# **DEPARTMENT OF**

# **ENVIRONMENTAL CONSERVATION**



### **Amendments to:**

State Air Quality Control Plan, Volume II, Section III.L "Interstate Transport of Pollution"

**April 16, 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 NAAOS

### 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

NOx Nitrous Oxide NO<sub>2</sub> Nitrogen Dioxide NSR New Source Review

O<sub>3</sub> 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<sub>2</sub> 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.

Adopted ii April 16, 2018

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 <sub>2.5</sub> 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 O <sub>3</sub> 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 SO <sub>2</sub> Primary 1-hour	06/22/2010 75 FR 35520	09/17/2011	04/17/2015	2	
2010 NO <sub>2</sub> Primary 1-hour	02/09/2010 75 FR 6474	01/04/2013	04/17/2015	3	
2012 PM <sub>2.5</sub> Primary Annual	01/15/2013 78 FR 3086	03/02/2016	12/17/2015	4	
2015 O <sub>3</sub> Primary & Secondary	10/26/2015 80 FR 65292	08/20/2016	[insert effective date of regulation]	5	

Adopted 1 April 16, 2018

Table 5. Interstate Transport: 2015 Primary & Secondary 8-hour O<sub>3</sub> NAAQS

CAA §110 Interstate	How Requirement is Addressed in Alaska's SIP			
Transport Requirement				
2015 O <sub>3</sub> NAAQS	Alaska does not contribute to nonattainment or interfere with maintenance of the 2015 Primary and Secondary O <sub>3</sub> NAAQS in any other state. This statement is based on the following:			
110(a)(2)(D)(i)(I) Contributions to nonattainment or	EPA has not classified any area of Alaska as not attaining the 2008 O <sub>3</sub> NAAQS, all areas have been identified as "unclassifiable/attainment" (77 FR 30088, May 21, 2012);			
maintenance of NAAQS in other states	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);			
	Ozone has been measured at Fairbanks NCore site and in the Mat-Su Valley at the Wasilla and Palmer sites from 2011 to 2015 <sup>1</sup> . 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. <sup>2</sup>			
	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.			
	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			

<sup>&</sup>lt;sup>1</sup> Alaska Department of Environmental Conservation Annual Air Quality Monitoring Network Plan, Nov. 2015: http://dec.alaska.gov/air/am/2015\_Air\_Monitoring\_plan.pdf

Adopted 2 April 16, 2018

<sup>&</sup>lt;sup>2</sup> 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

Vol. II: Section III.L – Interstate Transport of Pollution Table 5. Interstate Transport: 2015 Primary & Secondary 8-hour  $O_3$  NAAQS

110(a)(2)(D)(i)(I) Contributions to	(2,244 miles from Seattle, WA). The nearest 2008 ozone NAAQS nonattainment areas are located even further away in California and Colorado; and		
nonattainment or maintenance of NAAQS in	Weather patterns make long range transport of air pollutants from Alaska to the 48 contiguous states		
other states (continued)	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.		
2015 O <sub>3</sub> NAAQS  110(a)(2)(D)(i)(II)  Prevention of significant deterioration of air quality and protection of visibility in other states	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.  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].		

Adopted 3 April 16, 2018