LANE REGIONAL AIR PROTECTION AGENCY

TITLE 50

AMBIENT AIR STANDARDS AND PSD INCREMENTS

Section 50-001 Definitions

The definitions in title 12, section 29-0010, and this section apply to this title. If the same term is defined in this section and title 12 or section 29-0010, the definition in this section applies to this title.

(1) "Approved Method" means an analytical method for measuring air contaminant concentrations described or referenced in 40 CFR part 50 and Appendices.

(2) "Oregon standard method" means any method of sampling and analyzing for an air contaminant approved by LRAPA. Oregon standard methods are kept on file by LRAPA and include all methods described in the DEQ Source Sampling Manual and the DEQ Continuous Monitoring Manual referenced in OAR 340-200-0035(2) and (3), respectively.

Ambient Air Quality Standards

Section 50-005 Purpose and Scope of Ambient Air Quality Standards

(1) An ambient air quality standard is an established concentration, exposure time, and frequency of occurrence of an air contaminant or multiple contaminants in the ambient air that must not be exceeded. The ambient air quality standards set forth in sections 50-005 through 50-045 were established to protect both public health and public welfare.

(2) Ambient air quality standards are not generally used to determine the acceptability or unacceptability of emissions from a specific source of air contamination. More commonly, the measured ambient air quality is compared with the ambient air quality standards to determine the adequacy or effectiveness of emission standards for all sources in a general area. However, if a source or combination of sources are singularly responsible for a violation of ambient air quality standards in a particular area, it may be appropriate to impose emission standards that are more stringent than those otherwise applied to the class of sources involved. Similarly, proposed construction of new sources or expansions of existing sources, that may prevent or interfere with the attainment and maintenance of ambient air quality standards are grounds for issuing an order prohibiting such proposed construction as authorized by ORS 468A.055 and pursuant to sections 34-010 through 34-038 and OAR 340-218-0190. No source may cause or contribute to a new violation of an ambient air quality standard or PSD increment even if the single source impact is less than the significant impact level.

(3) In adopting the ambient air quality standards in this title, LRAPA recognizes that one or more of the standards have historically been exceeded in certain parts of Lane County. It is hereby declared to be the policy of LRAPA to achieve, by application of a timely but orderly program of pollution abatement, full compliance with ambient air quality standards throughout the state at the earliest possible date.

Section 50-010 Particle Fallout

(1) The particle fallout rate as measured by an Oregon standard method at a location approved by LRAPA must not exceed:

(a) 10 grams per square meter per month in an industrial area.

(b) 5.0 grams per square meter per month in an industrial area if visual observations show a presence of wood waste or soot and the volatile fraction of the sample exceeds 70 percent.

(c) 5.0 grams per square meter per month in residential and commercial areas.

(d) 3.5 grams per square meter per month in residential and commercial areas if visual observations show the presence of wood waste or soot and the volatile fraction of the sample exceeds 70 percent.

Section 50-015 Suspended Particulate Matter

(1) Concentrations of the fraction of suspended particulate that is equal to or less than 2.5 microns in aerodynamic diameter in ambient air as measured by an approved method must not exceed:

(a) 12 $\mu g/m^3$ of $PM_{2.5}$ as a 3-year average of the annual arithmetic mean. This standard is attained when the annual arithmetic mean concentrations is equal to or less than 12 $\mu g/m^3$ as determined in accordance with Appendix N of 40 CFR part 50.

(b) 35 $\mu g/m^3$ of $PM_{2.5}$ as a 3-year average of annual 98^{th} percentile 24-hour average values recorded at each monitoring site. This standard is attained when the 3-year average of annual 98^{th} percentile 24-hour average concentrations is equal to or less than 35 $\mu g/m^3$ as determined in accordance with Appendix N of 40 CFR part 50.

(2) Concentrations of the fraction of suspended particulate matter that is equal to or less than ten microns in aerodynamic diameter in ambient air as measured by an approved method must not exceed:

(a) 150 $\mu g/m^3$ of PM_{10} as a 24-hour average concentration for any calendar day. This standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$, as determined in Appendix K of 40 CFR part 50 is equal to or less than one (1) at any site.

Section 50-025 Sulfur Dioxide

(1) Concentrations of sulfur dioxide in ambient air as measured by an approved method for each averaging time must not exceed the following concentrations:

(a) Annual average: 0.02 ppm as an annual arithmetic mean for any calendar year at any site as measured by the reference method described in Appendix A of 40 CFR part 50 or by an equivalent method designated in accordance with 40 CFR part 53.

(b) 24-hour average: 0.10 ppm as a 24-hour average concentration more than once per year at any site as measured by the reference method described in Appendix A of 40 CFR part 50 or by an equivalent method designated in accordance with 40 CFR part 53.

(c) 3-hour average: 0.50 ppm as a 3-hour average concentration more than once per year at any site as measured by the reference method described in Appendix A of 40 CFR part 50 or by an equivalent method designated in accordance with 40 CFR part 53.

(d) 1-hour average: 0.075 ppm as a three-year average of the annual 99th percentile of the daily maximum 1-hour average concentration recorded at any monitoring site as determined by Appendix T of 40 CFR part 50 as measured by a reference method based on appendix A or A-1 of 40 CFR part 50, or by a Federal Equivalent Method (FEM) designated in accordance with 40 CFR part 53.

Section 50-030 Carbon Monoxide

(1) For comparison to the standard, averaged ambient concentrations of carbon monoxide will be rounded to the nearest integer in parts per million (ppm). Fractional parts of 0.5 or greater will be rounded up. Concentrations of carbon monoxide as measured by an approved method, must not exceed:

(a) 9 ppm as an 8-hour average concentration more than once per year at any site.

(b) 35 ppm as a 1-hour average concentration more than once per year at any site.

Section 50-035 Ozone

(1) Concentrations of ozone in ambient air as measured by an approved method must not exceed 0.070 ppm as a daily maximum eight-hour average concentration. This standard is attained when, at any site the average of the annual fourth-highest daily maximum eight-hour average ozone concentration is equal to or less than 0.070 as determined by the method of Appendix I, 40 CFR part 50.

Section 50-040 Nitrogen Dioxide

(1) Concentrations of nitrogen dioxide as measured by a reference method based on Appendix F of 40 CFR part 50 or by a Federal equivalent method (FEM) designated in accordance with 40 CFR part 53 must not exceed:

(a) 0.053 ppm as an annual average concentration for any calendar year at any site. The standard is met when the annual average concentration in a calendar year is less than or equal to 0.053 ppm, as determined in accordance with Appendix S of 40 CFR part 50 for the annual standard.

(b) 0.100 ppm as a 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations recorded at any monitoring site. The standard is met when the three-year average of the annual 98th percentile of the daily maximum 1-hour average concentration is less than or equal to 0.100 ppm, as determined in accordance with Appendix S of 40 CFR part 50 for the 1-hour standard.

(c) 0.053 ppm as an annual arithmetic mean concentration as determined in accordance with Appendix S of 40 CFR part 50. The secondary standard is attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to three (3) decimal places (fractional parts equal to or greater than 0.0005 ppm must be rounded up). To demonstrate attainment, an annual mean must be based upon hourly data that are at least 75 percent complete or upon data derived from manual methods that are at least 75 percent complete for the scheduled sampling days in each calendar quarter.

Section 50-045 Lead

(1) The concentration of lead and its compounds in ambient air must not exceed:

(a) 0.15 micrograms per cubic meter as a maximum arithmetic mean averaged over a calendar quarter, as measured by a reference method based on Appendix G of 40 CFR part 50 or an equivalent method designated in accordance with 40 CFR part 53.

(b) The standard is met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR part 50, is less than or equal to 0.15 micrograms per cubic meter.

Prevention of Significant Deterioration Increments

Section 50-050 General

(1) The purpose of sections 50-050 through 50-060 is to implement a program to prevent significant deterioration of air quality in Lane County as required by the FCAA Amendments of 1977.

(2) LRAPA will review the adequacy of the SIP on a periodic basis and within 60 days of such time as information becomes available that an applicable increment is being violated. Any SIP revision resulting from the reviews will be subject to the opportunity

for public hearing in accordance with procedures established in the SIP.

Section 50-055 Ambient Air PSD Increments

(1) This rule defines significant deterioration. In areas designated as Class I, II or III, emissions from new or modified sources must be limited such that aggregate increases in regulated pollutant concentration over the baseline concentration, as defined in section 40-0020, are less than the PSD increments or maximum allowable increases set out in Table 1.

(2) For any period other than an annual period, the applicable maximum allowable increase or PSD increment may be exceeded during one such period per year at any one (1) location.

Table 1 Section 50-055 Maximum Allowable Increase	
CLASS I	
POLLUTANT	*Micrograms per cubic meter*
Particulate Matter: PM_{10}, Annual arithmetic mean	4
PM_{10}, 24-hour maximum	8
$PM_{2.5}$, Annual arithmetic mean	1
$PM_{2.5}$, 24-hour maximum	2
Sulfur Dioxide: Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen Dioxide: Annual arithmetic mean	2.5
CLASS II	
Pollutant	*Micrograms per cubic meter*
Particulate Matter: PM_{10}, Annual arithmetic mean	17
PM_{10}, 24-hour maximum	30
$PM_{2.5}$, Annual arithmetic mean	4
$PM_{2.5}$, 24-hour maximum	9
Sulfur Dioxide:	

Table 1 Section 50-055 Maximum Allowable Increase	
Annual arithmetic mean 24-hour maximum 3-hour maximum	20 91 512
Nitrogen Dioxide: Annual arithmetic mean	25
CLASS III	
Pollutant	*Micrograms per cubic meter*
Particulate Matter: PM_{10}, annual arithmetic mean PM_{10}, 24-hour maximum $PM_{2.5}$, Annual arithmetic mean $PM_{2.5}$, 24-hour maximum	 34 60 8 18
Sulfur Dioxide: Annual arithmetic mean 24-hour maximum 3-hour maximum	 40 182 700
Nitrogen Dioxide: Annual arithmetic mean	50

Section 50-060 Ambient Air Ceilings

(1) No concentration of a pollutant may exceed:

(a) The concentration permitted under the national secondary ambient air quality standard;

(b) The concentration permitted under the national primary ambient air quality standard; or

(c) The concentration permitted under the state ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

Section 50-065 Ambient Air Quality Impact Levels for Maintenance Areas

(1) The following ambient air quality impact levels apply to the areas specified for the purpose of the air quality analysis in sections 38-0060 and 38-0260, if required:

(a) In a carbon monoxide maintenance area, 0.5 mg/m^3 (8 hour average) and 2 mg/m^3 (1-hour average).

(b) In a PM_{10} maintenance area:

(A) 120 $\mu g/m^3$ (24-hour average) in the Eugene-Springfield PM_{10} maintenance area.