

LANE REGIONAL AIR PROTECTION AGENCY

TITLE 50

Ambient Air Standards and PSD Increments

Section 50-001 Definitions

The definitions in Title 12 and this rule apply to this title. If the same term is defined in this rule and Title 12, the definition in this rule applies to this title.

1. "Ambient Air" means that portion of the atmosphere external to buildings, to which the general public has access.
2. "Ambient Air Monitoring Site Criteria" means the general probe siting specifications as set forth in **Appendix E** of **40 CFR 58**.
3. "Approved Method" means an analytical method for measuring air contaminant concentrations described or referenced in **40 CFR 50** and Appendices. These methods are approved by LRAPA.

~~4. "Baseline Concentration" means:~~

- ~~a. The ambient concentration level for sulfur dioxide and PM<sub>10</sub> that existed in an area during the calendar year 1978. If no ambient air quality data is available in an area, the baseline concentration may be estimated using modeling based on actual emissions for 1978. Actual emission increases or decreases occurring before January 1, 1978 must be included in the baseline calculation, except that actual emission increases from any major source or major modification on which construction commenced after January 6, 1975 must not be included in the baseline calculation;~~
- ~~b. The ambient concentration level for nitrogen oxides that existed in an area during the calendar year 1988.~~

~~5.4.~~ "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.

~~6.5.~~ "PPM" means parts per million by volume. It is a dimensionless unit of measurement for gases that expresses the ratio of the volume of one component gas to the volume of the entire sample mixture of gases.

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 Section 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 LRAPA 34-010 through 34-038 and OAR 340-218-0190.
3. In adopting the ambient air quality standards in this title, LRAPA recognizes that one or more of the standards are currently being exceeded in certain parts of the state. 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 Particulate Matter

1. Concentrations of particulate matter at a location meeting the EPA ambient air monitoring site criteria, and as measured by an approved method, shall not exceed:
  - A. 15.0 ug/m<sup>3</sup> of PM<sub>2.5</sub> as an annual arithmetic mean. To attain this standard, the 3-year average of the weighted annual mean PM<sub>2.5</sub> concentrations from single or multiple community-oriented monitors must not exceed 15.0 ug/m<sup>3</sup>.
  - B. 35 ug/m<sup>3</sup> of PM<sub>2.5</sub> as a 24-hour average concentration. To attain this standard, the 3-year average of the 98<sup>th</sup> percentile of 24-hour concentrations at each population-oriented

monitor within an area must not exceed 35 ug/m<sup>3</sup>.

- C. 150 ug/m<sup>3</sup> of PM10 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, rounded to the nearest 10 ug/m<sup>3</sup>, above 150 ug/m<sup>3</sup>, as determined in **Appendix K of 40 CFR 50** is equal to or less than one.

#### Section 50-020 Odors

(Deleted 10/09/01)

#### Section 50-025 Sulfur Dioxide

- 1. Concentrations of sulfur dioxide at a location meeting ambient air monitoring site criteria, and as measured by an approved method, shall not exceed:
  - A. 0.02 ppm as an annual arithmetic mean for any calendar year;
  - B. 0.10 ppm as a 24-hour average concentration more than once per year;
  - C. 0.50 ppm as a 3-hour average concentration more than once per year.

#### Section 50-030 Carbon Monoxide

- 1. For comparison to the standard, averaged ambient concentrations of carbon monoxide shall be rounded to the nearest integer in parts per million (ppm). Fractional parts of 0.5 or greater shall be rounded up.
- 2. Concentrations of carbon monoxide at a location meeting ambient air monitoring site criteria, and as measured by an approved method, shall not exceed:
  - A. 9 ppm as an 8-hour average concentration more than once per year;
  - B. 35 ppm as a 1-hour average concentration more than once per year.

#### Section 50-035 Ozone

Concentrations of ozone in ambient air as measured by an approved method must not exceed 0.08 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 0.08 as determined by the method of **Appendix I, 40 CFR 50**.

#### Section 50-040 Nitrogen Dioxide

Concentrations of nitrogen dioxide at a location meeting ambient air monitoring site criteria, and as measured by an approved method, shall not exceed 0.053 ppm as an annual arithmetic mean.

Section 50-045 Lead

The lead concentration at a location meeting ambient air monitoring site criteria, and as measured by an approved method, shall not exceed 1.5 ug/m<sup>3</sup> as an arithmetic average concentration of all samples collected at that location during any one calendar quarter.

**Prevention of Significant Deterioration Increments**

Section 50-050 General

1. The purpose of LRAPA 50-050 through 50-060 is to implement a program to prevent significant deterioration of air quality in Lane County as required by the federal Clean Air Act Amendments of 1977.
2. LRAPA will review the adequacy of the State Implementation Plan on a periodic basis and within 60 days of such time as information becomes available that an applicable increment is being violated. Any Plan revision resulting from the reviews will be subject to the opportunity for public hearing in accordance with procedures established in the Plan.

Section 50-055 Ambient Air 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 increases in pollutant concentration over the baseline concentration defined in LRAPA Title 40 must be limited to those set out in **Table 1** of this Title.
2. For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

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; or
  - 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.

Table 1 LRAPA 50-055 Maximum Allowable Increase Micrograms per cubic meter	
CLASS I	
<i>POLLUTANT</i>	<i>Micrograms per cubic meter</i>
Particulate Matter	
PM10, Annual Arithmetic Mean	4
PM10, 24-hour maximum	8
<u>PM2.5, Annual arithmetic mean</u>	<u>1</u>
<u>PM2.5, 24-hour maximum</u>	<u>3</u>
Sulfur Dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen Dioxide:	
Annual arithmetic mean	2.5
CLASS II	
<i>Pollutant</i>	<i>Micrograms per cubic meter</i>
Particulate Matter	
PM10, Annual Arithmetic Mean	17
PM10, 24-hour maximum	30
<u>PM2.5, Annual arithmetic mean</u>	<u>4</u>
<u>PM2.5, 24-hour maximum</u>	<u>9</u>
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
Nitrogen Dioxide:	
Annual arithmetic mean	25
CLASS III	
<i>Pollutant</i>	<i>Micrograms per cubic meter</i>
Particulate Matter	
PM10, Annual Arithmetic Mean	34
PM10, 24-hour maximum	60
<u>PM2.5, Annual arithmetic mean</u>	<u>8</u>
<u>PM2.5, 24-hour maximum</u>	<u>18</u>
Sulfur Dioxide:	

Formatted: Normal

Formatted: Font: Times New Roman

Formatted: Normal, Indent: First line: 1.14"

Formatted: Font: Times New Roman

Formatted: Font: 12 pt

Formatted: Normal

Formatted: Font: Times New Roman

Formatted: Left, Indent: First line: 1.14"

Formatted: Font: Times New Roman

Formatted: Font: Times New Roman, 10 pt

Formatted: Normal, Indent: First line: 1.14"

Formatted: Normal

Formatted: Normal, Indent: First line: 1.14"

Formatted: Font: Shruti, 12 pt

Annual arithmetic mean	40
24-hour maximum	182
3-hour maximum	700
Nitrogen Dioxide:	
Annual arithmetic mean	50