340-208-0110

Visible Air Contaminant Limitations

- (1) Existing sources outside special control areas. No person may emit or allow to be emitted any air contaminant into the atmosphere from any existing air contaminant source located outside a special control area for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 40% opacity.
- (2) New sources in all areas and existing sources within special control areas: No person may emit or allow to be emitted any air contaminant into the atmosphere from any new air contaminant source, or from any existing source within a special control area, for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity.
- (3) Exceptions to sections (1) and (2) of this rule:
- (a) Where the presence of uncombined water is the only reason for failure of any source to meet the requirement of sections (1) and (2) of this rule, such sections shall not apply;
- (b) Existing fuel burning equipment installed on or before June 1, 1970 that has not been modified since June 1, 1970 utilizing wood wastes and located within special control areas shall comply with the emission limitations of section (1) of this rule in lieu of section (2) of this rule.
- (4) Opacity is determined in accordance with the procedures specified in the definition of "opacity".
- (1) The emissions standards in this rule do not apply to fugitive emission sources.
- (2) The visible emissions standards in this rule are based on a 6-minute average as measured by:
- (a) EPA Method 9,
- (b) a continuous opacity monitoring system (COMS) installed and operated in accordance with the DEQ Continuous Monitoring Manual or 40 CFR Part 60; or
- (c) An alternative monitoring method approved by DEQ that is equivalent to EPA Method 9, such as EPA's ALT Method 082.
- (3) For emission sources, other than wood-fired boilers, that existed prior to June 1, 1970 and have not been modified since May 31, 1970:
- (a) If located outside a special control area, visible emissions must not equal or exceed:
- (A) 40% opacity through December 31, 2019; and

- (B) 20% opacity on and after January 1, 2020
- (b) If located inside a special control area, visible emissions must not equal or exceed 20% opacity.
- (4) For emission sources, other than wood-fired boilers, installed, constructed, or modified on or after June 1, 1970, visible emissions must not exceed 20% opacity.
- (5) For wood-fired boilers that existed prior to June 1, 1970 and have not been modified since May 31, 1970, visible emissions must not equal or exceed:
- (a) 40% opacity through December 31, 2019 with the exception that emissions may not equal or exceed 55% opacity for 12 minutes in an hour, as the average of two 6-minute Method 9 observation periods.
- (b) 20% opacity on or after January 1, 2020, with the following exceptions:
- (A) Emissions may not equal or exceed 40% opacity for 12 minutes in an hour, as the average of two 6-minute Method 9 observation periods; and
- (B) Emissions may not equal or exceed 40% opacity, as the average of all 6- minute Method 9 observation periods during grate cleaning operations provided the grate cleaning is performed in accordance with a grate cleaning plan approved by DEQ.
- (C) The owner or operator may request a boiler specific limit greater than 20% opacity, but not greater than 40% opacity, based on the opacity measured during a source test that demonstrates compliance with OAR 340-228-0210(2)(a)(C). Opacity must be measured for at least 60 minutes during each compliance source test run.

 The boiler specific limit will be the average of at least 30 6-minute Method 9 observations conducted during the compliance source test. The limit will include a higher limit for one six minute period during any hour based on the maximum 6 minute average measured during the compliance source test. Specific opacity limits will be included in the permit for each affected source as a minor permit modification (simple fee) for sources with an Oregon Title V Operating Permit or a Basic Technical Modification for sources with an Air Contaminant Discharge Permit. If an alternative limit is established in accordance with this paragraph, the exception provided in paragraph (A) does not apply.

(6) For wood-fired boilers installed, constructed, or modified after June 1, 1970 but before November 1, 2014, visible emissions must not equal or exceed 20% opacity with the exception that emissions may not equal or exceed 40% opacity for 12 minutes in an hour, as the average of two 6-minute Method 9 observation periods.

(7) For all wood-fired boilers installed, constructed, or modified after November 1, 2014, emissions must not equal or exceed 20% opacity.

Grain Loading Standards

340-226-0210

Particulate Emission Limitations for Sources Other Than Fuel Burning Equipment, Refuse Burning Equipment, and Fugitive Emissions

- (1) No person may cause, suffer, allow, or permit particulate matter emission from any air contaminant source in excess of:
- (a) 0.2 grains per standard cubic foot for existing sources, or
- (b) 0.1 grains per standard cubic foot for new sources.
- (2) This rule does not apply to fuel or refuse burning equipment, or to fugitive emissions.
- (1) This rule does not apply to fugitive emission sources, fuel burning equipment, refuse burning equipment, and solid fuel burning devices that have been certified under OAR 340-262-0500.
- (2) No person may cause, suffer, allow, or permit particulate matter emission from any air contaminant source in excess of:
- (a) For sources installed, constructed, or modified before June 1, 1970:
- (A) 0.10 grains per dry standard cubic foot unless representative compliance source test data prior to November 1, 2014 is greater than 0.080 grains per dry standard cubic foot;
- (B) If the limit in paragraph (A) does not apply, 0.2 grains per dry standard cubic foot through December 31, 2019;
- (C) If the limit in paragraph (A) does not apply, 0.15 grains per dry standard cubic foot beginning January 1, 2020; or

- (D) For equipment or a mode of operation that is used less than 876 hours per calendar year, 0.20 grains per standard cubic foot beginning January 1, 2020.
- (b) For sources installed, constructed, or modified on or after June 1, 1970 but prior to November 1, 2014:
- (A) 0.10 grains per dry standard cubic foot unless representative compliance source test data prior to November
- 1, 2014 is greater than 0.080 grains per dry standard cubic foot;
- (B) If the limit in paragraph (A) does not apply, 0.1 grains per dry standard cubic foot through December 31, 2019; or
- (C) 0.15 grains per dry standard cubic foot beginning January 1, 2020.
- (c) For sources installed, constructed or modified after November 1, 2014, 0.10 grains per dry standard cubic foot.
- (d) The owner or operator of a source installed, constructed or modified before November 1, 2014 who is unable to comply with the compliance dates specified in paragraphs (a)(C) and (b)(C) may request that DEQ grant an extension allowing the source up to one additional year to comply with the standard. The request for an extension must be submitted no later than October 1, 2019.
- (3) Compliance with the emissions standards in section (2) is determined using:
- (a) Oregon Method 5;
- (b) DEQ Method 8, as approved by DEQ for sources with exhaust gases at or near ambient conditions;
- (c) DEQ Method 7 for direct heat transfer sources; or
- (d) An alternative method approved by DEQ.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.]

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468.020 & ORS 468A.025.

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96;

DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0030; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-

01

340-228-0210

Grain Loading Standards

- (1) Except as provided in sections (2) and (3) of this rule, no person shall cause, suffer, allow, or permit the emission of particulate matter, from any fuel burning equipment in excess of:
- (a) 0.2 grains per standard cubic foot for sources installed, constructed, or modified on or before June 1, 1970;
- (b) 0.1 grains per standard cubic foot for sources installed, constructed, or modified after June 1, 1970.
- (2) For sources burning salt laden wood waste on July 1, 1981, where salt in the fuel is the only reason for failure to comply with the above limits and when the salt in the fuel results from storage or transportation of logs in salt water, the resulting salt portion of the emissions shall be exempted from subsection (1)(a) or (b) of this rule and OAR 340-208-0110. In no case shall sources burning salt laden woodwaste exceed 0.6 grains per standard cubic foot.
- (a) This exemption and the alternative emissions standard are only applicable upon prior notice to the Department.
- (b) Sources which utilize this exemption, to demonstrate compliance otherwise with subsection (1)(a) or (b) of this rule, shall submit the results of a particulate emissions source test of the boiler stacks bi-annually.
- (3) This rule does not apply to solid fuel burning devices that have been certified under OAR 340-262-0500.
- (1) This rule applies to fuel burning equipment, except solid fuel burning devices that have been certified under OAR 340-262-0500.
- (2) No person may cause, suffer, allow, or permit particulate matter emission from any fuel burning equipment in excess of:
- (a) For sources installed, constructed, or modified before June 1, 1970:
- (A) 0.10 grains per dry standard cubic foot unless representative compliance source test data prior to November
- 1, 2014 is greater than 0.080 grains per dry standard cubic foot;
- (B) If the limit in paragraph (A) does not apply, 0.2 grains per dry standard cubic foot through December 31, 2019;
- (C) If the limit in paragraph (A) does not apply, 0.15 grains per dry standard cubic foot beginning January 1, 2020; or
- (D) For equipment or a mode of operation (e.g., backup fuel) that is used less than 876 hours per calendar year, 0.20 grains per standard cubic foot beginning January 1, 2020.

- (b) For sources installed, constructed, or modified on or after June 1, 1970 but prior to November 1, 2014:

 (A) 0.10 grains per dry standard cubic foot unless representative compliance source test data prior to November
- (B) If the limit in paragraph (A) does not apply, 0.1 grains per dry standard cubic foot through December 31, 2019; or
- (C) 0.15 grains per dry standard cubic foot beginning January 1, 2020.

1, 2014 is greater than 0.080 grains per dry standard cubic foot;

- (c) For sources installed, constructed or modified after November 1, 2014, 0.10 grains per dry standard cubic foot.
- (d) The owner or operator of a source installed, constructed or modified before November 1, 2014 who is unable to comply with the compliance dates specified in paragraphs (a)(C) or (b)(C) may request that DEQ grant an extension allowing the source up to one additional year to comply with the standard provided that the owner or operator submits an engineering report signed by a registered professional engineer that demonstrates that the source cannot comply with the standard without making significant changes to the equipment or control equipment or adding control equipment. The request for an extension must be submitted no later than October 1, 2019.
- (e) The owner or operator of a source installed, constructed or modified before June 1, 1970 who is unable to comply with the standard in paragraph (a)(C) may request that DEQ set a source specific limit of 0.17 grains per dry standard cubic foot.
- (A) The owner or operator must hire a registered professional engineer that specializes in boiler/multiclone optimization to evaluate existing equipment optimization options.
- (B) If after evaluating and implementing optimization recommendations for existing equipment, the registered professional engineer determines that a source is unable to comply with the standard in paragraph (a)(C), the owner or operator may request a source specific limit of 0.17 grains per dry standard cubic foot.
- (C) The owner or operator must submit an engineering report of the optimization evaluation signed by a registered professional engineer.

- (D) The request for a source specific limit must be submitted no later than October 1, 2019.
- (E) DEQ will approve the request as a significant permit modification (simple fee) for sources with an Oregon

 Title V Operating Permit or a Simple Technical Modification for sources with an Air Contaminant Discharge

 Permit.
- (3) Compliance with the emissions standards in section (2) is determined using Oregon Method 5, or an alternative method approved by DEQ.
- (a) For indirect heat transfer fuel burning equipment that burn wood fuel by itself or in combination with any other fuel, the emission results are corrected to 12% CO2.
- (b) For indirect heat transfer fuel burning equipment that burn fuels other than wood, the emission results are corrected to 50% excess air.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-200-0040.

Stat. Auth.: ORS 468 & 468A

Stats. Implemented: ORS 468.020 & 468A.025

Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 12-1979, f. & ef. 6-8-79; DEQ 6-1981, f. & ef. 2-17-81; DEQ 18-1982, f. & ef. 9-1-82; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f.