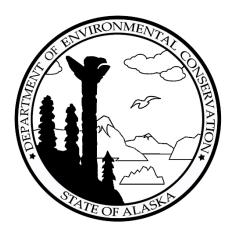
## ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION



# Amendments to: State Air Quality Control Plan

Vol. III: Appendices Section II.D.

## Clean Air Act Section 110 Infrastructure Certification Documentation Adopted

August 10, 2018

Bill Walker, Governor

Larry Hartig, Commissioner

#### **Amendments to State Air Quality Control Plan Volume III:**

Clean Air Act §110 Infrastructure Certification Documentation Appendix to Volume II Section II.D.: State Air Quality Control Program, is amended to update Table 1 and add new table, Table 6.

#### Table 1

Alaska's State Air Quality Control Plan CAA §110 Infrastructure Certifications

#### Table 6

Alaska's Compliance with CAA  $\S110$  Infrastructure Requirements for the 2015 8-hour ozone NAAQS

#### **Table of Contents**

| Table 1: Alaska's State Air Quality Control Plan CAA §110 Infrastructure Certifica | tions 1     |
|--|-------------|
| Table 6: Alaska's Compliance with CAA §110 Infrastructure Requirements for         | the 2015 8- |
| hour Ozone NAAQS.  | 2           |

#### 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 NNSR Nonattainment New Source Review

NOxNOzNitrous OxideNO2Nitrogen DioxideNSRNew 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<sub>2</sub> Sulfur Dioxide

Vol. III. – Appendix to Vol. II Section II.D. -  $\S 110$  Infrastructure Certifications Table 1.

Table 1: Alaska's State Air Quality Control Plan CAA §110 Infrastructure Certifications.

| NAAQS<br>Element                   | NAAQS<br>Federal<br>Register<br>Date | NAAQS<br>Federal<br>Register<br>Number | State of Alaska NAAQS Effective Date of Regulation | State of Alaska<br>CAA §110 SIP<br>Certification<br>Effective Date<br>of Regulation | Table<br>Number | Notes   |
|------------------------------------|--------------------------------------|--|--|---|-----------------|---|
| Ozone 8-hour                       | 7/18/97                              | 62 FR 38856                            | 6/21/98  | 8/1/12  | 2               |   |
| PM <sub>2.5</sub> annual & 24-hour | 7/18/97                              | 62 FR 38652                            | 6/21/98  | 8/1/12  | 2               |   |
| PM <sub>2.5</sub> 24-hour          | 10/17/06                             | 71 FR 61144                            | 4/1/2010   | 8/1/12  | 2               | Complete except<br>for 110(a)(2)(G),<br>see table 4 |
| Ozone 8-hour                       | 3/27/08                              | 73 FR 16436                            | 4/1/2010   | 8/1/12  | 2               |   |
| Lead                               | 11/12/08                             | 73 FR 66964                            | 4/1/2010   | 8/1/12  | 2               |   |
| SO <sub>2</sub> 1-hour             | 6/22/10                              | 75 FR 35520                            | 9/17/2011  | 4/17/15   | 3               |   |
| NO <sub>2</sub> 1-hour             | 2/9/10                               | 75 FR 6474                             | 1/4/2013   | 4/17/15   | 3               |   |
| PM <sub>2.5</sub> 24-hour          | 10/17/06                             | 71 FR 61144                            | 4/1/2010   | 12/17/15  | 4               | 110(a)(2)(G)<br>only                                |
| PM <sub>2.5</sub> annual           | 01/15/13                             | 78 FR 3086                             | 3/2/2016   | 12/17/15  | 5               |   |
| Ozone 8-hour                       | 10/26/15                             | 80 FR 65292                            | 8/20/2016  | 9/15/18   | 6               |   |

Table 6: Alaska's Compliance with CAA §110 Infrastructure Requirements for the 2015 8-hour Ozone NAAQS.

| CAA §110 Infrastructure<br>Element                                  | How Infrastructure Requirement is Addressed in Alaska's SIP  |  |
|---|--|--|
| §110(a)(2)(A) Emission limits & other control measures              | Alaska Administrative Code (AAC), Title 18 Environmental Conservation, Chapter 50 Air Quality Control  DEC has promulgated regulations to implement and enforce the NAAQS and other emission limitations.  These regulations include statewide ambient air quality standards, major and minor permits, transportation conformity and fees, among others which are found in the following articles of AAC Title 18 Environmental Conservation, Chapter 50. Air Quality Control: |  |
|   | <ul> <li>Article 1. Ambient Air Quality Standards (18 AAC 50.005 - 18 AAC 50.110);</li> <li>Article 2. Program Administration (18 AAC 50.200 - 18 AAC 50.250);</li> <li>Article 3. Major Stationary Source Permits (18 AAC 50.300 - 18 AAC 50.390);</li> <li>Article 5. Minor Permits (18 AAC 50.502 - 18 AAC 50.560);</li> <li>Article 7. Conformity (18 AAC 50.700 - 18 AAC 50.750); and</li> <li>Article 9. General Provisions (18 AAC 50.900 - 18 AAC 50.990).</li> </ul>  |  |
|   | The State of Alaska adopted the 2015 8-hour ozone NAAQS into <b>18 AAC 50</b> , Article 1 (state effective 8/20/2016). Alaska's current ambient air quality standards are found in Article 1 at <b>18 AAC 50.010</b> . <sup>1</sup>  |  |
|   | Alaska's air quality designations, classifications and control regions are found in <b>18 AAC 50.015</b> . There are no ozone nonattainment areas in Alaska at the present time.   |  |
| §110(a)(2)(B) Ambient air quality monitoring & data analysis system | DEC's statutory and regulatory authority to conduct ambient air monitoring investigations is found in <b>AS 46.03.020 (5)</b> , <b>AS 46.14.180</b> and <b>18 AAC 50.201</b> . On April 1, 2010, the State of Alaska adopted into Articles 1 and 2 of 18 AAC 50 the following 40 CFR Part 50 reference and interpretation methods for the 2008 8-hour ozone NAAQS:   |  |

<sup>&</sup>lt;sup>1</sup> The Division of Air Quality's current regulations are found in **Title 18 AAC 50 Air Quality Control**, as amended through November 7, 2017: <a href="http://dec.alaska.gov/commish/regulations/pdfs/18-aac-50.pdf">http://dec.alaska.gov/commish/regulations/pdfs/18-aac-50.pdf</a>

• Appendix P: Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone.

§110(a)(2)(B)
Ambient air quality
monitoring & data
analysis system
(continued)

DEC's revised "Quality Assurance Project Plan for the State of Alaska Air Monitoring & Quality Assurance Program" was adopted by reference into the State Air Quality Control Plan under 18 AAC 50.030(4) on October 29, 2010. This manual includes the appropriate, federally referenced ambient air quality monitoring and analysis procedures for ozone. As described in this plan, validated State & Local Air Monitoring Stations (SLAMS), and Special Purpose Monitoring (SPM) ambient air quality monitoring data are reported to the AMQA's database manager. This person verifies the data, and electronically reports these data to EPA through the Air Quality System (AQS) on a quarterly basis.

A comprehensive air quality monitoring plan, intended to meet the requirements of 40 CFR part 58 was submitted by Alaska to the EPA on January 18, 1980 (40 CFR 52.70) and approved by the EPA on April 15, 1981. This air quality monitoring plan has been updated annually, most recently on April 12, 2017<sup>3</sup>. The network includes ozone monitoring as described below.

#### **Ozone Monitoring-O3:**

The March 27, 2008 revision of the national ozone standard required the State of Alaska to establish an O<sub>3</sub> monitoring program by April 1, 2010. The regulation required at least one State and Local Air Monitoring (SLAMS) O<sub>3</sub> site in a core based statistical area (CBSA) with a population greater than 350,000. The Anchorage/Matanuska-Susitna Valley population forms the only combined Metropolitan Statistical Area (MSA) in the State of Alaska which meets the criterion. The Municipality of Anchorage conducted monitoring during the O<sub>3</sub> monitoring season (April- October) from 2010 through 2012. An O<sub>3</sub> monitoring site was also established in Wasilla in May 2011 and moved to Palmer in May 2015. Ozone monitoring is ongoing in Palmer and at the multi-pollutant NCore site in Fairbanks, which began monitoring for O<sub>3</sub> in 2012.

<sup>&</sup>lt;sup>2</sup> Quality Assurance Project Plan for the State of Alaska Air Monitoring & Quality Assurance Program, February 23, 2010: http://dec.alaska.gov/air/doc/adec-amqa-qapp-23feb10-final.pdf

<sup>&</sup>lt;sup>3</sup> Alaska Department of Environmental Conservation Annual Air Quality Monitoring Network Plan, April 12, 2017: <a href="http://dec.alaska.gov/air/am/2016\_Air\_Monitoring\_Plan.pdf">http://dec.alaska.gov/air/am/2016\_Air\_Monitoring\_Plan.pdf</a>

# §110(a)(2)(C) Program to enforce control measures, regulate modification & construction of stationary sources and a permit program

DEC's statutory authority to regulate stationary sources via an air permitting program is established in **AS 46.14 Air Quality Control**, Article 01, General Regulations and Classifications; and Article 02, Emission Control Permit Program. DAQ's Air Permits Program issues air discharge permits for stationary sources according to the following regulations:

- Construction permit for new or modified construction projects (18 AAC 50.302);
- Prevention of significant deterioration (PSD) permit (18 AAC 50.306);
- Non-attainment area major stationary source permit (18 AAC 50.311); and
- Minor Permits (18 AAC 50 Article 5).

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 approved by EPA on August 14, 2007 [72 FR 45378] and February 9, 2011 [76 FR 7116]. A copy of the 2001 regulations and SIP amendment were transmitted to EPA Region 10 on October 17, 2011.

Alaska's approved PSD/NSR program implements the 2015 8-hour ozone NAAQS. The EPA most recently approved revisions to the Alaska PSD and minor NSR program on August 28, 2017 (82 FR 40712). Standard and compliance conditions for stationary sources are found in 18 AAC 50.345. Owner requested limits (ORL) and plant-wide applicability limitations (PALs) are regulated according to 18 AAC 50.508, 18 AAC 50.540, and 18 AAC 50.542. Minor permit regulations requiring analysis of ambient air quality are found at 18 AAC 50.542(c). Regulations governing air pollution prohibitions are found at 18 AAC 50.045, 18 AAC 50.110, and 18 AAC 50.345(c). A violation of these prohibitions or any permit condition can result in civil actions (AS 46.03.760), administrative penalties (AS 46.03.761), or criminal penalties (AS.03.790). Regulations pertaining to compliance orders and enforcement proceedings are found in 18 AAC Chapter 95 Administrative Enforcement.

|                            | 1   |
|----------------------------|-----|
| §110(a)(2)(D)(ii)          |     |
| Interstate transport and   |     |
| interstate & international | -   |
| pollution abatement        |     |
| " insuring compliance      |     |
| with the applicable        |     |
| requirements of CAA § 126  |     |
| and 115".                  |     |
|                            |     |
|                            |     |
| §110(a)(2)(E)(i)           | -   |
| Adequate personnel,        | (   |
| funding and authority to   | 1   |
| carry out plan             | -   |
| I .                        | 1 ' |

Compliance with CAA §110(a)(2)(D)(ii) requirements is satisfied through the implementation of Alaska's PSD/NSR program originally approved by EPA on February 16, 1995 [60 FR 8943]. Revisions to the PSD program were most recently approved by the EPA on August 28, 2017 (82 FR 40712). Alaska's approved PSD/NSR program implements the 2015 ozone NAAQS.

Alaska has no pending obligations under section 115 or 126(b) of the CAA.

DEC has implemented CAA requirements and the State Air Quality Control Plan since its inception in 1972. DEC's statutory and regulatory authorities to implement and enforce the State of Alaska's Air Quality Control Plan are found at **AS 46.14.030** and **18 AAC 50.030**, respectively. The State of Alaska has adequate personnel, funding and the authority to implement the 2015 8-hour ozone NAAQS. The statutory authority for establishing local air pollution control programs is found in **AS 46.14.400**- Local Air Quality Control Programs. Where local control programs are relied upon to meet SIP requirements, DEC insures that the local program has adequate resources and documents this in the appropriate SIP sections.

# §110(a)(2)(E)(ii) Comply with state boards

Alaska's regulations meeting the intent of CAA §110(a)(2)(E) and CAA §128 "conflict of interest" phrases are found in **Attachment 1**- AAC Title 2- Administration; Chapter 50- Alaska Public Offices Commission: Conflict of Interest, Campaign Disclosure, Legislative Financial Disclosure, and Regulations of Lobbying - Article 1- Public Official Financial Disclosure (**2 AAC 50.010- 2 AAC 50.920**) and **Attachment 2-**Title 9-Law; Chapter 52- Executive Branch Code of Ethics (**9 AAC 52.010-9 AAC 52.990**). These existing regulations were adopted into the State Air Quality Control Plan and were included as attachments to the SIP on March 12, 2015. DEC submitted these regulations to meet the intent of CAA §110(a)(2)(E) and CAA §128 and for all future CAA §110 certification amendments to the SIP.

There are no state air quality boards in Alaska, however, the DEC Commissioner, as an appointed official and the head of an executive agency, is required to file a financial disclosure statement annually by March 15th of each year with the Alaska Public Offices Commission (APOC). These disclosures are publically available

Vol. III. – Appendix to Vol. II Section II.D. - \$110 Infrastructure Certifications Table 6. 2015 8-hour Ozone NAAQS

| §110(a)(2)(E)(ii) Comply with state boards (continued)                    | through APOC's Anchorage office. Alaska's Public Officials Financial Disclosure Forms and Internet links to Alaska's financial disclosure regulations can be found at the APOC website: <a href="http://doa.alaska.gov/apoc/home.html">http://doa.alaska.gov/apoc/home.html</a> .  |
|---|--|
| §110(a)(2)(E)(iii)Oversee<br>local & regional<br>government/agencies      | As a matter of policy, DEC encourages the development of strong local air quality control programs. DEC provides technical assistance and regulatory oversight to the MOA, FNSB and other local jurisdictions to ensure that the State Air Quality Control Plan and SIP objectives are satisfactorily carried out. As mentioned, DEC has an MOU with the MOA and FNSB which allows them to operate air quality control programs in their respective jurisdictions. The South Central Clean Air Authority has been established to aid the MOA and the MSB in pursuing joint efforts to control emissions and improve air quality in the air-shed common to the two jurisdictions.                 |
| §110(a)(2)(F) Stationary source emissions monitoring and reporting system | DEC's general statutory authority to regulate stationary sources via an air permitting program is established in <b>AS 46.14 Air Quality Control</b> , Article 01, General Regulations and Classifications; and Article 02, Emission Control Permit Program. Alaska's statutes regarding stationary source permit reporting requirements, completeness determinations, administrative actions, and stack source monitoring requirements are found at <b>AS 46.140</b> through <b>AS 46.14.180</b> . DEC's regulatory authority to determine compliance with these statutes is found in <b>18 AAC 50.200 Information requests</b> ; and <b>18 AAC 50.201 Ambient air quality investigations</b> . |
|   | The State of Alaska has adopted into <b>18 AAC 50, Articles 1 and 2</b> , the appropriate 40 CFR Part 50 reference and interpretation methods for ozone NAAQS. Monitoring protocols and test methods for stationary sources that have been adopted by reference in the State Air Quality Control Plan are found at <b>18 AAC 50.030</b> . Other  |

Vol. III. – Appendix to Vol. II Section II.D. - §110 Infrastructure Certifications Table 6. 2015 8-hour Ozone NAAQS

| §110(a)(2)(F) Stationary source emissions monitoring and reporting system (continued) | documents, procedures and test methods adopted by reference, including the federal reference and interpretation methods for the NAAQS, are found at <b>18 AAC 50.035</b> . Federal standards adopted by reference are found at <b>18 AAC 50.040</b> .  Alaska's PSD/NSR program was originally approved by EPA on February 16, 1995 [60 FR 8943]. Revisions to the PSD program were most recently approved by the EPA on August 28, 2017 (82 FR 40712). Ambient air quality and meteorological data that are collected for PSD purposes by stationary sources are reported to DEC on a quarterly and annual basis.   |
|---|--|
| §110(a)(2)(G) Authority to declare air pollution emergency and notify public          | DEC's regulatory authority to act during air episodes is found at 18 AAC 50.245. This authority is promulgated under the following statutes: <b>AS 46.03.020</b> ; <b>AS 46.03.820</b> ; <b>AS 46.14.010</b> ; <b>AS 46.14.020</b> , <b>AS 46.14.030</b> and <b>46.14.540</b> .  The three major municipalities in Alaska (MOA, FNSB, and CBJ) also have ordinances, codes, or regulations that enable them to declare emergencies in the case of poor air quality due to forest fires, volcanoes, wood smoke or other air quality problem. DEC personnel remain in close contact with each municipality when an air emergency is declared, assisting with air monitoring and analysis, and implementing safety and control measures, as needed. |
|   | Alaska's emergency episode rules at 18 AAC 50.245 and 18 AAC 50.246 most recently approved by the EPA on September 10, 2017 (82 FR 40712), are consistent with the requirements of 40 CFR part 51 subpart H (prevention of air pollution emergency episodes, sections 51.150 through 51.153) for purposes of the 2015 ozone NAAQS.   |
| §110(a)(2)(H) Future SIP Revisions  | DEC's statutory authority to adopt regulations in order to implement the CAA and the state air quality control program is found in <b>AS 46.03.020(10)</b> ( <b>A</b> ), and <b>AS 46.14.010(a</b> ). DEC's regulatory authority to implement any provision of the CAA is found in <b>18 AAC 50.010</b> . DEC strives to establish regulations and update Alaska's SIP in a timely fashion as new NAAQS are promulgated by EPA.  |

Vol. III. – Appendix to Vol. II Section II.D. -  $\S110$  Infrastructure Certifications Table 6. 2015 8-hour Ozone NAAQS

| §110(a)(2)(J)<br>§ 121 consultation        | DEC's statutory authority to consult and cooperate with officials of local governments, state and federal agencies, and non-profit groups is found in <b>AS 46.030.020</b> (3), (8). Municipalities and local air quality districts seeking approval for a local air quality control program shall enter into a cooperative agreement with DEC according to <b>AS 46.14.400</b> (d). DEC can adopt new CAA regulations only after a public hearing ( <b>AS 46.14.010</b> (a)).  Alaska's PSD program provides opportunity and procedures for public comment and notice to appropriate federal, state and local agencies. Alaska rules that define transportation conformity consultation and regional haze interagency planning provide for a process to consult with local governments and federal land managers. |
|--|--|
| §110(a)(2)(J)<br>§ 127 public notification | Public notice and public hearing regulations for SIP submittals and air quality discharge permits are found at <b>18 AAC 15.050</b> and <b>18 AAC 15.060</b> .  ADEC is a partner in the EPA's AIRNOW and Enviroflash Air Quality Alert programs, which provide air quality information to the public for five major air pollutants regulated by the CAA: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. Alaska also provides real-time air monitoring information to the public on the ADEC air quality website at <a href="http://dec.alaska.gov/applications/air/envistaweb/">http://dec.alaska.gov/applications/air/envistaweb/</a> , in addition to air advisory information.   |
| §110(a)(2)(J) PSD & visibility protection  | Alaska's PSD/NSR program was originally approved by EPA on February 16, 1995 [60 FR 8943]. The EPA most recently approved updates to the Alaska PSD program on August 28, 2017 (82 FR 40712). Alaska's approved program implements the 2015 8-hour ozone NAAQS.  DEC concludes that there are no new visibility protection obligations under CAA §110(a) (2) (J) as a result of the 2015 8-hour ozone NAAQS.   |

Vol. III. – Appendix to Vol. II Section II.D. - \$110 Infrastructure Certifications Table 6. 2015 8-hour Ozone NAAQS

| §110(a)(2)(M) Consultation/Participation by affected local entities | DEC has the statutory authority to consult and cooperate with officials and representatives of any organization in the state; and persons, organization, and groups, public and private using, served by, interested in, or concerned with the environment of the state ( <b>AS 46.03.020</b> ( <b>3</b> ) ( <b>A</b> )( <b>B</b> )).   |
|---|---|
|   | The EPA fully approved Alaska's title V program on July 26, 2001 (66 FR 38940). In addition, Alaska regulations at 18 AAC 50.306(d)(2) and 18 AAC 50.311(d)(2) require fees for purposes of major new source permitting as specified in 18 AAC 50.400 through 18 AAC 50.499.  |
| §110(a)(2)(L) Major stationary source permitting fees               | DEC's statutory authority to assess and collect permit fees is established in <b>AS 46.14.240</b> and <b>AS 46.14.250</b> . The permit fees for permitting major and minor stationary sources are assessed and collected by the Air Permits Program according to <b>18 AAC 50 Article 4. User Fees (18 AAC 50.400 through 18 AAC 50.430)</b> . The Air Permits Program is required to evaluate emission fee rates at least every four years, and provide a written evaluation of the findings ( <b>AS 46.14.250(g)</b> ; <b>18 AAC 50.410</b> ). The Division's most recent emission fee evaluation report was completed in May 2015 <sup>4</sup> . |
| §110(a)(2)(K) Air quality modeling/data                             | Air quality modeling by DEC is conducted under <b>18 AAC 50.215(b)</b> , ambient air quality analysis methods. Estimates of ambient concentrations and visibility impairment must be based on applicable air quality models, databases, and other requirements specified in the EPA's Guideline on Air Quality Models adopted by reference in <b>18 AAC 50.040(f)</b> . This regulation allows some provisions to exclude concentrations attributable to temporary construction activity for a new or modified source, or to new sources outside the United States.   |

<sup>&</sup>lt;sup>4</sup> Department of Environmental Conservation, Division of Air Quality Final 2014 Fee Study Report, May 21, 2015: <a href="http://dec.alaska.gov/air/ap/docs/FeesFY14.FeeStudyNarrativeReport.5-21-15.pdf">http://dec.alaska.gov/air/ap/docs/FeesFY14.FeeStudyNarrativeReport.5-21-15.pdf</a>