**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 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020, the definition in this rule applies to this division.

(1) "ASTM" means the American Society for Testing and Materials.

(2) "Coastal Areas" means Clatsop, Tillamook, Lincoln, Coos, and Curry Counties and those portions of Douglas and Lane County west of Range 8 West, Willamette Meridian.

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

(4) "Fuel burning equipment" means equipment, other than internal combustion engines, the principal purpose of which is to produce heat or power by indirect heat transfer.

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

(6) "Standard conditions" means a temperature of 68° Fahrenheit and a pressure of 14.7 pounds per square inch absolute.

(7) "Standard cubic foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions. When applied to combustion flue gases from fuel or refuse burning, "standard cubic foot" also implies adjustment of gas volume to that which would result at a concentration of 12% carbon dioxide or 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.

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

Stat. Auth.: ORS 468 & 468A
Stats. Implemented: ORS 468.020,468A.025 & 468A.035
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(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12

**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 the Department 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 the Department of Environmental Quality, 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, 468A.035 & 468A.055
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(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12

**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.

**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 & 468A.035
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(Temp), f. & cert. ef. 6-24-11 thru 12-19-11; Administrative correction, 2-6-12; DEQ 1-2012, f. & cert. ef. 5-17-12