |
| CBJ | City & Borough of Juneau |
| CFR | Code of Federal Regulations |
| DAQ | Division of Air Quality |
| DEC | Department of Environmental Conservation |
| EPA | Environmental Protection Agency |
| FNSB | Fairbanks North Star Borough |
| FR | Federal Register |
| MOA | Municipality of Anchorage |
| MSB | Matanuska-Susitna Borough |
| MOU | Memorandum of Understanding |
| NAAQS | National Ambient Air Quality Standards |
| NEI | National Emission Inventory |
| NNSR | Nonattainment New Source Review |
| NO _x | Nitrous Oxide |
| NO ₂ | Nitrogen Dioxide |
| NSR | New Source Review |
| O ₃ | Ozone |
| NSR | New Source Review |
| PM-2.5 | Fine Particulate Matter |
| PSD | Prevention of Significant Deterioration |
| § | Section |
| SIL | Significant Impact Level |
| SIP | State Implementation Plan |
| SO ₂ | Sulfur Dioxide |

L. PROVISIONS PROHIBITING REGIONAL TRANSPORT OF AIR POLLUTANTS

The 1990 CAA Amendments, Sections 110(a)(2)(D)(i) (I)&(II), require Alaska's SIP to "contain adequate provisions prohibiting ...any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will—

I. Contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard;

Or

II. Interfere with measures required to be included in the applicable implementation plan for any other State... to prevent significant deterioration of air quality or to protect visibility.

DEC demonstrates compliance with NAAQS interstate transport infrastructure requirements by submitting a new and separate table for each promulgated NAAQS as shown in Table 1. This table provides a chronological history of DEC's CAA §110 interstate transport SIP submittals.

Table 1: Alaska’s State Air Quality Control Plan CAA §110 Interstate Transport Regulation Certifications.

| NAAQS Element | NAAQS Federal Register Date and Number | State of Alaska NAAQS Effective Date of Regulation | State of Alaska Interstate Transport Regulation Certification Effective Date | Table Number | Note |
|---|---|---|---|---------------------|----------------------------------|
| 2006 PM_{2.5} Annual & 24-hour | 10/17/2006 71 FR 61144 | 04/01/2010 | 08/01/2012 | N/A | See: Volume II, Section III.D.VI |
| 2008 O₃ Primary & Secondary | 03/27/2008 73 FR 16436 | 04/01/2010 | 08/01/2012 | N/A | See: Volume II, Section III.D.VI |
| 2008 Lead Primary & Secondary | 11/12/2008 73 FR 66964 | 04/01/2010 | 08/01/2012 | N/A | See: Volume II, Section III.H.4 |
| 2010 SO₂ Primary 1-hour | 06/22/2010 75 FR 35520 | 09/17/2011 | 04/17/2015 | 2 | |
| 2010 NO₂ Primary 1-hour | 02/09/2010 75 FR 6474 | 01/04/2013 | 04/17/2015 | 3 | |
| 2012 PM_{2.5} Primary Annual | 01/15/2013 78 FR 3086 | 03/02/2016 | 12/17/2015 | 4 | |
| 2015 O₃ Primary & Secondary | 10/26/2015 80 FR 65292 | 08/20/2016 | [insert effective date of regulation] | 5 | |

Table 5. Interstate Transport: 2015 Primary & Secondary 8-hour O₃ NAAQS

| CAA §110 Interstate Transport Requirement | How Requirement is Addressed in Alaska’s SIP |
|--|---|
| <p>2015 O₃ NAAQS</p> <p>110(a)(2)(D)(i)(I) Contributions to nonattainment or maintenance of NAAQS in other states</p> | <p>Alaska does not contribute to nonattainment or interfere with maintenance of the 2015 Primary and Secondary O₃ NAAQS in any other state. This statement is based on the following:</p> <p>EPA has not classified any area of Alaska as not attaining the 2008 O₃ NAAQS, all areas have been identified as “unclassifiable/attainment” (77 FR 30088, May 21, 2012);</p> <p>Alaska is not subject to the “Cross-State Air Pollution Rule” (CSAPR), (76 FR 48208, August 8, 2011) and is not subject to the CSAPR Update (81 FR 74514, October 26, 2016);</p> <p>Ozone has been measured at Fairbanks NCore site and in the Mat-Su Valley at the Wasilla and Palmer sites from 2011 to 2015¹. All sites are well below the 2015 ozone standard of 0.070 ppm. The highest monitored 8-hour ozone concentration was 0.057 ppm on May 11, 2014 at the NCore site. General trends are consistent among years and sites with the monthly average of the maximum hourly ozone concentrations per day highest in April and May and lowest in December and January.²</p> <p>Alaska’s anthropogenic ozone precursor emissions are very low compared to national levels. The most recent national emissions inventory data (2014) reports Alaska aggregate emissions are approximately 1% percent of national nitrogen oxide emissions and less than 0.5% of national volatile organic compound emissions.</p> <p>Alaska is geographically isolated from the contiguous 48 states, making significant pollutant transport to other states unlikely. Approximately 600 miles of mountainous terrain in Canada’s Province of British Columbia separate the southeastern border of Alaska from the nearest state, Washington. The highest emissions of regulated air pollutants occur even further away from the contiguous 48 states in the Municipality of Anchorage (1,435 miles from Seattle, WA) and the Fairbanks North Star Borough</p> |

¹ Alaska Department of Environmental Conservation Annual Air Quality Monitoring Network Plan, Nov. 2015: http://dec.alaska.gov/air/am/2015_Air_Monitoring_plan.pdf

² Alaska Department of Environmental Conservation 2015 Ambient Air Quality Network Assessment, Nov. 2016: http://dec.alaska.gov/air/am/Alaska_2015_5-year_Network_Assessment.pdf

Table 5. Interstate Transport: 2015 Primary & Secondary 8-hour O₃ NAAQS

| | |
|--|---|
| <p>110(a)(2)(D)(i)(I) Contributions to nonattainment or maintenance of NAAQS in other states (continued)</p> | <p>(2,244 miles from Seattle, WA). The nearest 2008 ozone NAAQS nonattainment areas are located even further away in California and Colorado; and</p> <p>Weather patterns make long range transport of air pollutants from Alaska to the 48 contiguous states very unlikely. Regional, predominant low pressure, wind patterns emanate from the western Gulf of Alaska and travel inland towards the east, circulating in a counterclockwise direction.</p> |
| <p>2015 O₃ NAAQS</p> <p>110(a)(2)(D)(i)(II) Prevention of significant deterioration of air quality and protection of visibility in other states</p> | <p>Alaska’s PSD/NSR program was originally approved by EPA on February 16, 1995 [60 FR 8943]. Amendments to Alaska’s PSD/NSR program were more recently approved by EPA on February 9, 2011 [76 FR 7116] and January 7, 2015 [80 FR 832]. A copy of these regulations and SIP amendment were transmitted to EPA Region 10 on October 17, 2011.</p> <p>On February 14, 2013, EPA approved Alaska’s Regional Haze Plan submitted on April 4, 2011, as meeting the requirements set forth in sections 169A and 169B of the CAA and in 40 CFR 51.308 regarding Regional Haze [78 FR 10546].</p> |