## **DEPARTMENT OF**

## **ENVIRONMENTAL CONSERVATION**



18 AAC 50

### AIR QUALITY CONTROL

Adoption of National Ambient Air Quality Standards for Fine Particulate Matter (PM-2.5), Ozone and Lead, & Amending the Transportation Conformity Rules

**Public Review Draft** 

August 14<sup>th</sup>, 2009

Sean Parnell Governor

Larry Hartig Commissioner 18 AAC 50.010 is amended to read:

**18 AAC 50.010. Ambient air quality standards.** The standards for concentrations of air pollutants in the ambient air, measured, <u>determined</u>, or predicted by an analytical method described in <u>18 AAC 50.035 or</u> 18 AAC 50.215, are established as follows:

(1) for **<u>Particulate Matter</u>** [PM-10]:

(A) <u>for PM-10: 24-hour average of 150 micrograms per cubic meter</u>, <u>with this standard being attained when the expected number of days in a calendar</u> <u>year with a 24-hour average concentration above 150 micrograms per cubic meter is</u> <u>less than or equal to one day</u>; [EXPECTED ANNUAL ARITHMETIC MEAN OF 50 MICROGRAMS PER CUBIC METER; AND]

#### (B) for PM-2.5:

(i) annual arithmetic mean concentration of 15 micrograms per cubic meter, with this standard being obtained when the annual arithmetic mean concentration is less than or equal to 15 micrograms per cubic meter;

(ii) 24-hour average concentration of 35 micrograms per cubic meter, with this standard being obtained when the 98<sup>th</sup> percentile 24-hour concentration is less than or equal to 35 micrograms per cubic meter[ 24-HOUR AVERAGE OF 150 MICROGRAMS PER CUBIC METER, WITH THIS STANDARD BEING ATTAINED WHEN THE EXPECTED NUMBER OF DAYS IN A CALENDAR YEAR WITH A 24-HOUR AVERAGE CONCENTRATION ABOVE 150 MICROGRAMS PER CUBIC METER IS LESS THAN OR EQUAL TO ONE DAY];

#### Register \_\_\_\_\_ 2009 ENVIRONMENTAL CONSERVATION

(2) for sulfur oxides, measured as sulfur dioxide:

(A) annual arithmetic mean of 80 micrograms per cubic meter;

(B) 24-hour average of 365 micrograms per cubic meter not to be exceeded more than once each year; and

(C) three-hour average of 1300 micrograms per cubic meter not to be exceeded more than once each year;

(3) for carbon monoxide:

(A) eight-hour average of 10 milligrams per cubic meter not to be exceeded more than once each year; and

(B) one-hour average of 40 milligrams per cubic meter not to be exceeded more than once each year;

(4) for ozone: <u>daily maximum eight-hour average of 0.075 parts per million</u>, <u>with this standard being attained when the three-year average of the annual fourth-highest</u> <u>daily maximum eight-hour average ozone concentration is less than or equal to 0.075 parts</u> <u>per million</u> [ONE-HOUR AVERAGE OF 235 MICROGRAMS PER CUBIC METER, WITH THIS STANDARD BEING ATTAINED WHEN THE EXPECTED NUMBER OF DAYS IN A CALENDAR YEAR WITH A MAXIMUM HOURLY AVERAGE CONCENTRATION ABOVE 235 MICROGRAMS PER CUBIC METER IS LESS THAN OR EQUAL TO ONE DAY];

(5) for nitrogen dioxide: annual arithmetic mean of 100 micrograms per cubic meter;

(6) for lead: <u>arithmetic mean concentration over a three-month period of</u>0.15 micrograms per cubic meter, with this standard being attained when the maximum

# arithmetic three-month mean concentration for a three-year period is less than or equal to 0.15 micrograms per cubic meter [QUARTERLY ARITHMETIC MEN OF 1.5 MICROGRAMS PER CUBIC METER];

(7) for reduced sulfur compounds, expressed as sulfur dioxide: 30-minute average of 50 micrograms per cubic meter not to be exceeded more than once each year; and

(8) for ammonia: 2.1 milligrams per cubic meter, averaged over any consecutive eight hours not to be exceeded more than once each year. (Eff. 1/18/97, Register 141; am 6/21/98, Register 146; am 10/1/2004, Register 171; am \_/\_/\_\_\_, Register \_\_\_)
Authority: AS 46.03.020 AS 46.14.030 Sec. 30, ch. 74, SLA 1993

AS 46.14.010

18 AAC 50.030 is amended to read:

**18 AAC 50.030. State air quality control plan.** Volumes II and III of the *State Air Quality Control Plan* for implementing and enforcing the provisions of AS 46.14 and this chapter, as amended through **Effective Date of Regulations** [FEBRUARY 20, 2009], are adopted by reference. The plan includes the following documents which are also adopted by reference:

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(Eff. 1/18/97, Register 141; am 6/21/98, Register 146; am 9/4/98, Register 147; am 1/1/2000; Register 152; am 12/30/2000; Register 156; am 9/21/2001, Register 159; am 1/27/2002, Register 161; am 3/2/2002, Register 161; am 5/3/2002, Register 162; am 2/20/2004, Register 169; am 6/24/2004, Register 170; am 10/1/2004, Register 171; am 12/14/2006, Register 180; am 12/30/2007, Register 184; am 5/17/2008, Register 186; am 7/25/2008, Register 187; am,

4

Register \_\_\_\_\_ 2009 ENVIRONMENTAL CONSERVATION

11/9/2008, Register 188; am 5/6/2009, Register 190; am \_/\_/\_\_\_, Register\_\_\_; am

\_\_/\_\_/, Register \_\_\_)

 Authority:
 AS 46.03.020
 AS 46.14.030
 Sec. 30, ch. 74, SLA 1993

 AS 46.14.020
 AS 46.14.140

18 AAC 50.035(b) is amended to read:

(b) The following procedures and methods set out in 40 C.F.R. Part 50, revised as of **July 1, 2009** [JULY 1, 2007], are adopted by reference:

(1) 40 C.F.R. Part 50, Appendices A, D, F, <u>G</u>, [H,] J, [AND] K, [;] <u>L, N, P, Q</u>,

#### and R;

(2) 40 C.F.R. Part 51, Appendix M;

(3) 40 C.F.R. Part 58, Appendix B;

(4) the following test methods as they apply to 40 C.F.R. 63.11(b)(6):

(A) ASTM D1946-90(1994)e1, Standard Practice for Analysis of

Reformed Gas by Gas Chromatography; and

(B) ASTM D 240-92(1997)e2, Standard Test Method for Heat of

Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter.

(Eff. 1/18/97, Register 141; am 6/21/98, Register 146; am 7/2/2000, Register 154;

am 2/2/2002, Register 161; am 5/3/2002, Register 162; am 10/1/2004, Register 171; am

12/3/2005, Register 176; am 7/25/2008, Register 187; am 11/9/2008, Register 188; am

\_\_/\_\_/, Register \_\_\_)

Authority:	AS 46.03.020	AS 46.14.020	AS 46.14.140
	AS 46.14.010	AS 46.14.030	Sec. 30, ch. 74, SLA 1993

18 AAC 50.215(a)(2) is amended to read:

(2) a reference method or an equivalent method described in 40 C.F.R Part 50, Appendices D and <u>P</u> [H], adopted by reference in 18 AAC 50.035(b), for ozone; (Eff. 1/18/97, Register 141; am 6/21/98, Register 146; am 10/1/2004, Register 171; am 7/25/2008, Register 187; am \_/\_/\_\_\_, Register \_\_\_\_)
Authority: AS 46.03.020 AS 46.14.140 Sec. 30, ch. 74, SLA 1993

AS 46.14.030 AS 46.14.180

18 AAC 50.700(2) is amended to read:

(2) the project is nonfederally funded but is a regionally significant project that is funded, adopted, or approved by a current or prior recipient of funds under 23 U.S.C.
 (Highways) or 49 U.S.C. 53 (Federal Transit Act). (Eff. 1/4/95, Register 133; am 9/4/98,

Register 147; am \_\_/\_\_\_, Register \_\_\_)

Authority: AS 46.03.020 AS 46.14.030

18 AAC 50.705(a)(2) is amended to read:

(2) a project that is nonfederally funded, but that is a regionally significant
project funded, adopted, or approved by a current or prior recipient of funds designated under 23
U.S.C. (Highways) or 49 U.S.C. 53 (the Federal Transit Act). (Eff. 1/4/95, Register 133; am
9/4/98, Register 147; am \_/\_/\_\_\_, Register\_\_\_)
Authority: AS 46.03.020 AS 46.14.030

The lead in language for 18 AAC 50.710 is amended to read:

#### 18 AAC 50.710. Transportation conformity: incorporation by reference of federal

**regulations.** An agency subject to 40 C.F.R. 93 shall comply with the following federal regulations, as amended through <u>March 1, 2008</u> [AUGUST 15, 1997], adopted by reference:

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18 AAC 50.710(16) is amended to read:

(16) 40 C.F.R. 93.116 (Criteria and procedures: Localized CO<sub>2</sub>[AND] PM-10<sub>2</sub>
 and PM-2.5 violations (hot spots));

18 AAC 50.710(17) is amended to read:

(17) 40 C.F.R. 93.117 (Criteria and procedures: Compliance with PM-10 <u>and</u>
 <u>PM-2.5</u> control measures);

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18 AAC 50.710(19) is amended to read:

(19) 40 C.F.R. 93.119 (Criteria and procedures: <u>Interim emissions</u> [EMISSIONSREDUCTIONS] in areas without motor vehicle emissions budgets);

18 AAC 50.710(21) is amended to read:

(21) 40 C.F.R. 93.121 (Requirements for adoption or approval of projects by other recipients of funds designated under 23 U.S.C. or <u>the Federal Transit Laws</u>) [49 U.S.C.
53 (THE FEDERAL TRANSIT ACT)];

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18 AAC 50.710(23) is amended to read:

(23) 40 C.F.R. 93.123 (Procedures for determining localized CO<sub>2</sub>[AND] PM-10
 and PM2.5 concentrations (hot-spot analysis)); (Eff. 1/4/95, Register 133; am 9/4/98, Register 147; am\_/\_/\_\_\_, Register \_\_\_)

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Authority: AS 46.03.020 AS 46.14.030

Editor's note: The regulations of the Federal Highway Administration and the Federal Transit Authority concerning fiscal constraint referred to by paragraph (8) may be found at 23 C.F.R. 450.216(m), 23 C.F.R. 450.322(f)(10), and 23 C.F.R. 450.324(h) [23 C.F.R. 450.216(a)(5), 23 C.F.R. 450.322(b)(11), AND 23 C.F.R. 450.324(e)].

18 AAC 50.715(c)(6) is amended to read:

(6) identify, as required by 40 C.F.R. 93.123(b), adopted by reference in 18 AAC 50.710, projects located at sites within a PM-10 <u>or PM-2.5</u> nonattainment area identified in 18 AAC 50.015(b)(2) that have vehicle and roadway emission and dispersion characteristics essentially identical to those at sites that have air quality violations verified by monitoring, and that, therefore, require a quantitative PM-10 <u>or PM-2.5</u> hot-spot analysis; and (Eff. 1/4/95, Register 133; am 9/4/98, Register 147; am \_/\_/\_\_\_, Register \_\_\_)

Authority: AS 46.03.020 AS 46.14.030

18 AAC 50.720 is amended to read:

**18 AAC 50.720. Transportation conformity: public involvement**. (a) The responsible agency referred to in 18 AAC 50.705(c) shall establish a public involvement process to provide

opportunity for public review and comment on the public review draft of the conformity determination before the agency issues a final conformity determination. The public involvement process must be consistent with the requirements of <u>23 C.F.R. 450.316(a), 23 C.F.R. 450.322(i)</u>

and 23 C.F.R. 450.324(b) [23 C.F.R. 450.316(b)(1), 23 C.F.R. 450.322(c), and 23 C.F.R.

450.324(c)], as amended through March 1, 2008 [APRIL 1, 1997].

(b) The responsible agency shall

(1) subject to (d) of this section, [HOLD A PUBLIC HEARING OR MEETING

TO] receive written comments on the public review draft of the conformity determination;

#### (2) hold a public hearing or meeting;

# (A) for a transportation plan or transportation improvement program;

# (B) for projects within a designated nonattainment area listed under <u>18 AAC 50.015(b)</u>, and for projects within a designated maintenance area listed <u>under 18 AAC 50.015(d) not included in (A) above; and</u>

# (C) if the written comments, received under (1) above, request a public hearing or meeting for a regionally significant project;

(3) consider all comments received and prepare a written summary analysis of significant comments; and

(4) specifically address in the summary analysis all public comments concerning known plans for a regionally significant project that may not have been properly reflected in the emissions analysis used to support a proposed conformity finding for a transportation plan or transportation improvement program, regardless of whether the regionally significant project is receiving federal funding or approval.

(c) Opportunity for public involvement under this section must include access to information, emissions data, analyses, models, and modeling assumptions used to perform a conformity determination.

(d) If a project for which the provisions of (a) – (c) of this section apply is also subject to a public involvement process under 42 U.S.C. 4321 - 4370b (National Environmental Policy Act), compliance with the public involvement process under that law constitutes compliance with (a) – (c) of this section. (Eff. 1/4/95, Register 133; am 9/4/98, Register 147; am  $_/_/___$ , Register \_\_\_)

Authority: AS 46.03.020 AS 46.14.030

18 AAC 50.990 is amended by adding new subsections to read:

## (128) "PM-2.5" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers;

#### (129) "Ozone" means a colorless gas with a pungent odor that has the

molecular form O<sub>3</sub>. (Eff. 1/18/97, Register 141; am 6/14/98, Register 146; am 6/21/98,

Register 146; am 9/4/98, Register 147; am 11/4/99, Register 152; am 1/1/2000, Register 152; am

2/2/2002, Register 161; am 5/3/2002, Register 162; am 11/15/2002, Register 164; am 8/8/2003,

Register 167; am 10/1/2004, Register 171; am 12/3/2005, Register 176; am 12/30/2007, Register

184; am 7/25/2008, Register 187; am \_\_/\_/\_\_\_, Register \_\_\_)

Authority:	AS 44.46.025	AS 46.14.140	AS 46.14.250
	AS 46.03.020	AS 46.14.150	AS 46.14.255
	AS 46.03.710	AS 46.14.160	AS 46.14.280

Register, 2009	ENVIRONMENTAL CO	ENVIRONMENTAL CONSERVATION	
AS 46.14.010	AS 46.14.170	AS 46.14.285	
AS 46.14.020	AS 46.14.180	AS 46.14.290	
AS 46.14.030	AS 46.14.210	AS 46.14.300	
AS 46.14.120	AS 46.14.230	AS 46.14.560	
AS 46.14.130	AS 46.14.240	Sec. 30, ch. 74, SLA 1993	