**DIVISION 228**

**REQUIREMENTS FOR FUEL BURNING EQUIPMENT AND FUEL SULFUR CONTENT**

**340-228-0010**

**Applicability**

This division applies in all areas of the state.

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

Stat. Auth.: ORS 468 & ORS 468A
Stats. Implemented: ORS 468A.025
Hist.: DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0012

**340-228-0020**

**Definitions**

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020 or 340-204-010, the definition in this rule applies to this division.

 (1) "Distillate Fuel Oil" means any oil meeting the specifications of ASTM Grade 1 or 2 fuel oils;

 (3) "Residual Fuel Oil" means any oil meeting the specifications of ASTM Grade 4, 5, or 6 fuel oils.

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

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 468 & 468A
Stats. Implemented: ORS 468.020 & 468A.025
Hist.: [DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 1-1984, f. & ef. 1-16-84; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 3-1996, f. & cert. ef. 1-29-96]; [DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93]; [DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93]; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-021-0005, 340-022-0005, 340-022-0050; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 7-2011, f. & cert. ef. 6-24-11

**Sulfur Content of Fuels**

**340-228-0100**

**Residual Fuel Oils**

No person shall sell, distribute, use, or make available for use, any residual fuel oil containing more than 1.75 percent sulfur by weight.

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

Stat. Auth.: ORS 468 & ORS 468A
Stats. Implemented: ORS 468A.025
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 87, f. 3-25-75, ef. 4-25-75; DEQ 141, f. & ef. 8-25-77; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0010

**340-228-0110**

**Distillate Fuel Oils**

No person shall sell, distribute, use, or make available for use, any distillate fuel oil containing more than the following percentages of sulfur:

(1) ASTM Grade 1 fuel oil -- 0.3 percent by weight.

(2) ASTM Grade 2 fuel oil -- 0.5 percent by weight.

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

Stat. Auth.: ORS 468 & ORS 468A
Stats. Implemented: ORS 468A.025
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0015

**340-228-0120**

**Coal**

(1) Except as provided in section (2) of this rule, no person shall sell, distribute, use, or make available for use, any coal containing greater than 1.0 percent sulfur by weight.

(2) Except as provided for in sections (4) and (5) of this rule, no person shall sell, distribute, use or make available for use any coal or coal containing fuel with greater than 0.3 percent sulfur and five percent volatile matter as defined in **ASTM Method D3175** for direct space heating within the Portland, Salem, Eugene-Springfield, and Medford-Ashland Air Quality Maintenance Areas. For coals subjected to a devolatilization process, compliance with the sulfur limit may be demonstrated on the sulfur content of coal prior to the devolatilization process.

(3) Distributors of coal or coal containing fuel destined for direct residential space heating use shall keep records for a five year period which shall be available for DEQ inspection and which:

(a) Specify quantities of coal or coal containing fuels sold;

(b) Contain name and address of customers who are sold coal or coal containing fuels;

(c) Specify the sulfur and volatile content of coal or the coal containing fuel sold to residences in the Portland, Salem, Eugene-Springfield, and Medford-Ashland Air Quality Maintenance Areas.

(4) Users of coal for direct residential space heating in 1980 who apply in writing by July 1, 1983 and receive written approval from DEQ shall be exempted from the requirement of section (2) of this rule provided they certify that they used more than one-half ton of coal in 1980.

(5) Distributors may sell coal not meeting specification in section (2) of this rule to those users who have applied for and received the exemption provided for in section (4) of this rule.

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

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the agency.]

Stat. Auth.: ORS 468 & ORS 468A
Stats. Implemented: ORS 468A.025
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 3-1982, f. & ef. 1-29-82; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0020

**340-228-0130**

**Exemptions**

Exempted from the requirements of OAR 340-228-0100 through 340-228-0120 are:

(1) Fuels used exclusively for the propulsion and auxiliary power requirements of vessels, railroad locomotives, and diesel motor vehicles.

(2) With prior approval of DEQ, fuels used in such a manner or control provided such that sulfur dioxide emissions can be demonstrated to be equal to or less than those resulting from the combustion of fuels complying with the limitations of OAR 340-228-0100 through 340-228-0120.

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

Stat. Auth.: ORS 468 & ORS 468A
Stats. Implemented: ORS 468A.025
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0025

**General Emission Standards for Fuel Burning Equipment**

**340-228-0200**

**Sulfur Dioxide Standards**

The following emission standards are applicable to sources installed, constructed, or modified after January 1, 1972 only:

(1) For fuel burning equipment having a heat input capacity between 150 million BTU per hour and 250 million BTU, no person may cause, suffer, allow, or permit the emission into the atmosphere of sulfur dioxide in excess of:

(a) 1.4 lb. per million BTU heat input, maximum three-hour average, when liquid fuel is burned;

(b) 1.6 lb. per million BTU heat input, maximum three-hour average, when solid fuel is burned.

(2) For fuel burning equipment having a heat input capacity of more than 250 million BTU per hour, no person may cause, suffer, allow, or permit the emission into the atmosphere of sulfur dioxide in excess of:

(a) 0.8 lb. per million BTU heat input, maximum three-hour average, when liquid fuel is burned;

(b) 1.2 lb. per million BTU heat input, maximum three-hour average, when solid fuel is burned.

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

Stat. Auth.: ORS 468 & 468A
Stats. Implemented: ORS 468.020 & 468A.025
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1996, f. & cert. ef. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0055; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 7-2011, f. & cert. ef. 6-24-11

**340-228-0210**

**Grain Loading Standards**

(1) No person may cause, suffer, allow, or permit particulate matter emission from any air contaminant source in excess of:

(a) 0.20 grains per dry standard cubic foot for sources installed, constructed, or modified before June 1, 1970 except as required by section (d).

(b) 0.1 grains per dry standard cubic foot for sources installed, constructed, or modified after June 1, 1970, except as required by sections (c) and (d).

(c) 0.10 grains per dry standard cubic foot if the source is located within 5 miles of a PM10/PM2.5 sustainment area, nonattainment area, or maintenance area and was installed, constructed or modified after June 1, 1970.

(d) 0.10 grains per dry standard cubic foot for all sources on or after January 1, 2019.

(2) The owner or operator of an existing source who is unable to comply with OAR 340-228-0210(1)(a), (c), or (d) may request that DEQ grant an extension allowing the source up to one year to comply with the standard, if such period is necessary for the installation of controls.

(3) 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 section (1) of this rule and OAR 340-208-0110. In no case shall sources burning salt laden woodwaste exceed 0.6 grains per dry standard cubic foot.

(a) This exemption and the alternative emissions standard are only applicable upon prior notice to DEQ.

(b) Sources which utilize this exemption, to demonstrate compliance otherwise with section (1), must submit the results of a particulate emissions source test of the boiler bi-annually.

(4) This rule does not apply to solid fuel burning devices that have been certified under OAR 340-262-0500.

(5) Compliance with the emissions standards in section (1) is determined using Oregon Method 5. When combusting wood fuel by itself or in combination with any other fuel, the emission results are corrected to 12% CO2. When combusting 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 Environmental Quality Commission 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. & cert. ef. 10-14-99, Renumbered from 340-021-0020; DEQ 8-2007, f. & cert. ef. 11-8-07; DEQ 7-2011, f. & cert. ef. 6-24-11

**Federal Acid Rain Program**

**340-228-0300**

**Federal Regulations Adopted by Reference**

(1) **40 CFR Parts 72, 75**, and **76** (July 2, 2013) are by this reference adopted and incorporated herein, for purposes of implementing an acid rain program that meets the requirements of title IV of the Clean Air Act. The term "permitting authority" means the Oregon Department of Environmental Quality and the term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.

(2) If the provisions or requirements of **40 CFR Part 72** conflict with or are not included in OAR 340 divisions 218 or 220, the Part 72 provisions and requirements shall apply and take precedence.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 468.020 & 468.310(2)
Stats. Implemented: ORS 468A.025
Hist.: DEQ 32-1994, f. & cert. ef. 12-22-94; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-022-0075; DEQ 22-2000, f. & cert. ef. 12-18-00; DEQ 13-2006, f. & cert. ef. 12-22-06; DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11

**340-228-0400**

**Purpose**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0410**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0420**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0430**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0440**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0450**

**Registration**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0460**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0470**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0480**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0490**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0500**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0510**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0520**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

**340-228-0530**

**Integration into Permits**

Repealed

Stat. Auth.: ORS 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03

Repealed

[**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 468.020
Stats. Implemented: ORS 468A.035
Hist.: DEQ 19-2003, f. & cert. ef. 12-12-03