DIVISION 226

GENERAL EMISSION STANDARDS

340-226-0010 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) "New source" means, for purposes of OAR 340-226-0210, any air contaminant source installed, constructed, or modified after June 1, 1970.

(2) "Particulate matter" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable reference method in accordance with OAR 340-212-0120 and 212-0140. Sources with exhaust gases at or near ambient conditions may be tested with DEQ Method 5 or DEQ Method 8, as approved by the Department. Direct heat transfer sources must be tested with DEQ Method 7; indirect heat transfer combustion sources and all other non-fugitive emissions sources not listed above must be tested with DEQ Method 5 or an equivalent method approved by the Department;

(3) "Refuse" means unwanted matter.

(4) "Refuse burning equipment" means a device designed to reduce the volume of solid, liquid, or gaseous refuse by combustion.

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

(6) "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.

State effective: 7/1/01; EPA effective: 3/24/2003

HIGHEST AND BEST PRACTICABLE TREATMENT AND CONTROL

340-226-0100 POLICY AND APPLICATION

(1) As specified in OAR 340-226-0110 through 340-226-0140 and sections (2) through (5) of this rule, the highest and best practicable treatment and control of air contaminant emissions must in every case be provided so as to maintain overall air quality at the highest possible levels, and to maintain contaminant concentrations, visibility reduction, odors, soiling and other deleterious factors at the lowest possible levels. In the case of new sources of air contamination, particularly those located in areas with existing high air quality, the degree of treatment and control provided must be such that degradation of existing air quality is

minimized to the greatest extent possible.

(2) A source is in compliance with section (1) of this rule if the source is in compliance with all other applicable emission standards and requirements contained in divisions 200 through 268 of this chapter.

(3) The Commission may adopt additional rules as necessary to ensure that the highest and best practicable treatment and control is provided as specified in section (1) of this rule. Such rules may include, but are not limited to, requirements:

(a) Applicable to a source category, pollutant or geographic area of the state;

(b) Necessary to protect public health and welfare for air contaminants that are not otherwise regulated by the Commission; or

(c) Necessary to address the cumulative impact of sources on air quality.

(4) The Commission encourages the owner or operator of a source to further reduce emissions from the source beyond applicable control requirements where feasible.

(5) Nothing in OAR 340-226-0100 through 340-226-0140 revokes or modifies any existing permit term or condition unless or until the Department revokes or modifies the term or condition by a permit revision.

State effective: 7/1/01; EPA effective: 3/24/2003

340-226-0110 POLLUTION PREVENTION

The owner and operator of a source are encouraged to take into account the overall impact of the control methods selected, considering risks to all environmental media and risks from all affected products and processes. The owner or operator of a source is encouraged, but not required, to use the following hierarchy in controlling air contaminant emissions:

(1) Modify the process, raw materials or product to reduce the toxicity and quantity of air contaminants generated;

(2) Capture and reuse air contaminants;

(3) Treat to reduce the toxicity and quantity of air contaminants released; or

(4) Otherwise control emissions.

State effective: 7/1/01; EPA effective: 3/24/2003

340-226-0120 OPERATING AND MAINTENANCE REQUIREMENTS

(1) Operational, Maintenance and Work Practice Requirements:
(a) Where the Department has determined that specific operational, maintenance, or work practice requirements are appropriate to ensure that the owner or operator of a source is

operating and maintaining air pollution control equipment and emission reduction processes at the highest reasonable efficiency and effectiveness to minimize emissions, the Department will establish such requirements by permit condition or notice of construction approval;

(b) Operational, maintenance, and work practice requirements include:

(A) Flow rates, temperatures, and other physical or chemical parameters related to the operation of air pollution control equipment and emission reduction processes;

(B) Monitoring, record-keeping, testing, and sampling requirements and schedules;

(C) Maintenance requirements and schedules; and

(D) Requirements that components of air pollution control equipment be functioning properly.

(2) Emission Action Levels:

(a) Where the Department has determined that specific operational, maintenance, or work practice requirements considered or required under section (1) of this rule are insufficient to ensure that the owner or operator is operating and maintaining air pollution control equipment and emission reduction processes at the highest reasonable efficiency and effectiveness, the Department may establish, by permit or Notice of Construction approval, specific emission action levels in addition to applicable emission standards. An emission action level will be established that ensures an air pollution control equipment or emission reduction process is operated at the highest reasonable efficiency and effectiveness to minimize emissions;

(b) If emissions from a source equal or exceed the applicable emission action level, the owner or operator of the source must:

(A) Take corrective action as expeditiously as practical to reduce emissions to below the emission action level;

(B) Maintain records at the plant site for two years which document the exceedance, the cause of the exceedance, and the corrective action taken;

(C) Make such records available for inspection by the Department during normal business hours; and

(D) Submit such records to the Department upon request.

(c) The Department will revise an emission action level if it finds that such level does not reflect the highest reasonable efficiency and effectiveness of air pollution control equipment and emission reduction processes;

(d) An exceedance of an emission action level that is more stringent than an applicable emission standard is not a violation of such emission standard.

(3) In determining the highest reasonable efficiency and effectiveness for purposes of this rule, the Department considers operational variability and the capability of air pollution control equipment and emission reduction processes. If the performance of air pollution control equipment and emission reduction processes during start-up or shut-down differs from the performance under normal operating conditions, the Department determines the highest reasonable efficiency and effectiveness separately for these operating modes.

State effective: 7/1/01; EPA effective: 3/24/2003

340-226-0130 TYPICALLY ACHIEVABLE CONTROL TECHNOLOGY (TACT)

(1) Existing Sources. An existing emissions unit must meet TACT for existing sources if:

(a) The emissions unit is not already subject to emission standards under OAR 340-232-0010 through 340-232-0240, OAR 340 Divisions 230, 234, 236, or 238, OAR 340-240-0110 through 340-240-0180, 340-240-0310(1), OAR 340-240-0320 through 340-240-0430, or OAR 340 Division 224 for the pollutant emitted;

(b) The source is required to have a permit;

(c) The emissions unit has emissions of criteria pollutants equal to or greater than 5 tons per year of particulate or 10 tons per year of any gaseous pollutant; and

(d) The Department determines that air pollution control equipment and emission reduction processes in use for the emissions unit do not represent TACT, and that further emission control is necessary to address documented nuisance conditions, address an increase in emissions, ensure that the source is in compliance with other applicable requirements, or protect public health or welfare or the environment.

(2) New and Modified Sources. A new or modified emissions unit must meet TACT for new or modified sources if:

(a) The new or modified emissions unit is not subject to New Source Review requirements in OAR 340 division 224, an applicable Standard of Performance for New Stationary Sources in OAR 340 division 238, OAR 340-240-0110 through 340-240-0180, 340-240-0310(1), OAR 340-240-320 through 340-240-0430, or any other standard applicable only to new or modified sources in OAR 340 divisions 230, 234, 236, or 238 for the pollutant emitted;

(b) The source is required to have a permit;
(c) The emissions unit:

(A) If new, would have emissions of any criteria pollutant equal to or greater than 1 ton per year in any area, or of PM_{10} equal to or greater than 500 pounds per year in a

PM_{10} nonattainment area; or

(B) If modified, would have an increase in emissions from the permitted level for the emissions unit of any criteria pollutant equal to or greater than 1 ton per year in any area, or of PM_{10} equal to or greater than 500 pounds per year in a PM_{10} nonattainment area; and

(d) The Department determines that the proposed air pollution control equipment and emission reduction processes do not represent TACT.

(3) Before making a TACT determination, the Department will notify the owner or operator of a source that it intends to make such a determination using information known to the Department. The owner or operator of the source may supply the Department with additional information by a reasonable date set by the Department.

(4) The owner or operator of a source subject to TACT must submit, by a reasonable date established by the Department, compliance plans and specifications for the Department's approval. The owner or operator of the source must demonstrate compliance in accordance with a method and compliance schedule approved by the Department.

State effective: 7/1/01; EPA effective: 3/24/2003

340-226-0140 ADDITIONAL CONTROL REQUIREMENTS FOR STATIONARY SOURCES OF AIR CONTAMINANTS

In addition to other applicable requirements, the Department may establish control requirements by permit if necessary as specified in sections (1) through (5) of this rule:

(1) Requirements will be established to prevent violation of an Ambient Air Quality Standard caused or projected to be caused substantially by emissions from the source as determined by modeling, monitoring, or a combination thereof. For existing sources, the Department will conduct monitoring to confirm a violation of an Ambient Air Quality Standard .

(2) Requirements will be established to prevent significant impairment of visibility in Class I areas caused or projected to be caused substantially by a source as determined by modeling, monitoring, or a combination thereof. For existing sources, the Department will conduct monitoring to confirm visibility impairment.

(3) A requirement applicable to a major source will be established if it has been adopted by EPA but has not otherwise been adopted by the Commission.

(4) An additional control requirement will be established if requested by the owner or operator of a source.

(5) Requirements will be established if necessary to protect public health or welfare for the following air contaminants and sources not otherwise regulated under chapter 340, divisions 20 through 32:

(a) Chemical weapons; and

(b) Combustion and degradation by-products of chemical weapons.
State effective: 7/1/01; EPA effective: 3/24/2003

GRAIN LOADING STANDARDS

340-226-0200 APPLICABILITY

OAR 340-226-0200 through 340-226-0210 apply in all areas of the state.
State effective: 10/14/99; EPA effective: 3/24/2003

340-226-0210 PARTICULATE EMISSION LIMITATIONS FOR SOURCES OTHER THAN FUEL BURNING AND REFUSE BURNING EQUIPMENT

(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.
State effective: 7/1/01; EPA effective: 3/24/2003

PARTICULATE EMISSIONS FROM PROCESS EQUIPMENT

340-226-0300 APPLICABILITY

OAR 340-226-0300 through 340-226-0320 apply to all non-fugitive emissions from the following process equipment:

(1) Inertial separators without baghouses;

(2) Calciners;

(3) Material dryers;

(4) Material classifiers;

(5) Conveyors;

(6) Size reduction equipment;
(7) Material storage structures;

(8) Seed cleaning devices; and

(9) Equipment other than that for which specific emission standards have been adopted.
State effective: 7/1/01; EPA effective: 3/24/2003

340-226-0310 EMISSION STANDARD

No person may cause, suffer, allow, or permit the emissions of particulate matter in any one hour from any process in excess of the amount shown in **Table 1**, for the process weight rate allocated to such process.

State effective: 7/1/01; EPA effective: 3/24/2003

Table 1 (340-226-0310)
Particulate Matter Emissions Standards for Process Equipment

Process Lbs/Hr	Emission Lbs/Hr	Process Lbs/Hr	Emissions Lbs/Hr	Process Lbs/Hr	Emissions Lbs/Hr
50	0.24	2300	4.44	7500	8.39
100	0.46	2400	4.55	8000	8.71
150	0.66	2500	4.64	8500	9.03
200	0.85	2600	4.74	9000	9.36
250	1.03	2700	4.84	9500	9.67
300	1.20	2800	4.92	10000	10.00
350	1.35	2900	5.02	11000	10.63
400	1.50	3000	5.10	12000	11.28
450	1.63	3100	5.18	13000	11.89
500	1.77	3200	5.27	14000	12.50
550	1.89	3300	5.36	15000	13.13
600	2.01	3400	5.44	16000	13.74
650	2.12	3500	5.52	17000	14.36
700	2.24	3600	5.61	18000	14.97
750	2.34	3700	5.69	19000	15.58
800	2.43	3800	5.77	20000	16.19
850	2.53	3900	5.85	30000	22.22
900	2.62	4000	5.93	40000	28.30
950	2.72	4100	6.01	50000	34.30
1000	2.80	4200	6.08	60000	40.00
1100	2.97	4300	6.15	70000	41.30
1200	3.12	4400	6.22	80000	42.50
1300	3.26	4500	6.30	90000	43.60
1400	3.40	4600	6.37	10000	44.60
1500	3.54	4700	6.45	120000	46.30
1600	3.66	4800	6.52	140000	47.80
1700	3.79	4900	6.60	160000	49.00
1800	3.91	5000	6.67	200000	51.20
1900	4.03	5500	7.03	1000000	69.00
2000	4.14	6000	7.37	2000000	77.60
2100	4.24	6500	7.71	6000000	92.70

2200	4.34	7000	8.05		

Interpolation and extrapolation of the date for process unit weight rates in excess of 60,000 lb/hr shall be accomplished by the use of the equation: $E = 55.0P^{0.11} - 40$, where E - rate of process unit emission in lb/hr and P = process weight in tons/hr.

340-226-0320 DETERMINATION OF PROCESS WEIGHT

(1) Process weight is the total weight of all materials introduced into a piece of process equipment. Solid fuels charged are considered part of the process weight, but liquid and gaseous fuels and combustion air are not.

(a) For a cyclical or batch operation, the process weight per hour is derived by dividing the total process weight by the number of hours in one complete operation, excluding any time during which the equipment is idle.

(b) For a continuous operation, the process weight per hour is derived by dividing the process weight by a typical period of time, as approved by the Department.

(2) Where the nature of any process or operation or the design of any equipment permits more than one interpretation of this rule, the interpretation that results in the minimum value for allowable emission applies.

State effective: 7/1/01; EPA effective: 3/24/2003

ALTERNATIVE EMISSION CONTROLS

340-226-0400 ALTERNATIVE EMISSION CONTROLS (BUBBLE)

(1) Alternative emission controls for VOC and NOx emissions may be approved in a Standard ACDP or Oregon Title V Operating Permit for use within a single source such that a specific emission limit is exceeded, provided that:

(a) Such alternatives are not specifically prohibited by a rule or permit condition.

(b) Net emissions for each pollutant are not increased above the PSEL.

(c) The net air quality impact is not increased as demonstrated by procedures required by OAR 340-224-0090, Requirements for Net Air Quality Benefit.

(d) No other pollutants including malodorous, toxic or hazardous pollutants are substituted.

(e) BACT and LAER, where required by a previously issued permit pursuant to OAR 340 division 224, NSPS (OAR 340 division 238), and NESHAP (OAR 340 division 244), where required, are not relaxed.

(f) Specific emission limits are established for each emission unit involved such that

compliance with the PSEL can be readily determined.

(g) Application is made for a permit modification and such modification is approved by the Department.

(h) The reducing emission source reduces its allowable emission rate. Merely reducing production, throughput, or hours of operation is insufficient.

(2) Total emissions from the emission sources under the bubble will be established in the permit.

(3) Alternative emission controls, in addition to those allowed in (1) above, may be approved by the Department and EPA as a source specific SIP amendment.

State effective: 7/1/01; EPA effective: 3/24/2003

DIVISION 228

REQUIREMENTS FOR FUEL BURNING EQUIPMENT AND FUEL SULFUR CONTENT

340-228-0010 APPLICABILITY

This division applies in all areas of the state.

State effective: 10/14/99; EPA effective: 3/24/2003

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) "New source" means any air contaminant source installed, constructed, or modified

(a) for purposes of OAR 340-228-0200, after January 1, 1972; and

(b) for purposes of OAR 340-228-0210, after June 1, 1970.

(6) "Particulate matter" means all finely divided solid or liquid material, other than uncombined

water, emitted to the ambient air as measured by an applicable reference method in accordance with OAR 340-212-0120 and OAR 340 212-0140. Sources with exhaust gases at or near ambient conditions may be tested with DEQ Method 5 or DEQ Method 8, as approved by the Department. Direct heat transfer sources shall be tested with DEQ Method 7; indirect heat transfer combustion sources and all other non-fugitive emissions sources not listed above shall be tested with DEQ Method 5 or an equivalent method approved by the Department;

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

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

(9) "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.

State effective: 10/14/99; EPA effective: 3/24/2003

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.

State effective: 10/14/99; EPA effective: 3/24/2003

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.

State effective: 10/14/99; EPA effective: 3/24/2003

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.

State effective: 10/14/99; EPA effective: 3/24/2003

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.

State effective: 10/14/99; EPA effective: 3/24/2003

GENERAL EMISSION STANDARDS FOR FUEL BURNING EQUIPMENT

340-228-0200 SULFUR DIOXIDE STANDARDS

The following emission standards are applicable to new sources 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 2-hour average, when liquid fuel is burned;

(b) 1.6 lb. per million BTU heat input, maximum 2-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 2-hour average, when liquid fuel is burned;

(b) 1.2 lb. per million BTU heat input, maximum 2-hour average, when solid fuel is burned.
State effective: 10/14/99; EPA effective: 3/24/2003

340-228-0210 GRAIN LOADING STANDARDS

(1) 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 existing sources;

(b) 0.1 grains per standard cubic foot for new sources.

(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. 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.
State effective: 10/14/99; EPA effective: 3/24/2003

DIVISION 232

EMISSION STANDARDS FOR VOC POINT SOURCES

INTRODUCTION 340-232-0010

(1) This division regulates sources of VOC which contribute to the formation of photochemical oxidant, mainly ozone.

(2) Since ozone standards are not violated in Oregon from October through April (because of insufficient solar energy), natural gas-fired afterburners may be permitted, on a case-by-case basis, to lay idle during the winter months.

(3) Sources regulated by this division are new and existing sources in the Portland and Medford AQMA's and in the Salem SATS listed in subsections (a) through (n) of this section, including:

(a) Gasoline dispensing facilities, storage tank filling;

(b) Bulk gasoline plants and delivery vessels;

(c) Bulk gasoline terminal loading;

(d) Cutback asphalt;

(e) Petroleum refineries, petroleum refinery leaks;

(f) VOC liquid storage, secondary seals;

(g) Coating including paper coating and miscellaneous painting;

(h) Aerospace component coating;

(i) Degreasers;

(j) Asphaltic and coal tar pitch in roofing;

(k) Flat wood coating;

(l) Rotogravure and Flexographic printing;

(m) Automotive Gasoline.

(4) Emissions units not covered by the source categories listed in section (3) of this rule which emit or have the potential to emit over 100 tons of VOC per year are subject to OAR 340-232-0040(5).

State effective: 12/26/01; EPA effective: 10/3/05

340-232-0020 APPLICABILITY

(1) Notwithstanding the emission limitations in OAR 340 this division, all new major sources or major modifications at existing sources, located within the areas cited in section (2) of this rule, shall comply with OAR 340 division 224 (New Source Review).

(2) All new and existing sources inside the following areas shall comply with the General Emission Standards for Volatile Organic Compounds:

(a) Portland-Vancouver Air Quality Maintenance Area;

(b) Medford-Ashland Air Quality Maintenance Area;

(c) Salem Area Transportation Study (SATS) Area.

(3) VOC sources located outside the areas cited in section (2) of this rule are exempt from the General Emission standards for Volatile Organic Compounds.

(4) All new and existing sources in the areas identified in section (2) of this rule shall apply Reasonably Available Control Technology (RACT) subject to the categorical RACT requirements set forth in this division. Compliance with the requirements in this division shall be presumed to satisfy the RACT requirement.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0030 DEFINITIONS

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 340-204-0010, the definition in this rule applies to this division.

(1) "Aerospace component" means the fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile or space vehicle.

(2) "Air dried coating" means coatings which are dried by the use of air at ambient temperature.

(3) "Applicator" means a device used in a coating line to apply coating.

(4) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline from bulk terminals by railroad car or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and gasoline dispensing facilities.

(5) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.

(6) "Can coating" means any coating applied by spray, roller, or other means to the inside and/or outside surfaces of metal cans, drums, pails, or lids.

(7) "Carbon bed breakthrough" means the initial indication of depleted adsorption capacity characterized by a sudden measurable increase in VOC concentration exiting a carbon adsorption bed or column.

(8) "Certified storage device" means vapor recovery equipment for gasoline storage tanks as certified by the State of California Air Resources Board Executive Orders, copies of which are on file with the Department, or which has been certified by other air pollution control agencies and approved by the Department.

(9) "Class II hardboard paneling finish" means finishers which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

(10) "Clear coat" means a coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color.

(11) "Coating" means a material applied to a surface which forms a continuous film and is used for protective and/or decorative purposes.

(12) "Coating line" means one or more apparatus or operations which include a coating applicator, flash-off area, and oven or drying station wherein a surface coating is applied, dried, and/or cured.

(13) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

(14) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen, and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

(15) "Custody transfer" means the transfer of produced petroleum and/or condensate after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(16) "Cutback asphalt" means a mixture of a base asphalt with a solvent such as gasoline, naphtha, or kerosene. Cutback asphalts are rapid, medium, or slow curing (known as RC, MC, SC), as defined in **ASTM D2399**.

(17) "Day" means a 24-hour period beginning at midnight.

(18) "Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks.

(19) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation.

(20) "External floating roof" means a cover over an open top storage tank consisting of a double deck or pontoon single deck which rests upon and is supported by the volatile organic liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(21) "Extreme performance coatings" means coatings designed for extreme environmental conditions such as exposure to any one of the following: continuous ambient weather conditions, temperature consistently above 95°C, detergents, abrasive and scouring agents, solvents, corrosive atmosphere, or similar environmental conditions.

(22) "Extreme performance interior topcoat" means a topcoat used in interior spaces of aircraft areas requiring a fluid, stain or nicotine barrier.

(23) "Fabric coating" means any coating applied on textile fabric. Fabric coating includes the application of coatings by impregnation.

(24) "Flexographic printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

(25) "Freeboard ratio" means the freeboard height divided by the width (not length) of the degreaser's air/solvent area.

(26) "Forced air dried coating" means a coating which is dried by the use of warm air at temperatures up to 90°C (194°F).

(27) "Gas Freed" means a marine vessel's cargo tank has been certified by a Marine Chemist as "Safe for Workers" according to the requirements outlined in the National Fire Protection Association Rule 306.

(28) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 27.6 kPa (4.0 psi) or greater which is used to fuel internal combustion engines.

(29) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle, boat, or airplane gasoline tanks from stationary storage tanks.

(30) "Gas service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the gaseous phase.

(31) "Hardboard" is a panel manufactured primarily from inter-felted ligno-cellulosic fibers which are consolidated under heat and pressure in a hot press.

(32) "Hardwood plywood" is plywood whose surface layer is a veneer of hardwood.

(33) "High performance architectural coating" means coatings applied to aluminum panels and moldings being coated away from the place of installation.

(34) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floating upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(35) "Large appliance" means any residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and other similar products.

(36) "Leaking component" means any petroleum refinery source which has a volatile organic compound concentration exceeding 10,000 parts per million (ppm) when tested in the manner described in method 31 and 33 on file with the Department. These sources include, but are not limited to, pumping seals, compressor seals, seal oil degassing vents, pipeline valves, flanges and other connections, pressure relief devices, process drains, and open-ended pipes. Excluded from these sources are valves which are not externally regulated.

(37) "Lightering" means the transfer of fuel product into a cargo tank from one marine tank vessel to another.

(38) "Liquid-mounted" means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.

(39) "Liquid service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the liquid phase.

(40) "Loading event" means the loading or lightering of gasoline into a marine tank vessel's cargo tank, or the loading of any product into a marine tank vessel's cargo tank where the prior cargo was gasoline. The event begins with the connection of a marine tank vessel to a storage or cargo tank by means of piping or hoses for the transfer of a fuel product from the storage or cargo tank(s) into the receiving marine tank vessel. The event ends with disconnection of the pipes and/or hoses upon completion of the loading process.

(41) "Low solvent coating" means a coating which contains a lower amount of volatile organic compound than conventional organic solvent borne coatings. Low solvent coatings include waterborne, higher solids, electrodeposition and powder coatings.

(42) "Major modification" means any physical change or change of operation of a source that would result in a net significant emission rate increase for any pollutant subject to regulation under the Clean Air Act.

(43) "Major source" means a stationary source which emits or has the potential to emit any pollutant regulated under the Clean Air Act at a significant emission rate.

(44) "Marine Tank Vessel" means any marine vessel constructed or converted to carry liquid bulk cargo that transports gasoline.

(45) "Marine Terminal" means any facility or structure used to load or unload any fuel product cargo into or from marine tank vessels.

(46) "Marine Vessel" means any tugboat, tanker, freighter, passenger ship, barge or other boat, ship or watercraft.

(47) "Maskant for chemical processing" means a coating applied directly to an aerospace component to protect surface areas when chemical milling, anodizing, aging, bonding, plating, etching and/or performing other chemical operations on the surface of the component.

(48) "Miscellaneous metal parts and products" means any metal part or metal product, even if attached to or combined with a nonmetal part or product, except cans, coils, metal furniture, large appliances, magnet wires, automobiles, ships, and airplane bodies.

(49) "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

(50) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.

(51) "Oven-dried" means a coating or ink which is dried, baked, cured, or polymerized at temperatures over 90°C (194°F).

(52) "Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into packaging products and labels for articles to be sold.

(53) "Paper coating" means any coating applied on paper, plastic film, or metallic foil to make certain products, including (but not limited to)adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper, or pressure sensitive tapes. Paper coating includes the application of coatings by impregnation and/or saturation.

(54) "Person" means the federal government, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatsoever.

(55) "Petroleum refinery" means any facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through distillation of petroleum, crude oil, or through redistillation, cracking, or reforming of unfinished petroleum derivatives. "Petroleum refinery" does not mean a re-refinery of used motor oils or other waste chemicals. "Petroleum refinery" does not include asphalt blowing or separation of products shipped together.

(56) "Plant site basis" means all of the sources on the premises (contiguous land) covered in one Air Contaminant Discharge Permit unless another definition is specified in a Permit.

(57) "Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitations on the capacity of a source to emit an air pollutant, excluding air pollution control equipment, shall be treated as part of its design if the limitation is enforceable by the Department.

(58) "Pretreatment wash primer" means a coating which contains a minimum of 0.5% acid by weight for surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.

(59) "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

(60) "Printing" means the formation of words, designs and pictures, usually by a series of application rolls each with only partial coverage.

(61) "Prime coat" means the first of two or more films of coating applied in an operation.

(62) "Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

(63) "Reasonably available control technology" or "RACT" means the lowest emission limitation that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

(64) "Roll printing" means the application of words, designs and pictures to a substrate by means of hard rubber or steel rolls.

(65) "Sealant" means a coating applied for the purpose of filing voids and providing a barrier against penetration of water, fuel or other fluids or vapors.

(66) "Specialty printing" means all gravure and flexographic operations which print a design or image, excluding publication gravure and packaging printing. Specialty Printing includes printing on paper plates and cups, patterned gift wrap, wallpaper, and floor coverings.

(67) "Splash filling" means the filling of a delivery vessel or stationary storage tanks through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.

(68) "Source" means any building, structure facility, installation or combination thereof which emits or is capable of emitting air contaminants to the atmosphere and is located on one or more contiguous or adjacent properties and is owned or operated by the same person or by persons under common control.

(69) "Source category" means all sources of the same type or classification.

(70) "Submerged fill" means any fill pipe or hose, the discharge opening of which is entirely submerged when the liquid is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean any fill pipe, the discharge of which is entirely submerged when the liquid level is 18 inches, or is twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.

(71) "Thin particleboard" means a manufactured board 1/4 inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

(72) "Thirty-day rolling average" means any value arithmetically averaged over any consecutive thirty days.

(73) "Tileboard" means paneling that has a colored waterproof surface coating.

(74) "Topcoat" means a coating applied over a primer or intermediate coating for purposes such as appearance, identification or protection.

(75) "True vapor pressure" means the equilibrium pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks," February, 1980.

(76) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

(77) "Vapor-mounted" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the primary seal, the tank shell, the liquid surface, and the floating roof.

(78) "Vapor Tight" means, as used in OAR 340-232-0110, a condition that exists when the concentration of a volatile organic compound, measured one centimeter from any source, does

State effective: 12/26/01; EPA effective: 10/3/05

340-232-0040 GENERAL NON-CATEGORICAL REQUIREMENTS

(1) All existing sources, operating prior to November 15, 1990, located inside the areas cited in OAR 340-232-0020(2)(a) or (2)(c), containing emissions units or devices for which no categorical RACT requirements exist and which have potential emissions before add-on controls of over 100 tons per year (TPY) of VOC from aggregated, non-regulated emission units, shall have RACT requirements developed on a case-by-case basis by the Department. Sources that have complied with New Source Review requirements per OAR 340 division 224 and are subject to Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) requirements are presumed to have met RACT requirements. A source may request RACT not be applied by demonstrating to the Department that their potential emissions before add-on controls are below 100 tons per year. Once a source becomes subject to RACT requirements under this section, it shall continue to be subject to RACT, unless VOC emissions fall below 100 tons per year and the source requests that RACT be removed, by demonstrating to the Department that their potential VOC emissions before add-on controls are below 100 tons per year.

(2) Within 3 months of written notification by the Department of the applicability of this rule, or, for good cause shown, up to an additional three months as approved by the Department, the source shall submit to the Department a complete analysis of RACT for each category of emissions unit at the source, taking into account technical and economic feasibility of available control technology, and the emission reductions each technology would provide. This analysis does not need to include any emissions units subject to a specific categorical RACT requirement under this division. These RACT requirements approved by the Department shall be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source specific SIP revision. The source shall have one year from the date of notification by the Department of EPA approval to comply with the applicable RACT requirements.

(3) Failure by a source to submit a RACT analysis required by section (2) of this rule shall not relieve the source of complying with a RACT determination established by the Department.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0050 EXEMPTIONS

Natural gas-fired afterburners needed to comply with this division shall be operated during the months of May, June, July, August, and September. During other months, the afterburners may be turned off with prior written Departmental approval, provided that the operation of

such devices is not required for purposes of occupational health or safety, or for the control of toxic substances, malodors, or other regulated pollutants, or for complying with visual air contaminant limitations.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0060 COMPLIANCE DETERMINATION

(1) Certification and test procedures required by this division shall be conducted in accordance with the Department's **Source Sampling Manual**. Applicants are encouraged to submit designs approved by other air pollution control agencies where VOC control equipment has been developed. Construction approvals and proof of compliance will, in most cases, be based on Departmental evaluation of the source and controls.

(2) Approval by the Department of alternative methods for demonstrating compliance where specified and allowed in this division, including approval of equivalent testing methods for determining compliance, shall be subject to review and approval by EPA.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0070 GASOLINE DISPENSING FACILITIES

(1) No person may transfer or cause or allow the transfer of gasoline from any delivery vessel which was filled at a Bulk Gasoline Terminal into any gasoline dispensing facility tank of less than 40,000 gallon capacity unless:

(a) The tank is filled by submerged fill;

(b) A vapor balance system is used which consists of a certified gasoline storage tank device capable of collecting the vapor from volatile organic liquids and gases so as to prevent their emission to the outdoor atmosphere. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place;

(c) The vapors are processed by a system demonstrated to the satisfaction of the Department to be of equal effectiveness; and

(d) All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order. No gasoline delivery shall take place unless the vapor return hose is connected by the delivery truck operator, if required by subsection (b) of this section.

(2) Exemptions and Limitations:

(a) All existing storage tanks at gasoline dispensing facilities with a rated capacity of 1,500 gallons or less are exempt from the submerged fill and vapor balance system requirements in section (1) of this rule;

(b) All new gasoline storage tanks with a rated capacity of 1500 gallons or less are exempt from the vapor balance system requirement in subsection (1)(b) of this rule;

(c) All new gasoline storage tanks of any capacity, installed after the effective date of this rule, shall have a submerged fill-tube system;

(d) Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent shall be exempt from subsections 1(a) and 1(b) of this rule.

(3) Compliance with subsection (1)(b) of this rule shall be determined by verifications of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 30 on file with the Department.

(4) All persons subject to OAR 340-232-0010 and this rule shall obtain and maintain a current vapor balance system permit from the Department:

(a) All persons applying for this permit for any time period beginning after December 31, 1999 shall be subject to a biennial fee of $100;

(b) The Department may issue vapor balance permits for up to 10 years;

(c) Persons applying for a new permit with an effective date beginning before December 31, 1999 or in an odd numbered year shall pay the annual fee of $50 and then will be billed for the biennial fee for the next biennial period;

(d) Fees shall be paid at the time of application and by December 1 in odd numbered years for the next biennial period.

(5) When a facility changes ownership, the new owner shall obtain a new vapor balance system permit, as described in section (4) of this rule above, within 60 days of the change of ownership.

(6) No person shall cause or allow the installation of non-certified gasoline storage tank device equipment at any gasoline dispensing facility where a vapor balance system is required.

(7) Persons subject to this rule shall apply for a renewal vapor balance system permit not less than 60 days prior to the expiration date of the existing permit. The biennial fee shall be included with the application for renewal.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0080 BULK GASOLINE PLANTS

(1) No person shall transfer or allow the transfer of gasoline to or from a bulk gasoline plant unless:

(a) Each stationary storage tank uses submerged fill when transferring gasoline; and

(b) The displaced vapors from filling each tank are prevented from being released to the atmosphere through use of a vapor tight vapor balance system, or equivalent system as

approved in writing by the Department. All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order.

(2) Each stationary gasoline storage tank may release vapor to the atmosphere through a pressure relief valve set to release at the highest possible pressure in accordance with state or local fire codes, or the National Fire Prevention Association guidelines and no less than 3.4 kPa (0.50 psi) or some other setting approved in writing by the Department.

(3) Gasoline shall be handled in a manner to prevent spillage, discharging into sewers, storage in open containers, or handled in any other manner that would result in evaporation. If more than five gallons are spilled, the operator shall report the spillage in accordance with OAR 340-214-0300 to 340-214-0350.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0085 GASOLINE DELIVERY VESSEL(S)

(1) No person shall transfer or allow the transfer of gasoline to a delivery vessel from a bulk gasoline terminal; or a bulk gasoline plant, with a daily throughput of 4,000 or more gallons based on a 30 day-rolling average, located in the Portland-Vancouver AQMA, unless:

(a) Each delivery vessel uses submerged fill when receiving gasoline; and

(b) The displaced vapors from filling each tank are prevented from being released to the atmosphere through use of a vapor tight vapor balance system, or equivalent system as approved in writing by the Department. All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order.

(2) No person shall transfer or allow the transfer of gasoline from a delivery vessel, which was filled at a bulk gasoline terminal; or a bulk gasoline plant, with a daily throughput of 4,000 or more gallons based on a 30-day rolling average, located within the Portland-Vancouver AQMA; to a new or existing gasoline dispensing facility tank with a capacity of 1,500 gallons or more, unless:

(a) Each gasoline dispensing facility tank uses submerged fill when receiving gasoline; and

(b) The displaced vapors from filling each tank are prevented from being released to the atmosphere through use of a vapor tight vapor balance system, or equivalent system as approved in writing by the Department. All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order.

(3) No person shall transfer or allow the transfer of gasoline from a delivery vessel to a new gasoline dispensing facility tank unless the gasoline dispensing facility tank uses submerged fill when receiving gasoline.

(4) Gasoline shall be handled in a manner to prevent spillage, discharge into sewers, storage in open containers, or handled in any other manner that would result in evaporation. If more

than five gallons are spilled, the operator shall report the spillage in accordance with OAR 340-214-0300 to 340-214-0350.

(5) Compliance with subsection (1)(a) and (2)(a) of this rule shall be determined by visual inspection to ensure minimal spillage of gasoline and proper installation of bottom loading couples.

(6) Compliance with subsection (1)(b) and (2)(b) of this rule shall be determined by verification of use of equipment approved by the Department and/or by testing and monitoring in accordance with applicable portions of OAR 340232-0100 and/or Method 31 and/or 32 on file with the Department.

(7) The owner or operator of a gasoline delivery vessel shall maintain the vessel to be vapor tight at all times, in accordance with OAR 340- 232-0100(1), if such vessel is part of a vapor balance system required by subsection (1)(b) or (2)(b) of this rule.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0090 BULK GASOLINE TERMINALS

(1) No terminal owner or operator, shall allow volatile organic compounds (VOC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with a daily throughputs of greater than 76,000 liters (20,000 gallons) per day of gasoline (determined by a thirty-day rolling average):

(a) The owner or operator of a gasoline loading terminal shall only allow the transfer of gasoline between the facility and a truck tank or a truck trailer when a current leak test certification for the delivery vessel is on file with the terminal or a valid permit as required by OAR 340-232-0100(1)(c) is displayed on the delivery vessel;

(b) The owner or operator of a truck tank or a truck trailer shall not make any connection to the terminal's gasoline loading rack unless the gasoline delivery vessel has been tested in accordance with OAR 340-232-0100(1);

(c) The truck driver or other operator who fills a delivery truck tank and/or trailer tank shall not take on a load of gasoline unless the vapor return hose is properly connected;

(d) All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order.

(2) Compliance with section (1) of this rule shall be determined by testing in accordance with Method 33 on file with the Department. The method for determining compliance with section (1) of this rule are delineated in **40 CFR Part 60**, **Subpart XX, §60.503**.

(3) Bulk Gasoline terminals shall comply with the following within the limits of section (1) of this rule:

(a) All displaced vapors and gases during tank truck gasoline loading operations shall be vented only to the vapor control system;

(b) The loading device must not leak when in use. The loading device shall be designed and operated to allow no more than 10 cubic centimeters drainage per disconnect on the basis of 5 consecutive disconnects;

(c) All loading liquid lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected;

(d) All vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected or which contain vapor tight unidirectional valves;

(e) Gasoline shall be handled in a manner to prevent its being discarded in sewers or stored in open containers or handled in any manner that would result in evaporation. If more than 5 gallons are spilled, the operator shall report the spillage in accordance with OAR 340-214-0300 through 340-214-0350;

(f) The vapor balance system shall be operated in a manner to prevent the pressure therein from exceeding the tank truck or trailer pressure relief settings.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0100 TESTING VAPOR TRANSFER AND COLLECTION SYSTEMS

(1) No person shall allow a vapor-laden delivery vessel subject to OAR 340-232-0080(5) to be filled or emptied unless the delivery vessel:

(a) Is tested annually according to the test Method 32 on file with the Department, or **CFR Part 60**, EPA Method 21 or 27, or **California Air Resources Board Method 2-5**;

(b) Sustains a pressure change of no more than 750 pascals (3 inches of H_2O) in five minutes when pressurized to a gauge pressure of 4,500 pascals (18 inches of H_2O) or evacuated to a gauge pressure of 1,500 pascals (6 inches of H_2O) during the testing required in subsection (1)(a) of this rule; and

(c) Displays a valid permit near the Department of Transportation test date markings required by **49 CFR 177.824h**, which:

(A) Shows the year and month that the gasoline tank truck last passed the test required in subsections (1)(a) and (b) of this rule;

(B) Shows the identification of the permit; and

(C) Expires not more than one year from the date of the leak-test test, or if tested in California, on the expiration date so specified.

(d) Has its vapor return hose connected by the truck operator so that gasoline vapor is not expelled to the atmosphere.

(2) The owner or operator of a vapor collection system subject to this regulation shall design and operate the vapor collection system and the gasoline loading equipment in a manner that prevents:

(a) Gauge pressure from exceeding 4,500 pascals (18 inches of H_2O) and vacuum from exceeding 1,500 pascals (6 inches of H_2O) in the gasoline tank truck being loaded;

(b) A reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters from all points on the perimeter of a potential leak source when measured by the Method 31 and 33 on file with the Department, or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals; and

(c) Visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals.

(3) The Department may, at any time, monitor a gasoline tank truck, vapor collection system, or vapor control system, by the methods on file with the Department, to confirm continuing compliance with section (1) or (2) of this rule.

(4) Recordkeeping and Reporting:

(a) The owner or operator of a source of volatile organic compounds subject to this rule shall maintain records of all certification testing and repairs. The records must identify the gasoline tank truck, vapor collection system, or vapor control system; the date of the test or repair; and if applicable, the type of repair and the date of retest. The records must be maintained in a legible, readily available condition for at least two years after the date of testing or repair was completed;

(b) Copies of all records and reports under subsection (4)(a) of this rule shall be submitted to the Department within 30 days of certification testing.

(c) Persons applying for a permit required by this rule shall at the time of application pay a fee of $25.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0110 LOADING GASOLINE ONTO MARINE TANK VESSELS

(1) Applicability. This rule applies to loading events at any location within the Portland ozone air quality maintenance area when gasoline is placed into a marine tank vessel cargo tank; or where any liquid is placed into a marine tank vessel cargo tank that had previously held gasoline. The owner or operator of each marine terminal and marine tank vessel is responsible for and must comply with this rule.

(2) Exemptions. The following activities are exempt from the marine vapor control emission limits of this rule:

(a) Marine vessel bunkering;

(b) Lightering when neither vessel is berthed at a marine terminal dock,

(c) Loading when both of the following conditions are met:

(A) The vessel has been gas freed (regardless of the prior cargo), and

(B) When loading any products other than gasoline.

(3) Vapor Collection System. The owner or operator of a marine terminal subject to this rule must equip each loading berth with a vapor collection system that is designed to collect all displaced VOC vapors during the loading of marine tank vessels. The owner or operator of a marine tank vessel subject to this rule must equip each marine tank vessel with a vapor collection system that is designed to collect all displaced VOC vapors during the loading of marine tank vessels. The collection system must be designed such that all displaced VOC vapors collected during any loading event are vented only to the control device.

(4) Marine Vapor Control Emission Limits. Vapors that are displaced and collected during marine tank vessel loading events must be reduced from the uncontrolled condition by at least 95 percent by weight, as determined by EPA Method 25 or other methods approved in writing by the Department or limited to 5.7 grams per cubic meter (2 lbs. per 1000 bbls) of liquid loaded.

(5) Operating Practice and Maintenance.

(a) All hatches, pressure relief valves, connections, gauging ports and vents associated with the loading of fuel product into marine tank vessels must be maintained to be leak free and vapor tight.

(b) The owner or operator of any marine tank vessel must certify to the Department that the vessel is leak free, vapor tight, and in good working order based on an annual inspection using EPA Method 21 or other methods approved in writing by the Department.

(c) Gaseous leaks must be detected using EPA Method 21 or other methods approved in writing by the Department.

(d) Loading must cease anytime gas or liquid leaks are detected. Loading may continue only after leaks are repaired or if documentation is provided to the Department that the repair of leaking components is technically infeasible without dry-docking the vessel or cannot otherwise be undertaken safely. Subsequent loading events involving the leaking

components are prohibited until the leak is repaired. Any liquid or gaseous leak detected by Department staff is a violation of this rule.

(6) Monitoring and Record-Keeping.

(a) Marine terminal operators must maintain operating records for at least five years of each loading event at their terminal. Marine tank vessel owners and operators are responsible for maintaining operating records for at least five years for all loading events involving each of their vessels. Records must be made available to DEQ upon request. These records must include but are not limited to:

(A) The location of each loading event.

(B) The date of arrival and departure of the vessel.

(C) The name, registry and legal owner of each marine tank vessel participating in the loading event.

(D) The type and amount of fuel product loaded into the marine tank vessel.

(E) The prior cargo carried by the marine tank vessel. If the marine tank vessel has been gas freed, then the prior cargo can be recorded as gas freed.

(F) The description of any gaseous or liquid leak, date and time of leak detection, leak repair action taken and screening level after completion of the leak repair.

(7) Lightering exempted from controls by subsection 2 (b) of this rule must be curtailed from 2:00 a.m. until 2:00 p.m. when the Department declares a Clean Air Action (CAA) day. If the Department declares a second CAA day before 2:00 p.m. of the first curtailment period, then such uncontrolled lightering must be curtailed for an additional 24 hours until 2:00 p.m. on the second day. If a third CAA day in a row is declared, then uncontrolled lightering is permissible for a 12-hour period starting at 2 p.m. on the second CAA day and ending at 2 a.m. on the third CAA day. Uncontrolled lightering must be curtailed from 2 a.m. until 2 p.m. on the third CAA day. If the Department continues to declare CAA days consecutively after the third day, the curtailment and loading pattern used for the third CAA day will apply.

(8) Safety/Emergency Operations. Nothing in this rule is intended to:

(a) Require any act or omission that would be in violation of any regulation or other requirement of the United States Coast Guard; or

(b) Prevent any act that is necessary to secure the safety of a vessel or the safety of passengers or crew.

State effective: 6/1/2001; EPA effective: 3/24/2003

340-232-0120 CUTBACK AND EMULSIFIED ASPHALT

(1) Use of any cutback asphalts for paving roads and parking areas is prohibited during the months of April, May, June, July, August, September, and October, except as provided for in section (2) of this rule.

(2) Slow curing (SC) and medium curing (MC) cutback asphalts are allowed during all months for the following uses and applications:

(a) Solely as a penetrating prime coat for aggregate bases prior to paving;

(b) For the manufacture of medium-curing patching mixes to provide long-period storage stockpiles used exclusively for pavement maintenance; or

(c) For all uses when the National Weather Service forecast of the high temperature during the 24-hour period following application is below 10° C. (50° F.).

(3) Rapid curing (RC) grades of cutback asphalt are always prohibited.

(4)(a) Use of emulsified asphalts is unrestricted if solvent content is kept at or less than the limits listed below. If these limits are exceeded, then the asphalt shall be classified as medium curing (MC) cutback asphalts, and shall be limited to only the uses permitted by section (2) of this rule. (Grades of Emulsion Per AASHTO Designation M 208-72 — Maximum Solvent Content by Weight.):

(A) CRS-1 — 3%;
(B) CRS-2 — 3%;
(C) CSS-1— 3%;
(D) CSS-1h — 3%;
(E) CMS-2 — 8%;
(F) CMS-2h — 8%;
(G) CMS-2S —12%.

(b) Solvent content is determined by ASTM distillation test D-244.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0130 PETROLEUM REFINERIES

This rule shall apply to all petroleum refineries:

(1) Vacuum-Producing Systems:

(a) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or to a closed refinery system;

(b) Hot wells associated with contact condensers shall be tightly covered and the collected VOC introduced into a closed refinery system.

(2) Wastewater Separators:

(a) Wastewater separators' forebays shall incorporate a floating pontoon or fixed solid cover with all openings sealed totally enclosing the compartmented liquid contents, or a floating pontoon or double deck-type cover equipped with closure seals between the cover edge and compartment wall;
(b) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use.

(3) Process Unit Turnaround:
(a) The VOC contained in a process unit to be depressurized for turnaround shall be introduced to a closed refinery system, combusted by a flare, or vented to a disposal system;

(b) The pressure in a process unit following depressurization for turnaround shall be less than 5 psig before venting to the ambient air.

(4) Maintenance and Operation of Emission Control Equipment: Equipment for the reduction, collection or disposal of VOC shall be maintained and operated in a manner commensurate with the level of maintenance and housekeeping of the overall plant.

(5) Recordkeeping: The owner or operator shall maintain a record of process unit turnarounds including an approximation of the quantity of VOC emitted to the atmosphere. Records shall be maintained for two years.
State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0140 PETROLEUM REFINERY LEAKS

(1) All persons operating petroleum refineries shall comply with this section concerning leaks:

(a) The owner or operator of a petroleum refinery complex, upon detection of a leaking component, which has a volatile organic compound concentration exceeding 10,000 ppm when tested in the manner described below shall:

(A) Include the leaking component on a written list of scheduled repairs; and

(B) Repair and retest the component within 15 days.

(b) Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install or operate a valve at the end of a pipe or line containing volatile organic compounds unless the pipe or line is sealed with a second valve, a blind flange, a plug, or a cap. The sealing device may be removed only when a sample is being taken during maintenance operations;

(c) Pipeline valves and pressure relief valves in gaseous volatile organic compound service shall be marked in some manner that will be readily obvious to both refinery personnel

performing monitoring and the Department.

(2) Testing Procedures: Testing and calibration procedures to determine compliance with this rule shall be done in accordance with EPA Method 21.

(3) Monitoring, Recordkeeping, Reporting:

(a) The owner or operator of a petroleum refinery shall maintain, as a minimum, records of all testing conducted under this rule; plus records of all monitoring conducted under subsections (b) and (c) of this section;

(b) The owner or operator of a petroleum refinery subject to this rule shall:

(A) Monitor yearly by the methods referenced in section (2) of this rule all:
(i) Pump seals;
(ii) Pipeline valves in liquid service; and
(iii) Process drains.

(B) Monitor quarterly by the methods referenced in section (2) of this rule all:
(i) Compressor seals;
(ii) Pipeline valves in gaseous service; and
(iii) Pressure relief valves in gaseous service.

(C) Monitor weekly by visual methods all pump seals;

(D) Monitor immediately any pump seal from which liquids are observed dripping;

(E) Monitor any relief valve within 24 hours after it has vented to the atmosphere; and

(F) Monitor immediately after repair of any component that was found leaking.

(c) Pressure relief devices which are connected to an operating flare header, vapor recovery device, inaccessible valves, storage tank valves, or valves that are not externally regulated are exempt from the monitoring requirements in subsection (b) of this section;

(d) The owner or operator of a petroleum refinery, upon the detection of a leaking component, shall affix a weatherproof and readily visible tag bearing an identification number and the date the leak is located to the leaking component. This tag shall remain in place until the leaking component is repaired;

(e) The owner or operator of a petroleum refinery, upon the completion of each yearly and/or quarterly monitoring procedure, shall:

(A) Submit a report to the Department on the 15th day of January, April, July, and September, listing the leaking components that were located but not repaired within the required time limit in subsection (1)(a) of this rule;

(B) Submit a signed statement attesting to the fact that, with the exception of those leaking components listed in paragraph (A) of this subsection, all monitoring and repairs were performed as stipulated.

(f) The owner or operator of a petroleum refinery shall maintain a leaking component monitoring log which shall contain, at a minimum, the following data:

(A) The name of the process unit where the component is located;
(B) The type of component (e.g., valve, seal);
(C) The tag number of the component;
(D) The date on which a leaking component is discovered;
(E) The date on which a leaking component is repaired;
(F) The date and instrument reading of the recheck procedure after a leaking component is repaired;
(G) A record of the calibration of the monitoring instrument;
(H) Those leaks that cannot be repaired until turnaround, (exceptions to the 15-day requirement of paragraph (1)(a)(B) of this rule); and
(I) The total number of components checked and the total number of components found leaking.

(g) Copies of all records and reports required by this section shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted;

(h) Copies of all records and reports required by this section shall immediately be made available to the Department upon verbal or written request at any reasonable time;

(i) The Department may, upon written notice, modify the monitoring, recordkeeping and reporting requirements.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0150 LIQUID STORAGE

(1) Owners or operators which have tanks storing methanol or other volatile organic compound liquids with a true vapor pressure, as stored, greater than 10.5 kPa (kilo Pascals) (1.52 psia), at actual monthly average storage temperatures, and having a capacity greater than 150,000 liters (approximately 39,000 gallons) shall comply with one of the following:

(a) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources — Storage Vessels for Petroleum Liquids, **40 CFR, 60 Subpart K**, and **Ka**, as amended by **Federal Register, April 4, 1980, pages 23379** through **23381**;

(b) Be retrofitted with a floating roof or internal floating cover using at least a nonmetallic resilient seal as the primary seal meeting the equipment specifications in the federal

standards referred to in subsection (a) of this section or its equivalent.

(2) All seals used in subsections (1)(b) and (c) of this rule are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears or other openings.

(3) All openings, except stub drains and those related to safety (such as slotted gage wells), are to be sealed with suitable closures. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place; except for slotted gage wells which must have floating seals with one-half inch edge gaps or less.

(4) Secondary Seals:

(a) Applicability: Subsection (c) of this section applies to all VOC liquid storage vessels equipped with external floating roofs, having capacities greater than 150,000 liters (39,000 gallons) except as indicated in subsection (c) and paragraph (c)(H) of this section;

(b) Exemptions: Subsection (c) of this section does not apply to petroleum liquid storage vessels which:

(A) Are used to store waxy, heavy pour crude oil;

(B) Have capacities less than 1,600,000 liters (420,000 gallons) and are used to store produced crude oil and condensate prior to lease custody transfer;

(C) Contain a VOC liquid with a true vapor pressure of less than 10.5 kPa (1.5 psia) where the vapor pressure is measured at the storage temperature;

(D) Contain a VOC liquid with a true vapor pressure less than 27.6 kPa (4.0 psia):
(i) Are of welded construction; and
(ii) Presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by the Department; or

(E) Are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoemounted secondary seal).

(c) No owner of a VOC liquid storage vessel subject to this rule shall store VOC liquid in that vessel unless:

(A) The vessel has been fitted with:

(i) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

(ii) A closure or other device which controls VOC emissions with an effectiveness

equal to or greater than a seal required under subparagraph (A)(i) of this subsection as approved in writing by the Department.

(B) All seal closure devices meet the following requirements:

(i) There are no visible holes, tears, or other openings in the seal(s) or seal fabric;
(ii) The seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and
(iii) For vapor mounted seals, the accumulated area of gaps exceeding 0.32 cm (1/8 inch) in width between the secondary seal and the tank wall are determined by the method in subsection (d) of this section and shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 in^2 per foot of tank diameter).

(C) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
(i) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and
(ii) Equipped with projections into the tank which remain below the liquid surface at all times.

(D) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(E) Rim vents are set to open only when the roof is being floated off the leg supports or at the manufacturer's recommended setting;

(F) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90 percent of the area of the opening; and

(G) The owner or operator of a VOC liquid storage vessel with an external floating roof subject to subsection (c) of this section shall:

(i) Perform routine inspections semi-annually in order to ensure compliance with paragraphs (A) through (F) of this subsection and the inspections shall include a visual inspection of the secondary seal gap;
(ii) Measure the secondary seal gap annually in accordance with subsection (d) of this section when the floating roof is equipped with a vapor-mounted primary seal; and
(iii) Maintain records of the types of VOC liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed in subparagraphs (G)(i) and (ii) of this subsection.

(H) The owner or operator of a VOC liquid storage vessel having a capacity equal to or less than 150,000 liters (39,000 gallons) with an external floating roof, but containing a VOC liquid with a true vapor pressure greater than 7.00 kPa (1.0 psi), shall maintain records of the average monthly storage temperature, the type of liquid, and the maximum true vapor pressure for all VOC liquids with a true vapor pressure greater than 7.0 kPa;

(I) The owner or operator of a VOC liquid storage vessel subject to this rule, shall submit to the Department, as a minimum, annual reports summarizing the inspections;

(J) Copies of all records and reports under paragraphs (G) (H), and (I) of this subsection shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted;

(K) Copies of all records and reports under this section shall immediately be made available to the Department, upon verbal or written request, at any reasonable time;

(L) The Department may, upon written notice, require more frequent reports or modify the monitoring and recordkeeping requirements, when necessary to accomplish the purposes of this rule.

(d) Secondary Seal Compliance Determination:

(A) The owner or operator of any volatile organic compound source required to comply with section (4) of this rule shall demonstrate compliance by the methods of this section or an alternative method approved by the Department;

(B) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test. The notification shall contain the information required by, and be in a format approved by the Department;

(C) Compliance with subparagraph (4)(c)(B)(iii) of this rule shall be determined by:

(i) Physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 inch) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall; and
(ii) Summing the area of the individual gaps.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0160 SURFACE COATING IN MANUFACTURING

(1) No person shall operate a coating line which emits into the atmosphere volatile organic compounds in excess of the limits in section (5) of this rule, expressed as pounds VOC per gallon of coating applied, excluding water and exempt solvents, unless an alternative emission limit is approved by the Department pursuant to section (3) of this rule or emissions are controlled to an equivalent level pursuant to section (7) of this rule.

(2) Exemptions:

(a) This rule does not apply to airplanes painted out of doors in open air; automobile and

truck refinishing; customized top coating of automobiles and trucks, if production is less than 35 vehicles per day; marine vessels and vessel parts painted out in the open air; flat wood coating; wood furniture and wood cabinets; wooden doors, mouldings, and window frames; machine staining of exterior wood siding; high temperature coatings (for service above 500° F.); lumber marking coatings; potable water tank inside coatings; high performance inorganic zinc coatings, air dried, applied to fabricated steel; and markings by stencil for railroad cars;

(b) This rule does not apply to:

(A) Sources whose potential to emit from activities identified in section (5) of this rule of volatile organic compounds are less than 10 tons per year (or 3 lb. VOC/hr or 15 lb. VOC/day actual); or

(B) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance (such as research facilities, pilot plant operations, and laboratories) unless:

(i) The operation of the source is an integral part of the production process; or
(ii) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.

(3) Exceptions:

(a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in section (5) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT);

(b) Included in this documentation must be a complete analysis of technical and economic factors which:

(A) Prevent the source from using both compliance coatings and pollution control equipment; and
(B) Justify the alternative emission limit sought by the source.

(c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Contaminant Discharge Permit, or Title V operating permit, and shall not become effective until approved by EPA as a source specific SIP revision.

(4) Applicability: This rule applies to each coating line, which includes the application area(s), flashoff area(s), air and forced air drier(s), and oven(s) used in the surface coating of the parts and products in subsections (5)(a) through (j) of this rule.

(5) Process and Limitation: These emission limitations shall be based on a daily average except subsection (5)(e) of this rule shall be based on a monthly average. If more than one emission limitation in this rule applies to a specific coating, then the most stringent emission limitation

shall be applied:

(a) Can Coating:

(A) Sheet basecoat (exterior and interior) and over-varnish; two-piece can exterior (basecoat and over-varnish) 2.8 lb/gal;

(B) Two- and three-piece can interior and exterior body spray, two-piece can exterior end (spray or roll coat) 4.2 lb/gal;

(C) Three-piece can side-seam spray 5.5 lb/gal;

(D) End sealing compound 3.7 lb/gal;

(E) End Sealing Compound for fatty foods 3.7 lb/gal.

(b) Fabric Coating 2.9 lb/gal;

(c) Vinyl Coating 3.8 lb/gal;

(d) Paper Coating 2.9 lb/gal;
(e) Existing Coating of Paper and Film in the Medford-Ashland AQMA 55 lb.*

[**NOTE:** *55 lb VOC per 1000 sq. yds. of material per pass.]

(f) Auto and Light Duty Truck Coating:

(A) Prime 1.9 lb/gal;

(B) Topcoat 2.8 lb/gal;

(C) Repair 4.8 lb/gal.

(g) Metal Furniture Coating 3.0 lb/gal;

(h) Magnet Wire Coating 1.7 lb/gal;

(i) Large Appliance Coating 2.8 lb/gal;

(j) Miscellaneous Metal Parts and Products:

(A) Clear Coatings 4.3 lb/gal;

(B) Force Air Dried or Air Dried 3.5 lb/gal;

(C) Extreme Performance Coatings 3.5 lb/gal;

(D) Other Coatings (i.e., Powder, oven dried) 3.0 lb/gal;

(E) High Performance Architectural Coatings 3.5 lb/gal.

(6) Compliance Determination: Compliance with this rule shall be determined by testing in accordance with **40 CFR Part 60 EPA Method 18, 24, 25**, a material balance method, or an equivalent plant specific method approved by and on file with the Department. The limit in section (1) of this rule of VOC in the coating is based upon an assumed solvent density, and other assumptions unique to a coating line; where conditions differ, such as a different solvent density, a plant specific limit developed pursuant to the applicable Control Technology Guideline document may be submitted to the Department for approval.

(7) Reduction Method: The emission limits of sections (3) and (5) of this rule shall be achieved by:

(a) The application of low solvent content coating technology;

(b) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or

(c) An equivalent means of VOC removal. The equivalent means must be approved by the Department and will be incorporated in the source's Air Contaminant Discharge Permit or Title V Permit, and shall not become effective until approved by EPA as a source-specific SIP revision. Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal.

(8) Recordkeeping Requirements:

(a) A current list of coatings shall be maintained which provides all the coating data necessary to evaluate compliance, including the following information, where applicable:

(A) Coating catalyst and reducer used;

(B) Mix ratio of components used;

(C) VOC content of coating as applied; and

(D) Oven temperature.

(b) Where applicable, a monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation;

(c) Such records shall be retained and available for inspection by the Department for a period

of two years.
State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0170 AEROSPACE COMPONENT COATING OPERATIONS

(1) No owner or operator of an aerospace component coating facility shall emit into the atmosphere volatile organic compounds in excess of the following limits, expressed as pounds VOC per gallon of coating applied, excluding water and exempt solvents, unless an alternative emission limit is approved by the Department pursuant to section (4) of this rule or emissions to the atmosphere are controlled to an equivalent level pursuant to section (10)of this rule:

(a) Primer — 2.9 lb./gal.;
(b) Interior Topcoat — 2.8 lb./gal.;
(c) Electric or Radiation Effect Coating — 6.7 lb./gal.;
(d) Extreme Performance Interior Topcoat — 3.5 lb./gal.;
(e) Fire Insulation Coating — 5.0 lb./gal.;
(f) Fuel Tank Coating — 6.0 lb./gal.;
(g) High Temperature Coating* — 6.0 lb./gal.;
(h) Sealant — 5.0 lb./gal.;
(i) Self-Priming Topcoat — 3.5 lb./gal.;
(j) Topcoat — 3.5 lb./gal.;
(k) Pretreatment Wash Primer — 3.5 lb./gal.;
(l) Sealant Bonding Primer — 6.0 lb./gal.;
(m) Temporary Protective Coating — 2.1 lb./gal.
*(For conditions between 350° F. - 500° F.)

(2) Exemptions: This rule does not apply to the following:

(a) The exterior of fully assembled airplanes painted out of doors, high temperature coatings (for conditions over 500° F.), adhesive bonding primer, flight test coatings, and space vehicle coatings;

(b) Sources whose potential emit from activities identified in section (1)of this rule before add on controls of volatile organic compounds are less than ten tons per year (or 3 lb. VOC/hr or 15 lb. VOC/day actual);

(c) The use of separate coating formulations in volumes of less than 20 gallons per calendar year. No source shall use more than a combined total of 250 gallons per calendar year of exempt coatings. Records of coating usage shall be maintained as per section (8) of this rule; or

(d) Sources used exclusively for chemical or physical analysis or determination of product quality and coating performance (such as research facilities and laboratories) unless:

(A) The operation of the source is an integral part of the production process; or

(B) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.

(3) Exceptions:

(a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in section (1) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT);

(b) Included in this documentation must be a complete analysis of technical and economic factors which:

(A) Prevent the source from using both compliance coatings and pollution control equipment; and

(B) Justify the alternative emission limit sought by the source.

(c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Contaminant Discharge Permit and shall not become effective until approved by EPA as a source-specific SIP revision.

(4) Applicability: This rule applies to each coating line, which includes the application area(s), flashoff area(s), air and force air drier(s), and oven(s) used in the surface coating of aerospace components in subsections (1)(a) through (m) of this rule. If more than one emission limitation in this rule applies to a specific coating, then the most stringent emission limitation shall be applied.

(5) Solvent Evaporation Minimization:

(a) Closed containers shall be used for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup;

(b) Fresh and spent solvent shall be stored in closed containers;

(c) Organic compounds shall not be used for the cleanup of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation;

(d) Containers of coating, catalyst, thinner, or solvent shall not be left open to the atmosphere when not in use.

(6) Stripper Limitations: No stripper shall be used which contains more than 400 grams/liter (3.3 lbs./gal.) of VOC or which has a true vapor pressure of 1.3 kPa (0.19 psia) at actual usage temperature.

(7) Maskant for Chemical Processing Limitation: No maskant shall be applied for chemical processing unless the VOC emissions from coating operations are reduced by 85 percent, or the

coating contains less than 600 grams of VOC per liter (5.0 lbs./gal.) of coating excluding water, as applied.

(8) Compliance determination: Compliance with this rule shall be determined by testing in accordance with **40 CFR, Part 60, Appendix A**, Method 24 for determining the VOC content of the coating materials. Emissions from the coating processes and/or VOC emissions control efficiencies shall be determined by testing in accordance with **40 CFR, Part 60, Appendix A**, Method 18, 25, California Method ST-7, a material balance method, or an equivalent plant specific method approved by EPA and the Department and on file with the Department. The limit in section (1)of this rule of VOC in the coating is based upon an assumed solvent density, and other assumptions unique to a coating line; where conditions differ, such as a different solvent density, a plant specific limit may be submitted to the Department and EPA for approval.

(9) Reduction Method: The emission limits of section (1) of this rule shall be achieved by:

(a) The application of a low solvent content coating technology;

(b) A vapor collection and disposal system; or

(c) An equivalent means of VOC removal. The equivalent means must be approved by the Department and will be incorporated in the source's Air Contaminant Discharge Permit or Title V Operating Permit, and shall not become effective until approved by EPA as a source-specific SIP revision. Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal.

(10) Recordkeeping Requirements:

(a) A current list of coatings shall be maintained which provides all of the coating data necessary to evaluate compliance, including the following information, where applicable:
(A) A daily record indicating the mix ratio of components used; and

(B) The VOC content of the coating as applied.

(b) A monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation;

(c) A monthly record shall be maintained indicating the amount of stripper used;

(d) Such records shall be retained and available for inspection by the Department for a period of two years.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0180 DEGREASERS

Cold cleaners, open top vapor degreasers, and conveyorized degreasers are exempt from this rule if they use fluids which are not photochemically reactive. These fluids are defined in the

definition of Volatile Organic Compound (VOC) under OAR 340-200-0020.

(1) The owner or operator of dip tank cold cleaners shall comply with the equipment specifications in this section:

(a) Be equipped with a cover that is readily opened and closed. This is required of all cold cleaners, whether a dip tank or not;
(b) Be equipped with a drainrack, suspension basket, or suspension hoist that returns the drained solvent to the solvent bath;
(c) Have a freeboard ratio of at least 0.5;
(d) Have a visible fill line.

(2) An owner or operator of a cold cleaner shall be responsible for following the required operating parameters and work practices. The owner shall post and maintain in the work area of each cold cleaner a pictograph or instructions clearly explaining the work practices in this section:

(a) The solvent level shall not be above the fill line;
(b) The spraying of parts to be cleaned shall be performed only within the confines of the cold cleaner;
(c) The cover of the cold cleaner shall be closed when not in use or when parts are being soaked or cleaned by solvent agitation;
(d) Solvent-cleaned parts shall be rotated to drain cavities or blind holes and then set to drain until dripping has stopped;
(e) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste by weight can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's solid and Hazardous Waste Rules, OAR Chapter 340, Division 100.

(3) The owner or operator shall maintain cold cleaners in good working condition and free of solvent leaks.

(4) If the solvent has a volatility greater than 2.0 kPa (0.3 psi) measured at 38° C. (100° F.), or if the solvent is agitated or heated, then the cover must be designed so that it can be easily operated with one hand or foot.

(5) If the solvent has a volatility greater than 4.3 kPa (0.6 psi) measured at 38° C. (100° F.), then the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(6) If the solvent has a volatility greater than 4.3 kPa (0.6 psi) measured at 38° C. (100° F.), or if the solvent is heated above 50° C. (120° F.), then one of the following solvent vapor control systems must be used:

(a) The freeboard ratio must be equal to or greater than 0.70; or
(b) Water must be kept over the solvent, which must be insoluble in and heavier than water; or
(c) Other systems of equivalent control, such as a refrigerated chiller.
State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0190 OPEN TOP VAPOR DEGREASERS

(1) The owner or operator of all open top vapor degreasers shall comply with the following equipment specifications:

(a) Be equipped with a cover that may be readily opened and closed. When a degreaser is equipped with a lip exhaust, the cover shall be located below the lip exhaust. The cover shall move horizontally or slowly so as not to agitate and spill the solvent vapor. The degreaser shall be equipped with at least the following three safety switches:

(A) Condenser flow switch and thermostat to shut off sump heat if coolant is either not circulating or too warm;

(B) Spray safety switch to shut off spray pump or conveyor if the vapor level drops excessively, (e.g., greater than 10 cm (4 inches));

(C) Vapor level control thermostat to shut off sump heat when vapor level rises too high.

(b)(A) A closed design such that the cover opens only when the part enters or exits the degreaser and when the degreaser starts up, forming a vapor layer, the cover may be opened to release the displaced air, and either;

(B) A freeboard ratio equal to or greater than 0.75; or

(C) A freeboard, refrigerated or cold water, chiller.

(c) Post a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:

(A) Do not degrease porous or absorbent materials such as cloth, leather, wood or rope;

(B) The cover of the degreaser should be closed at all times except when processing workloads;

(C) When the cover is open the lip of the degreaser should not be exposed to steady drafts greater than 15.3 meters per minute (50 feet/minute);

(D) Rack parts so as to facilitate solvent drainage from the parts;

(E) Workloads should not occupy more than one-half of the vapor-air interface area;

(F) When using a powered hoist, the vertical speed of parts in and out of the vapor zone should be less than 3.35 meters per minute (11 feet/minute);

(G) Degrease the workload in the vapor zone until condensation ceases;

(H) Spraying operations should be done within the vapor layer;

(I) Hold parts in the degreaser until visually dry;

(J) When equipped with a lip exhaust, the fan should be turned off when the cover is closed;

(K) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser;

(L) Water shall not be visible in the solvent stream from the water separator.

(2) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.

(3) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

(4) Still and sump bottoms shall be kept in closed containers.

(5) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's Solid and Hazardous Waste Rules, OAR Chapter 340, Division 100.

(6) Exhaust ventilation shall not exceed 20 m^3/minute per m^2 (65 cfm per $foot^2$) of degreaser open area, unless necessary to meet OSHA requirements. Ventilation fans shall not be used near the degreaser opening.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0200 CONVEYORIZED DEGREASERS

(1) The owner or operator of conveyorized cold cleaners and conveyorized vapor degreasers shall comply with the following operating requirements:

(a) Exhaust ventilation should not exceed 20 cubic meters per minute of square meter (65

cfm per foot^2) of degreaser opening, unless necessary to meet OSHA requirements. Workplace fans should not be used near the degreaser opening;

(b) Post in the immediate work area a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:

(A) Rack parts for best drainage;

(B) Maintain vertical speed of conveyored parts to less than 3.35 meters per minute (11 feet/minute);

(C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.

(2) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.

(3) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.

(4) Still and sump bottoms shall be kept in closed containers.

(5) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's Solid and Hazardous Waste Rules, OAR Chapter 340, Division 100.

(6) All conveyorized cold cleaners and conveyorized vapor degreasers with air/vapor interfaces of 2.0 m^2 or greater shall have one of the following major control devices installed and operating:

(a) Carbon adsorption system, exhausting less than 25 ppm of solvent averaged over a complete adsorption cycle, based on exhaust ventilation of 15 m^3/minutes per m^2 of air/vapor area, when down-time covers are open; or
(b) Refrigerated chiller with control effectiveness equal to or better than subsection (a) of this section; or

(c) A system with control effectiveness equal to or better than subsection (a) of this section.
State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0210 ASPHALTIC AND COAL TAR PITCH USED FOR ROOFING COATING

(1) No person shall operate or use equipment for melting, heating or holding asphalt or coal tar pitch for the on-site construction, installation, or repair of roofs unless the gas-entrained effluents from such equipment are contained by close fitting covers.

(2) A person operating equipment subject to this rule shall maintain the temperature of the asphaltic or coal tar pitch below 285° C. (550° F.), or 17° C. (30° F.) below the flash point whichever is the lower temperature, as indicated by a continuous reading thermometer.

(3) The provisions of this rule shall not apply to equipment having a capacity of 100 liters (26 gallons) or less; or to equipment having a capacity of 600 liters (159 gallons) or less provided it is equipped with a tightly fitted lid or cover.
State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0220 FLAT WOOD COATING

(1) This rule applies to all flat wood manufacturing and surface finishing facilities, that manufacture the following products:

(a) Printed interior panels made of hardwood plywood and thin particle board;

(b) Natural finish hardwood plywood panels; or

(c) Hardboard paneling with Class II finishes.

(2) This rule does not apply to the manufacture of exterior siding, tileboard, particle board used as a furniture component, or paper or plastic laminates on wood or wood-derived substrates.

(3) No owner or operator of a flat wood manufacturing facility subject to this rule shall emit volatile organic compounds from a coating application system in excess of:

(a) 2.9 kg per 100 square meters of coated finished product (6.0 lb./1,000 square feet) from printed interior panels, regardless of the number of coats applied;

(b) 5.8 kg per 100 square meters of coated finished product (12.0 lb./1,000 square feet) from natural finish hardwood plywood panels, regardless of the number of coats applied; and

(c) 4.8 kg per 100 square meters of coated finished product (10.0 lb./1,000 square feet) from Class II finishes on hardboard panels, regardless of the number of coats applied.

(4) The emission limits in section (3) of this rule shall be achieved by:

(a) The application of low solvent content coating technology; or

(b) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or

(c) An equivalent means of VOC removal. The equivalent means must be approved in writing by the Department. The time period used to determine equivalency shall not exceed 24 hours.

(5) A capture system must be used in conjunction with the emission control systems in subsections (4)(b) and (c) of this rule. The design and operation of a capture system must be consistent with good engineering practice and shall be required to provide for an overall emission reduction sufficient to meet the emission limitations in section (3) of this rule.

(6) Compliance Demonstration:

(a) The owner or operator of a volatile organic compound source required to comply with this rule shall demonstrate compliance by the methods of subsection (c) of this section, or an alternative method approved by the Department;

(b) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test;

(c) Test procedures in **40 CFR,Part 60, EPA Method 18, 24, or 25** shall be used to determine compliance with section (3)of this rule;

(d) The Department may accept, instead of the coating analysis required by paragraph (c)(A) of this section, a certification by the coating manufacturer of the composition of the coating, if supported by actual batch formulation records. In the event of any inconsistency between a Method 18, 24, or 25 test and a facility's formulation data, the Method 18, 24, or 25 test will govern;

(e) If add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:

(A) Exhaust gas temperature of all incinerators;

(B) Temperature rise across a catalytic incinerator bed; and

(C) Breakthrough of VOC on a carbon absorption unit.

State effective: 10/14/99; EPA effective: 3/24/2003

340-232-0230 ROTOGRAVURE AND FLEXOGRAPHIC PRINTING

(1) No owner or operator of a packaging rotogravure, publication rotogravure, flexographic or specialty printing facility, with the potential to emit greater than 90 mg/year (100 ton/year), employing ink containing solvent may operate, cause, allow or permit the operation of the press unless:

(a) The volatile fraction of ink, as it is applied to the substrate contains 25.0 percent by volume or less or organic solvent and 75 percent by volume or more of water; or

(b) The ink as it is applied to the substrate, less water, contains 60.0 percent by volume or more nonvolatile material; or

(c) The owner or operator installs and operates:

(A) A carbon absorption system which reduces the volatile organic emissions from the capture system by at least 90.0 percent by weight;

(B) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) to carbon dioxide and water; or

(C) An alternative volatile organic compound emissions reduction system demonstrated to have at least a 90.0 percent reduction efficiency, measured across the control system, and has been approved by the Department.

(2) A capture system must be used in conjunction with the emission control systems in subsection (1)(c) of this rule. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall reduction in volatile organic compound emissions of at least:

(a) 75.0 percent where a publication rotogravure process is employed;

(b) 65.0 percent where a packaging rotogravure process is employed; or

(c) 60.0 percent where a flexographic printing process is employed.

(3) Compliance Demonstration:

(a) Upon request of the Department, the owner or operator of a volatile organic compound source shall demonstrate compliance by the methods of this section or an alternative method approved by the Department. All tests shall be made by, or under the direction of, a person qualified by training and/or experience in the field of air pollution testing;

(b) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test. The notification shall contain the information required by, and be in a format approved by, the Department;

(c) Test procedures to determine compliance with this rule must be approved by the Department and consistent with:

(A) EPA test Method 18, 24, or 25, **40 CFR,Part 60**; or California Method ST-7;

(B) The Department may accept, instead of ink-solvent analysis, a certification by the ink manufacturer of the composition of the ink-solvent, if supported by actual batch formulation records. In the event of any inconsistency between an EPA Method test and a facility's formulation data, the EPA Method test will govern.

(d) If add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:

(A) Exhaust gas temperature of all incinerators;

(B) Breakthrough of VOC on a carbon adsorption unit; and

(C) Temperature rise across a catalytic incinerator bed.

State effective: 10/14/99; EPA effective: 3/24/2003

DIVISION 234

EMISSION STANDARDS FOR WOOD PRODUCTS INDUSTRIES

340-234-0010 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 340-204-0010, the definition in this rule applies to this division.

(1) "Acid Absorption Tower" means the device where the sodium carbonate and sulfur dioxide react to form a sodium sulfite solution prior to use as the cooking liquor.

(2) "Acid Plant" means the facility in which the cooking liquor is either manufactured or fortified when not associated with a recovery furnace.

(4) "Average Daily Emission" means the total weight of sulfur oxides emitted in each month divided by the number of days of production that month.

(5) "Average Daily Production" means air dry tons of unbleached pulp produced in a month, divided by the number of days of production in that month.

(6) "Average Operating Opacity" means the opacity of emissions determined using EPA Method 9 on any three days within a 12-month period which are separated from each other by at least 30 days; a violation of the average operating opacity limitation is judged to have occurred if the opacity of emissions on each of the three days is greater than the specified average operating opacity limitation.

(7) "Baseline emissions rate" means a source's actual emissions rate during the baseline period,

as defined in OAR 340-200-0020, expressed as pounds of emissions per thousand square feet of finished product, on a 1/8” basis.

(8) “Blow System” means the storage chest, tank, or pit to which the digester pulp is discharged following the cook.

(9) “BLS” means Black Liquor Solids, dry weight.
(10) “Continual Monitoring”

(a) as used in OAR 340-234-0200 through 340-234-0350 means sampling and analysis, in a timed sequence, using techniques which will adequately reflect actual emission levels or concentrations on an ongoing basis;

(b) as used in OAR 340-234-0400 through 340-234-0430 means sampling and analysis in a continuous or timed sequence, using techniques which will adequately reflect actual emission levels, ambient air levels, or concentrations on a continuous basis.

(11) “Continuous monitoring” means instrumental sampling of a gas stream on a continuous basis, excluding periods of calibration.

(12) “Continuous-Flow Conveying Methods” means methods which transport materials at uniform rates of flow, or at rates generated by the production process.

(13) “Daily Arithmetic Average” means the average concentration over the twenty-four hour period in a calendar day, or Department approved equivalent period, as determined by continuous monitoring equipment or reference method testing. Determinations based on EPA reference methods or equivalent methods in accordance with the Department **Source Sampling Manual** consist of three separate consecutive runs having a minimum sampling time of sixty minutes each and a maximum sampling time of eight hours each. The three values for concentration (ppm or grains/dscf) are averaged and expressed as the daily arithmetic average which is used to determine compliance with process weight limitations, grain loading or volumetric concentration limitations and to determine daily emission rate.

(14) “Department” means the Department of Environmental Quality.

(15) “Emission” means a release into the atmosphere of air contaminants.

(16) “EPA Method 9” means the method for Visual Determination of the Opacity of Emissions From Stationary Sources described as Method 9 (average of 24 consecutive observations) in the Department Source Sampling Manual (January, 1992).

(17) “Fuel Moisture Content by Weight Greater Than 20 Percent” means bark, hogged wood waste, or other wood with an average moisture content of more than 20 percent by weight on a wet basis as used for fuel in the normal operation of a wood-fire veneer dryer as measured by **ASTMD4442-84** during compliance source testing.

(18) “Fugitive Emissions” means dust, fumes, gases, mist, odorous matter, vapors or any combination thereof not easily given to measurement, collection, and treatment by conventional pollution control methods.

(19) “Hardboard” means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.

(20) “Kraft Mill” or “Mill” means any industrial operation which uses for a cooking liquor an alkaline sulfide solution containing sodium hydroxide and sodium sulfide in its pulping process.
(21) “Lime Kiln” means any production device in which calcium carbonate is thermally converted to calcium oxide.

(22) “Maximum Opacity” means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).

(23) “Modified Wigwam Waste Burner” means a device having the general features of a wigwam waste burner, but with improved combustion air controls and other improvements installed in accordance with design criteria approved by the Department.

(24) “Neutral Sulfite Semi-Chemical (NSSC) Pulp Mill” means any industrial operation which uses for cooking, a liquor prepared from a sodium carbonate solution and sulfur dioxide at a neutral pH, range 6-8.

~~(25) “Non-Condensibles” mean gases and vapors, contaminated with TRS compounds, from the digestion and multiple-effect evaporation processes of a mill.~~

(26)“Opacity” means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.

(27) “Operations” includes plant, mill, or facility.

(28) “Other Sources”

~~(a) as used in OAR 340-234-0200 though 340-234-0270 means sources of TRS emissions in a kraft mill other than recovery furnaces and lime kilns, including but not limited to:~~

~~(A) Vents from knotters, brown stock washing systems, evaporators, blow tanks, blow heat accumulators, black liquor storage tanks, black liquor oxidation system, pre-steaming vessels, tall oil recovery operations; and~~

~~(B) Any vent which is shown to contribute to an identified nuisance condition.~~

(b) as used in OAR 340-234-0400 through 340-234-0430 means sources of sulfur oxide emissions including, but not limited to washers, washer filtrate tanks, digester dilution tanks, knotters, multiple effect evaporators, storage tanks, any operation connected with the handling of condensate liquids or storage of condensate liquids, and any vent or stack which

may be a significant contributor of sulfur oxide gases other than those mentioned in emission standard limitations (OAR 340-234-0410).

(29) “Particleboard” means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.

(30) “Particulate Matter”

(a) as used in OAR 340-234-0200 through 340-234-0350 means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured by EPA Method 5 or an equivalent test method in accordance with the Department **Source Sampling Manual**. Particulate matter emission determinations by EPA Method 5 shall use water as the cleanup solvent instead of acetone, and consist of the average of three separate consecutive runs having a minimum sampling time of 60 minutes each, a maximum sampling time of eight hours each, and a minimum sampling volume of 31.8 dscf each;

(b) as used in OAR 340-234-0400 through 340-234-0430 means a small, discrete mass of solid matter, including the solids dissolved or suspended in liquid droplets but not including uncombined water;

(c) as used in OAR 340-234-0500 through 340-234-0530 means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured in accordance with the Department **Source Sampling Manual (January, 1992)**. Particulate matter emission determinations shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 7, each run shall have a minimum sampling time of one-hour, a maximum sampling time of eight hours, and a minimum sampling volume of 31.8 dscf. For sources tested using DEQ Method 8, each run shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Veneer dryers, wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8.

(31)“Parts Per Million (ppm)” means parts of a contaminant per million parts of gas by volume on a dry-gas basis (1 ppm equals 0.0001% by volume).

(32) “Person” includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the Federal Government and any agencies thereof.

(33) “Plywood” means a flat panel built generally of an odd number of thin sheets of veneers of wood in which the grain direction of each ply or layer is at right angles to the one adjacent to it.

(34) “Press/Cooling Vent” means any opening through which particulate and gaseous emissions from plywood, particleboard, or hardboard manufacturing are exhausted, either by natural draft or powered fan, from the building housing the process. Such openings are generally located immediately above the board press, board unloader, or board cooling area.

(35) “Production”

(a) as used in OAR 340-234-0200 through 340-234-0270 means the daily amount of air-dried unbleached pulp, or equivalent, produced during the 24-hour period each calendar day, or Department approved equivalent period, and expressed in air-dried metric tons (admt) per day. The corresponding English unit is air-dried tons (adt) per day;

(b) as used in OAR 340-234-0300 through 340-234-0350 means the daily amount of virgin air-dried unbleached NSSC pulp, or equivalent, produced during the 24-hour period each calendar day, or Department approved equivalent period, expressed in air-dried metric tons (ADMT) per day. The corresponding English unit is air-dried tons (ADT) per day.

(36) “Recovery Furnace” means the combustion device in which dissolved wood solids are incinerated and pulping chemicals recovered from the molten smelt. For OAR 340-234-0200 through 340-234-0270, and where present, this term shall include the direct contact evaporator.

(37) “Recovery System” means the process by which all or part of the cooking chemicals may be recovered, and cooking liquor regenerated from spent cooking liquor, including evaporation, combustion, dissolving, fortification, and storage facilities associated with the recovery cycle.

(38) “Significant Upgrading of Pollution Control Equipment” means a modification or a rebuild of an existing pollution control device for which a capital expenditure of 50 percent or more of the replacement cost of the existing device is required, other than ongoing routine maintenance.

(39) “Smelt dissolving tank vent” means the vent serving the vessel used to dissolve the molten smelt produced by the recovery furnace.

(40) “Special Problem Area” means the formally designated Portland, Eugene-Springfield, and Medford AQMAs and other specifically defined areas that the Environmental Quality Commission may formally designate in the future. The purpose of such designation will be to assign more stringent emission limits as may be necessary to attain and maintain ambient air standards or to protect the public health or welfare.

(41) “Spent Liquor Incinerator” means the combustion device in which pulping chemicals are subjected to high temperature to evaporate the water, incinerate organics and reclaim the sodium sulfate (saltcake) and sodium carbonate.

(42) “Standard Dry Cubic Meter” means the amount of gas that would occupy a volume of one cubic meter, if the gas were free of uncombined water, at a temperature of 20° C. (68° F.) and a pressure of 760 mm of mercury (29.92 inches of mercury). The corresponding English unit is standard dry cubic foot. When applied to recovery furnace gases “standard dry cubic meter” requires adjustment of the gas volume to that which would result in a concentration of 8% oxygen if the oxygen concentration exceeds 8%. When applied to lime kiln gases “standard dry cubic meter” requires adjustment of the gas volume to that which would result in a concentration of 10% oxygen if the oxygen concentration exceeds 10%. The mill shall demonstrate that oxygen concentrations are below noted values or furnish oxygen levels and corrected pollutant data.

(43) “Tempering Oven” means any facility used to bake hardboard following an oil treatment process.

(44) “Sulfite Mill” or “Mill” means a pulp mill producing cellulose pulp using a cooking liquor consisting of sulfurous acid and/or a bisulfite salt.

(45) “Sulfur Oxides” means sulfur dioxide, sulfur trioxide, and other sulfur oxides.

~~(46) “Total Reduced Sulfur (TRS)” means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, and any other organic sulfides present expressed as hydrogen sulfide (H_2S).~~

(47)“Veneer” means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.
(48) “Wigwam Waste Burner” means a burner which consists of a single combustion chamber, has the general features of a truncated cone, and is used for incineration of wastes.

(49) “Wood Fired Veneer Dryer” means a veneer dryer which is directly heated by the products of combustion of wood fuel in addition to or exclusive of steam or natural gas or propane combustion.
State effective: 10/14/99; EPA effective: 3/24/2003

WIGWAM WASTE BURNERS

340-234-0100 STATEMENT OF POLICY AND APPLICABILITY

(1) Policy. Recent technological and economic developments have enhanced the degree to which wood waste residues currently being disposed of in wigwam waste burners may be utilized or otherwise disposed of in ways not damaging to the environment. While recognizing that complete utilization of wood wastes is not presently possible in all instances, consistent with the economic and geographical conditions in Oregon, it is hereby declared to be the policy of the Environmental Quality Commission to:

(a) Encourage the complete utilization of wood waste residues.
(b) Phase out, wherever reasonably practicable, all disposal of wood waste residues by incineration.
(c) Require the modification of all wigwam waste burners to minimize air contaminant emissions.
(d) Require effective monitoring and reporting of wigwam waste burner operating conditions.

(2) Applicability. OAR 340-234-0100 through 340-234-0140 apply to the construction and operation of wigwam waste burners.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0110 AUTHORIZATION TO OPERATE A WIGWAM BURNER

(1) Operation of wigwam waste burners other than modified wigwam waste burners is prohibited

without approval of the Department of Environmental Quality.

(2) Persons seeking authorization to modify a wigwam waste burner or establish a new wigwam waste burner shall request authorization by submitting a Notice of Construction and submitting plans in accordance with OAR 340-210-0200 through 340-210-0220.

(3) Authorization to establish a modified waste burner installation shall not be approved unless it is demonstrated to the Department that:

(a) No feasible alternative to incineration of wood waste residues exists. In demonstrating this, the applicant shall provide a statement of the relative technical and economic feasibility of alternatives, including but not limited to: Utilization, off-site disposal and incineration in a boiler or incinerator other than a wigwam waste burner;
(b) The modified wigwam waste burner facility is to be constructed and operated in accordance with design criteria approved by the Department, and the emission standards set forth in OAR 340-234-0120.

(4) Authorization for establishment of a new modified wigwam waste burner in conjunction with the establishment of a new industrial facility or significant expansion of an existing facility shall not be granted without approval of the Department of Environmental Quality.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0120 EMISSION AND OPERATION STANDARDS FOR WIGWAM WASTE BURNERS

(1) No person shall cause, suffer, allow, or permit the emission of air contaminants into the atmosphere from any wigwam waste burner for a period or periods aggregating more than three minutes in any one-hour which is equal to or greater than 20 percent opacity.

(2) Resultant emissions notwithstanding, no person shall use a wigwam waste burner for the incineration of other than production process wood wastes. Such wood wastes shall be transported to the burner by continuous-flow conveying methods.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0130 MONITORING AND REPORTING

(1) A thermocouple and recording pyrometer or other approved temperature measurement and recording devices shall be installed and maintained on every modified wigwam waste burner.

(2) Exit gas temperature shall be recorded continuously using the installed pyrometer at all times when the burner is in operation.

(3) Records of temperature and burner operation, or summaries thereof, shall be submitted at such frequency as the Department may prescribe.

(4) In addition to temperature monitoring as prescribed above, in accordance with OAR 340-212-0110 through 340-212-0160, the Department may require installation of visible emissions monitoring devices and subsequent reporting of data therefrom.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0140 EXISTING ADMINISTRATIVE AGENCY ORDERS

(1) The provisions of OAR 340-234-0100 through 340-234-0120 and 340-234-0130(1) are in addition thereto and do not modify, amend, repeal, alter, postpone, or in any other manner affect any specific existing agency orders directed against specific parties or persons to abate air pollution.

(2) The provisions of OAR 340-234-0130(2) shall not be made applicable nor extend in any manner to any specific existing agency orders directed against specific parties or persons to abate air pollution.
State effective: 10/14/99; EPA effective: 3/24/2003

KRAFT PULP MILLS

340-234-0200 STATEMENT OF POLICY AND APPLICABILITY

(1) Policy. Recent technological developments have enhanced the degree of malodorous emission control possible for the kraft pulping process. While recognizing that complete malodorous and particulate emission control is not presently possible, consistent with the meteorological and geographical conditions in Oregon, it is hereby declared to be the policy of the Department to:

(a) Require, in accordance with a specific program and time table for all sources at each operating mill, the highest and best practicable treatment and control of atmospheric emissions from kraft mills through the utilization of technically feasible equipment, devices, and procedures. Consideration will be given to the economic life of equipment, which when installed, complied with the highest and best practicable treatment requirement.

(b) Require degrees and methods of treatment for major and minor emission points that will minimize emissions of odorous gases and eliminate ambient odor nuisances.

(c) Require effective monitoring and reporting of emissions and reporting of other data pertinent to air quality or emissions. The Department will use these data in conjunction with ambient air data and observation of conditions in the surrounding area to develop and revise emission and ambient air standards, and to determine compliance therewith.

(d) Encourage and assist the kraft pulping industry to conduct a research and technological development program designed to progressively reduce kraft mill emissions, in accordance with a definite program, including specified objectives and time schedules.

(2) Applicability. OAR 340-234-0200 through 340-234-0270 apply to existing and new kraft pulp mills.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0210 EMISSION LIMITATIONS

~~(1) Emission of Total Reduced Sulfur (TRS):~~

~~(a) Recovery Furnaces:~~

~~(A) The emissions of TRS from each recovery furnace placed in operation before January 1, 1969, shall not exceed 10 ppm and 0.15 Kg/metric ton (0.30 lb./ton) of production as daily arithmetic averages;~~

~~(B) TRS emissions from each recovery furnace placed in operation after January 1, 1969, and before September 25, 1976, or any recovery furnace modified significantly after January 1, 1969, and before September 25, 1976, to expand production shall be controlled such that the emissions of TRS shall not exceed 5 ppm and 0.075 Kg/metric ton (0.150 lb./ton) of production as daily arithmetic averages.~~

~~(b) Lime Kilns. Lime kilns shall be operated and controlled such that emissions of TRS shall not exceed 20 ppm as a daily arithmetic average and 0.05 Kg/metric ton (0.10 lb./ton) of production as a daily arithmetic average. This subsection applies to those sources where construction was initiated prior to September 25, 1976;~~

~~(c) Smelt Dissolving Tanks:~~

~~(A) TRS emissions from each smelt dissolving tank shall not exceed 0.0165 gram/Kg BLS(0.033 lb./ton BLS) as a daily arithmetic average, except as provided in paragraph (B) of this subsection;~~

~~(B) Where an explosion hazard, which was in existence on March 26, 1989, exists and control is not practical or economically not feasible and adequate documentation of these conditions is provided to the Department, the affected smelt dissolving tank shall not exceed 0.033 gram/Kg BLS (0.066 lb./ton BLS) as a daily average.~~

~~(d) Non-Condensibles. Non-condensibles from digesters, multiple-effect evaporators and contaminated condensate stripping shall be continuously treated to destroy TRS gases by thermal incineration in a lime kiln or incineration device capable of subjecting the non-condensibles to a temperature of not less than 650° C. (1,200° F.) for not less than 0.3 second. An alternate device meeting the above requirements shall be available in the event adequate incineration in the primary device cannot be accomplished. Venting of TRS gases during changeover shall be minimized but in no case shall the time exceed one-hour;~~

~~(e) Other Sources:~~

~~(A) The total emission of TRS from other sources including, but not limited to, knotters and brown stock washer vents, brown stock washer filtrate tank vents, and black liquor oxidation vents shall not exceed 0.078 Kg/metric ton (0.156 lb./ton) of production as a daily arithmetic average;~~

~~(B) Miscellaneous Sources and Practices. If it is determined that sewers, drains, and anaerobic lagoons significantly contribute to an odor problem, a program for control shall be required.~~

(2) Particulate Matter:

(a) Recovery Furnaces. The emissions of particulate matter from each recovery furnace stack shall not exceed:

(A) 2.0 kilograms per metric ton (4.0 pounds per ton) of production as a daily arithmetic average;

(B) 0.30 gram per dry standard cubic meter (0.13 grain per dry standard cubic foot) as a daily arithmetic average; and

(C) Thirty-five percent opacity for a period or periods aggregating more than 30 minutes in any 180 consecutive minutes or more than 60 minutes in any 24 consecutive hours (excluding periods when the facility is not operating).

(b) Lime Kilns. The emissions of particulate matter from each lime kiln stack shall not exceed:

(A) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average;

(B) 0.46 gram per dry standard cubic meter (0.20 grain per dry standard cubic foot) as a daily arithmetic average; and

(C) The visible emission limitations in section (4) of this rule.

(c) Smelt Dissolving Tanks. The emission of particulate matter from each smelt dissolving tank vent shall not exceed:

(A) A daily arithmetic average of 0.25 kilogram per metric ton (0.50 pound per ton)of production; and

(B) The visible emission limitations in section (4) of this rule.

(d) Replacement or Significant Upgrading of existing particulate pollution control equipment after July 1, 1988 shall result in more restrictive standards as follows:

(A) Recovery Furnaces:

(i) The emission of particulate matter from each affected recovery furnace stack shall not exceed 1.00 kilogram per metric ton (2.00 pounds per ton) of production as a daily arithmetic average; and

(ii) 0.10 gram per dry standard cubic meter (0.044 grain per dry standard cubic foot) as a daily arithmetic average.

(B) Lime Kilns:

(i) The emission of particulate matter from each affected lime kiln stack shall not exceed 0.25 kilogram per metric ton (0.50 pound per ton)of production as a daily arithmetic average; and

(ii) 0.15 gram per dry standard cubic meter (0.067 grain per dry standard cubic foot) as a daily arithmetic average when burning gaseous fossil fuel; or

(iii) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average; and

(iv) 0.30 gram per dry standard cubic meter (0.13 grain per dry standard cubic foot) as a daily arithmetic average when burning liquid fossil fuel.

(C) Smelt Dissolving Tanks. The emissions of particulate matter from each smelt dissolving tank vent shall not exceed 0.15 kilogram per metric ton (0.30 pound per ton) of production as a daily arithmetic average.

(3) Sulfur Dioxide (SO_2). Emissions of sulfur dioxide from each recovery furnace stack shall not exceed a three-hour arithmetic average of 300 ppm on a dry-gas basis except when burning fuel oil. The sulfur content of fuel oil used shall not exceed the sulfur content of residual and distillate oil established in OAR 340-228-0100(2) and 340-228-0110, respectively.

(4) All kraft mill sources with the exception of recovery furnaces shall not exceed an opacity equal to or greater than 20 percent for a period exceeding three minutes in any one hour.

(5) New Source Performance Standards. New or modified sources that commenced construction after September 24, 1976, are subject to each provision of this rule and the New Source Performance Standards, 40 CFR 60 subpart BB as adopted under OAR 340-238-0060, whichever is more stringent.

State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0220 MORE RESTRICTIVE EMISSION LIMITS

The Department may establish more restrictive emission limits than the numerical emission standards contained in OAR 340-234-0210 and maximum allowable daily mill site emission limits in kilograms or pounds per day for an individual mill upon a finding by the Department that:

(1) The individual mill is located or is proposed to be located in a special problem area or an area where ambient air standards are exceeded or are projected to be exceeded or where the emissions will have a significant air quality impact in an area where the standards are exceeded; or

(2) An odor or nuisance problem has been documented at any mill, in which case the TRS emission limits may be reduced below the regulatory limits; or

(3) Other rules which are more stringent apply.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0230 PLANS AND SPECIFICATIONS

Prior to construction of new kraft mills or modification of facilities affecting emissions at existing kraft mills, complete and detailed engineering plans and specifications for air pollution control devices and facilities and such other data as may be required to evaluate projected emissions and potential effects on air quality shall be submitted to and approved by the Department. All construction shall be in accordance with plans as approved in writing by the Department.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0240 MONITORING

(1) General:

(a) The details of the monitoring program for each mill shall be submitted to and approved by the Department. This submittal shall include diagrams and descriptions of all monitoring systems, monitoring frequencies, calibration schedules, descriptions of all sampling sites, data reporting formats and duration of maintenance of all data and reports. Any changes that are subsequently made in the approved monitoring program shall be submitted in writing to the Department for review and approved in writing prior to change;

(b) All records associated with the approved monitoring program including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a continuous period of at least two calendar years and shall be furnished to the Department upon request;

(c)All source test data; TRS and SO_2 concentrations (ppm), corrected for oxygen content, if required, that are determined by continuous monitoring equipment; and opacity as determined by continuous monitoring equipment or EPA Method 9 will be used to determine compliance with applicable emission standards. All continuous monitoring data, excluding the above, will be used to evaluate performance of emitting processes and associated control systems, and for the qualitative determination of plant site emissions.

~~(2) Total Reduced Sulfur (TRS). Each mill shall continuously monitor TRS in accordance with the following:~~

~~(a) The monitoring equipment shall determine compliance with the emission limits and reporting requirements established by OAR 340-234-0200 through 340-234-0270, and shall continuously sample and record concentrations of TRS;~~

~~(b) The sources monitored shall include, but are not limited to individual recovery furnaces, and lime kilns. All sources shall be monitored down-stream of their respective control equipment, in either the ductwork or the stack, in accordance with the Department **Continuous Monitoring Manual**;~~

~~(c) At least once per year, vents from other sources as required in OAR 340-234-0210(1)(e), Other Sources, shall be sampled to demonstrate the representativeness of the emission of TRS using EPA Method 16, 16A, 16B or continuous emission monitors. EPA methods shall consist of three separate consecutive runs of one-hour each in accordance with the Department **Source Sampling Manual**. Continuous emissions monitors shall be operated for three consecutive hours in accordance with the Department **Continuous Monitoring Manual**. All results shall be reported to the Department;~~

~~(d) Smelt dissolving tank vents shall be sampled for TRS quarterly except that testing may be semi-annual when the preceding six source tests were less than 0.0124 gram/Kg BLS (0.025 lb./ton BLS)using EPA Method 16, 16A, 16B or continuous emission monitors. EPA methods shall consist of three separate consecutive runs of one-hour each in accordance with the Department **Source Sampling Manual**.~~

(3) Particulate Matter:

(a) Each mill shall sample the recovery furnace(s), lime kiln(s) and smelt dissolving tank vent(s) for particulate emissions in accordance with the Department **Source Sampling Manual**;

(b) Each mill shall provide continuous monitoring of opacity of emissions discharged to the atmosphere from each recovery furnace stack in accordance with the Department **Continuous Monitoring Manual**; or

(c) Where monitoring of opacity from each recovery furnace is not feasible, provide

continuous monitoring of particulate matter from each recovery furnace using sodium ion probes in accordance with the Department **Continuous Monitoring Manual**;

(d) Recovery furnace particulate source tests shall be performed quarterly except that testing may be semi-annual when the preceding six source tests were less than 0.225 gram/dscm (0.097 grain/dscf) for furnaces subject to OAR 340-234-0210(2)(a) or 0.075 gram/dscm (0.033 grain/dscf) for furnaces subject to OAR 340-234-0210(2)(d)(A);

(e) Lime kiln source tests shall be performed semi-annually;

(f) Smelt dissolving tank vent source tests shall be performed quarterly except that testing may be semi-annual when the preceding six source tests were less than 0.187 kilogram per metric ton (0.375 pound per ton) of production.

(4) Sulfur Dioxide (SO_2). Representative sulfur dioxide emissions from each recovery furnace shall be determined at least once each month by the average of three one-hour source tests in accordance with the Department **Source Sampling Manua**l or from continuous emission monitors. If continuous emission monitors are used, the monitors shall be operated for three consecutive hours in accordance with the Department **Continuous Monitoring Manual**.

(5) Combined Monitoring. The Department may allow the monitoring for opacity of a combination of more than one emission stream if each individual emission stream has been demonstrated with the exception of opacity to be in compliance with all the emission limits of OAR 340-234-0210. The Department may establish more stringent emission limits for the combined emission stream.

State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0250 REPORTING

Unless otherwise authorized or required by permit, data shall be reported by each mill for each calendar month by the fifteenth day of the subsequent calendar month as follows:

~~(1) Applicable daily average emissions of TRS gases expressed in parts per million of H_2S on a dry gas basis with oxygen concentrations, if oxygen corrections are required, for each source included in the approved monitoring program.~~

~~(2) Daily average emissions of TRS gases in pounds of total reduced sulfur per equivalent ton of pulp processed, expressed as H_2S, for each source included in the approved monitoring program.~~

(3) Three-hour average emission of SO_2 based on all samples collected in one sampling period from the recovery furnace(s), expressed as ppm, dry basis.

(4) All daily average opacities for each recovery furnace stack where transmissometers are

utilized.

(5) All six-minute average opacities from each recovery furnace stack that exceeds 35 percent.

(6) Daily average kilograms of particulate per equivalent metric ton (pounds of particulate per equivalent ton) of pulp produced for each recovery furnace stack. Where transmissometers are not feasible, the mass emission rate shall be determined by alternative sampling conducted in accordance with OAR 340-234-0240(3)(c).

(7) The results of each recovery furnace particulate source test in grams per standard cubic meter (grains per dry standard cubic foot) and for the same source test period the hourly average opacity, where transmissometers are used, and the particulate monitoring record obtained in accordance with the approved or the alternate monitoring program in OAR 340-234-0240(3)(c);

(8) Unless otherwise approved in writing, all periods of non-condensible gas bypass shall be reported.

(9) Upset conditions shall be reported in accordance with OAR 340-234-0260(3).

(10) Each kraft mill shall furnish, upon request of the Department, such other pertinent data as the Department may require to evaluate the mill's emission control program.

(11) Monitoring data reported shall reflect actual observed levels corrected for oxygen, if required, and analyzer calibration.

(12) Oxygen concentrations used to correct pollutant data shall reflect oxygen concentrations at the point of measurement of pollutants.

(13) The Department shall be notified at least 15 days in advance of all scheduled reference method testing including all scheduled changes.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0260 UPSET CONDITIONS

(1) Each mill shall report to the Department abnormal mill operations including control and process equipment maintenance, or unexpected upsets that result in emissions in excess of the regulatory or air contaminant discharge permit limits within one-hour, or when conditions prevent prompt notice, as soon as possible but no later than one-hour after the start of the next working day. The mill shall also take immediate corrective action to reduce emission levels to regulatory or permit levels.

(2) Upsets shall be reported in writing with an accompanying report on measures taken or to be taken to correct the condition and prevent its reoccurrence within five working days of each

incident.

(3) Each mill shall report the cumulative duration in hours each month of the upsets reported in section (1) of this rule and classified as to:

(a) Recovery Furnace:

~~(A) TRS;~~
(B) Particulate.

(b) Lime Kiln:
~~(A) TRS;~~
(B) Particulate.

(c) Smelt Tank Particulate.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0270 CHRONIC UPSET CONDITIONS

If the Department determines that an upset condition is chronic and correctable by installing new or modified process or control procedures or equipment, a program and schedule to effectively eliminate the deficiencies causing the upset conditions shall be submitted. Such reoccurring upset conditions causing emissions in excess of applicable limits may be subject to civil penalty or other appropriate action.
State effective: 10/14/99; EPA effective: 3/24/2003

NEUTRAL SULFITE SEMI-CHEMICAL (NSSC) PULP MILLS

340-234-0300 APPLICABILITY

OAR 340-234-0300 through 340-234-360 apply to existing and new neutral sulfite semi-chemical (NSSC) pulp mills.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0310 EMISSION LIMITATIONS

~~(1) Emission of Total Reduced Sulfur (TRS): Spent Liquor Incinerator. The emissions of TRS from any spent liquor incinerator stack shall not exceed 10 ppm and 0.07 gram/kg BLS (0.14 lb/ton BLS) as a daily arithmetic average.~~

(2) Particulate Matter: Spent Liquor Incinerator. The emissions of particulate matter from any spent liquor incinerator stack shall not exceed:

(a) 3.6 grams/kg BLS (7.2 lbs/ton BLS) as a daily arithmetic average in accordance with the Department **Source Sampling Manual**; and

(b) An opacity equal to or greater than 35 percent for a period exceeding 3 minutes in any one hour, excluding periods when the facility is not operating.

(3) Sulfur Dioxide ($S0_2$):

(a) Spent Liquor Incinerator. The emissions of sulfur dioxide from each spent liquor incinerator stack shall not exceed a 3-hr arithmetic average of 10 ppm on a dry gas basis;

(b) Acid Absorption Tower. The emissions of sulfur dioxide from the acid absorption tower stack shall not exceed 20 ppm as a 3-hr arithmetic average on a dry gas basis.

(4) All NSSC sources, with the exception of spent liquor incinerators, shall not exhibit an opacity equal to or greater than 20 percent for a period exceeding three (3) minutes in any one hour.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0320 MORE RESTRICTIVE EMISSION LIMITS

The Department may establish more restrictive emission limits than the numerical emission standards contained in OAR 340-234-0310 and maximum allowable daily mill site emission limits in kilograms or pounds per day, for an individual mill, upon a finding by the Department that:

(1) The individual mill is located or is proposed to be located in a special problem area or an area where ambient air standards are exceeded or are projected to be exceeded; or

~~(2) When an odor or nuisance problem has been documented at any mill the TRS emission limits may be reduced below the regulatory limits; or~~

(3) Other rules which are more stringent apply.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0330 PLANS AND SPECIFICATIONS

Prior to construction of new neutral sulfite semi-chemical (NSSC) pulp mills or modification of facilities affecting emissions at existing NSSC mills, complete and detailed engineering plans and specifications for air pollution control devices and facilities and such data as may be required to evaluate projected emissions and potential effects on air quality shall be submitted to and approved by the Department. All construction shall be in accordance with plans as approved in writing by the Department.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0340 MONITORING

(1) General:

(a) The details of the monitoring program for each mill shall be submitted to and approved by the Department. This submittal shall include diagrams and descriptions of all monitoring systems, monitoring frequencies, calibration schedules, descriptions of all sampling sites, data reporting formats and duration of maintenance of all data and reports. Any changes that are subsequently made in the approved monitoring program shall be submitted in writing to the Department for review and approved in writing prior to change;

(b) All records associated with the approved monitoring program including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a period of at least two calendar years and shall be furnished to the Department upon request.

~~(2) (a) Total Reduced Sulfur (TRS). Each mill shall continuously monitor the spent liquor incinerator for TRS emissions using: continuous monitoring equipment, except where a vibration problem, which was in existence on March 26, 1989, exists and continuous monitoring equipment is not practical or economically feasible; in which case, upon documentation of the above condition, the spent liquor incinerator shall be sampled for TRS emissions using the reference method and the analytical method (EPA Method 16, 16A, or 16B) as outlined in the Department **Source Sampling Manual**;~~

~~(b) Spent liquor incinerator TRS source tests shall be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 7.5 ppm;~~

~~(c) Flow rate measurements used to determine TRS mass emission rates shall be corrected for cyclonic flow, where applicable.~~

(3) (a) Particulate Matter. Each mill shall sample the spent liquor incinerator for particulate emissions with:

(A) The sampling method; and

(B) The analytical method specified in the Department **Source Sampling Manual**.

(b) Spent liquor incinerator particulate source tests shall be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 2.7 grams/kg BLS (5.4 lbs./ton BLS). All sampling data shall be corrected for cyclonic flow, where applicable;

(c) Each mill shall provide continuous monitoring of opacity of emissions discharged to the atmosphere from the spent liquor incinerator, and the acid plant in accordance with the **Department Continuous Monitoring Manual**; except that when continuous monitoring of opacity is not feasible due to excessive moisture then EPA Method 9 shall be used for the determination of opacity.

(4) Sulfur Dioxide (SO_2). Representative sulfur dioxide emissions from spent liquor incinerators and from the acid absorption tower shall be determined at least once every six (6) months with:

(a) The sampling method; and

(b) The analytical method specified in the **Department Source Sampling Manual**.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0350 REPORTING

Unless otherwise authorized by permit, data shall be reported by each mill for each sampling period by the 15th day of the first month following the applicable sampling period as follows:

~~(1) Daily average emissions of TRS gases in kilograms of total reduced sulfur per metric ton (pounds of total reduced sulfur per ton) of black liquor solids expressed as H_2S based on all samples collected in one sampling period from the spent liquor incinerator.~~

(2) Daily average emissions of particulate in kilograms per metric ton (pounds per ton) of black liquor solids based on all samples collected in one sampling period from the spent liquor incinerator.

(3) Daily average concentration of sulfur dioxide in ppm for each source included in the approved monitoring program based on all samples collected in any one sampling period.

(4) Daily average amount of virgin air-dried unbleached NSSC pulp produced expressed as air dried metric tons per day (air dried tons per day).

(5) Daily average amount of black liquor solids, dry weight, fired in the spent liquor incinerator during periods of operation.

(6) Upset conditions shall be reported in accordance with OAR 340-234-0360(3).

(7) Each mill shall furnish, upon request of the Department, such other pertinent data as the Department may require to evaluate the mills emission control program.

(8) The Department shall be notified at least 15 days in advance of all scheduled reference method testing including all scheduled changes.

(9) Data reported shall reflect actual observed levels.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0360 UPSET CONDITIONS

(1) Each mill shall report abnormal mill operations to the Department including control and process equipment maintenance, or unexpected upsets that result in emissions in excess of the regulatory or air containment discharge permit limits within one hour, or when conditions prevent prompt notification, as soon as possible but no later than one hour after the start of the

next working day. The mill shall also take immediate corrective action to reduce emission levels to regulatory or permit levels.

(2) Upsets shall be reported in writing with an accompanying report on measures taken or to be taken to correct the condition and prevent its reoccurrence within five working days of each incident.

(3) Each mill shall report the cumulative duration in hours each month of the upsets reported in section (1) of this rule and classified as to:

(a) Spent Liquor Incinerator:

~~(A) TRS;~~
(B) Particulate;
(C) SO_2;
(D) Opacity.

(b) Acid Absorption Tower:

(A) SO_2;
(B) Opacity.

State effective: 10/14/99; EPA effective: 3/24/2003

SULFITE PULP MILLS

340-234-0400 STATEMENT OF POLICY AND APPLICABILITY

(1) Policy. It is the policy of the Commission:

(a) To require, in accordance with a specific program and timetable for each operating mill, the highest and best practicable treatment and control of emissions from sulfite mills through the utilization of technically feasible equipment, devices, and procedures.

(b) To require the evaluation of improved and effective measuring techniques for sulfur oxides, total reduced sulfur, particulates, and other emissions from sulfite mills.

(c) To require effective measuring and reporting of emissions and reporting of other data pertinent to emissions. The Department will use these data in conjunction with ambient air data and observation of conditions in the surrounding area to develop and revise emission standards and air quality standards, and to determine compliance therewith.

(d) To encourage and assist the sulfite pulping industry to conduct a research and technological development program designed to progressively reduce sulfite mill emissions, in accordance with a definite program with specific objectives.

(e) To establish standards deemed to be technically feasible, reasonably attainable, and necessary for the attaining of satisfactory air quality with the intent of revising the standards as new information and better technology are developed.

(2) Applicability. OAR 340-234-0400 through 340-234-0430 apply to existing and new sulfite pulp mills.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0410 MINIMUM EMISSION STANDARDS

(1) Notwithstanding the specific emission limits set forth in this rule, the Department of Environmental Quality may, after notice and hearing, establish more restrictive emission limits and compliance schedules for mills located in recognized problem areas, for new mills, for mills expanding existing facilities, for mills installing substantial modifications of existing facilities which result in increased emissions; or for mills in areas where it is shown ambient air standards are exceeded.

(2) The total average daily emissions from a sulfite pulp mill shall not exceed 20 pounds of sulfur dioxide per ton of air dried unbleached pulp produced and in addition:

(a) The blow system emissions shall not exceed 0.2 pounds of sulfur dioxide per minute per ton of unbleached pulp (charged to digester) on a 15 minute average;

(b) Emissions from the recovery system, acid plant, and other sources shall not exceed 800 ppm of sulfur dioxide as an hourly average.

(3) Mills of less than 110 tons of air dried unbleached pulp per day may be exempted from the limitations of section (2) of this rule provided that a minimum of 80 percent collection efficiency for sulphur dioxide (SO_2) is maintained.

(4) The total emission of particulate matter from the recovery furnace stacks shall not exceed four pounds per air dried ton of unbleached pulp produced.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0420 MONITORING AND REPORTING

(1) Each mill shall maintain a Department approved detailed sampling and testing program.

(2) The monitoring equipment shall be capable of determining compliance with the emission limits established by OAR 340-234-0400 through 350-234-0430, and shall be capable of continual sampling and recording of concentrations of sulfur dioxide contaminants from the recovery system. Unless otherwise approved in writing, compliance shall be determined by EPA Method 6 which is contained in the Department **Source Sampling Manual**.

(3) Each mill shall sample the recovery system, blow system, and acid plant for sulfur dioxide emissions on a regularly scheduled basis.

(4) Each mill shall sample the recovery furnace stacks for particulate on a regularly scheduled basis. Unless otherwise approved in writing, compliance shall be determined by EPA Method 5 (front half only) which is contained in the Department **Source Sampling Manual**.

(5) Unless otherwise authorized, data shall be reported by each mill at the end of each calendar month as follows:

(a) Average daily emissions of sulfur dioxides expressed as pounds of sulfur dioxide per ton of pulp produced from the blow system, recovery system, and acid plant;

(b) The daily average and peak concentrations of sulfur dioxides expressed in pounds per hour and expressed in ppm of sulfur dioxide and the number of hours each day that the concentration exceeds 500 ppm;

(c) The average daily production of unbleached pulp and the maximum daily production.

(6) Each mill shall furnish upon request of the Department, such other pertinent data as the Department may require to evaluate the mill's emission control program. Unless otherwise prescribed, each mill shall report immediately to the Department abnormal mill operations which adversely affect the emission of air contaminants.

(7) All measurements shall be made in accordance with techniques approved by the Department.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0430 EXCEPTIONS

OAR 340-234-0400 through 340-234-0430 do not apply to open burning or power boiler operations conducted at sulfite pulp mills unless such boilers are an integral part of the sulfite process or recovery system.
State effective: 10/14/99; EPA effective: 3/24/2003

BOARD PRODUCTS INDUSTRIES (VENEER, PLYWOOD, PARTICLEBOARD, HARDBOARD)

340-234-0500 APPLICABILITY AND GENERAL PROVISIONS

(1) OAR 340-234-0500 through 340-234-0530 establish minimum performance and emission standards for veneer, plywood, particleboard, and hardboard manufacturing operations.

(2) Emission limitations established herein are in addition to, and not in lieu of, general emission standards for visible emissions, fuel burning equipment, and refuse burning equipment, except as provided for in OAR 340-234-0510.

(3) Emission limitations established herein and stated in terms of pounds per 1,000 square feet of production shall be computed on an hourly basis using the maximum eight-hour production capacity of the plant.

(4) Each affected veneer, plywood, particleboard, and hardboard plant shall proceed with a progressive and timely program of air pollution control. Each plant shall at the request of the Department submit periodic reports in such form and frequency as directed to demonstrate the progress being made toward full compliance with OAR 340-234-0500 through 340-234-0530.
State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0510 VENEER AND PLYWOOD MANUFACTURING OPERATIONS

(1) Veneer Dryers:

(a) Consistent with OAR 340-2340-500(1) through (4), it is the object of this section to control air contaminant emissions, including, but not limited to, condensible hydrocarbons such that visible emissions from each veneer dryer are limited to a level which does not cause a characteristic “blue haze” to be observable;

(b) No person shall operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed:

(A) An average operating opacity of ten percent; and
(B) A maximum opacity of 20 percent.

(c) Particulate emissions from wood fired veneer dryers shall not exceed:

(A) 0.75 pounds per 1,000 square feet of veneer dried (3/8 inch basis) for units using fuel which has a moisture content by weight of 20 percent or less;
(B) 1.50 pounds per 1,000 square feet of veneer dried (3/8 inch basis) for units using fuel which has a moisture content by weight of greater than 20 percent;
(C) In addition to paragraphs (1)(c)(A) and (B) of this rule, 0.40 pounds per 1,000 pounds of steam generated in boilers which exhaust gases to the veneer dryer.

(d) Exhaust gases from fuel-burning equipment vented to the veneer dryer are exempt from OAR 340-228-0210;

(e) Each veneer dryer shall be maintained and operated at all times such that air contaminant generating processes and all contaminant control equipment shall be at full efficiency and effectiveness so that the emission of air contaminants are kept at the lowest practicable levels;

(f) No person shall willfully cause or permit the installation or use of any means, such as dilution, which, without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission which would otherwise violate this rule;

(g) Where effective measures are not taken to minimize fugitive emissions, the Department may require that the equipment or structures in which processing, handling, and storage are done, be tightly closed, modified, or operated in such a way that air contaminants are minimized, controlled, or removed before discharge to the open air;

(h) The Department may require more restrictive emission limits than provided in subsections (1)(b) and (c) of this rule for an individual plant upon a finding by the Commission that the individual plant is located or is proposed to be located in a special problem area. The more restrictive emission limits for special problem areas may be established on the basis of allowable emissions expressed in opacity, pounds per hour, or total maximum daily emissions to the atmosphere, or a combination thereof.

(2) Other Emission Sources:

(a) No person shall cause to be emitted particulate matter from veneer and plywood mill sources, including, but not limited to, sanding machines, saws, presses, barkers, hogs, chippers, and other material size reduction equipment, process or space ventilation systems, and truck loading and unloading facilities in excess of a total from all sources within the plant site of one pound per 1,000 square feet of plywood or veneer production on a 3/8 inch basis of finished product equivalent;

(b) Excepted from subsection (2)(a) of this rule are veneer dryers, fuel burning equipment, and refuse burning equipment.

(3) Monitoring and Reporting: The Department may require any veneer dryer facility to establish an effective program for monitoring the visible air contaminant emissions from each veneer dryer emission point. The program shall be subject to review and approval by the Department and shall consist of the following:

(a) A specified minimum frequency for performing visual opacity determinations on each veneer dryer emission point;

(b) All data obtained shall be recorded on copies of a “Veneer Dryer Visual Emissions Monitoring Form” which shall be provided by the Department of Environmental Quality or on an alternative form which is approved by the Department; and

(c) A specified period during which all records shall be maintained at the mill site for inspection by authorized representatives of the Department.

State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0520 PARTICLEBOARD MANUFACTURING OPERATIONS

(1) Truck Dump and Storage Areas:

(a) Every person operating or intending to operate a particleboard manufacturing plant shall cause all truck dump and storage areas holding or intended to hold raw materials to be enclosed to prevent windblown particle emissions from these areas from being deposited upon property not under the ownership of said person;

(b) The temporary storage of raw materials outside the regularly used areas of the plant site is prohibited unless the person who desires to temporarily store such raw materials first notifies the Department of Environmental Quality and receives written approval for said storage:

(A) When authorized by the Department of Environment Quality, temporary storage areas shall be operated to prevent windblown particulate emissions from being deposited upon property not under the ownership of the person storing the raw materials;

(B) Any temporary storage areas authorized by the Department shall not be operated in excess of six (6) months from the date they are first authorized.

(c) Any person who proposes to control windblown particulate emissions from truck dump storage areas other than by enclosure shall apply to the Department for written authorization to utilize alternative controls. The application shall describe in detail the plan proposed to control windblown particulate emissions and indicate on a plot plan the nearest location of property not under ownership of the applicant.

(2) Other Emission Sources:

(a) No person shall cause to be emitted particulate matter from particleboard plant sources including, but not limited to, hogs, chippers, and other material size reduction equipment, process or space ventilation systems, particle dryers, classifiers, presses, sanding machines, and materials handling systems in excess of a total from all sources within the plant site of three (3.0) pounds per 1000 square feet of particleboard produced on a 3/4 inch basis of finished product equivalent;

(b) Excepted from subsection (2)(a) of this rule are truck dump and storage areas, fuel burning equipment, and refuse burning equipment.

State effective: 10/14/99; EPA effective: 3/24/2003

340-234-0530 HARDBOARD MANUFACTURING OPERATIONS

(1) Truck Dump and Storage Areas:

(a) Every person operating or intending to operate a hardboard manufacturing plant shall cause all truck dump and storage areas holding or intended to hold raw materials to be enclosed to prevent windblown particle emissions from these areas from being deposited upon property not under the ownership of said person;

(b) The temporary storage of raw materials outside the regularly used areas of the plant site is prohibited unless the person who desires to temporarily store such raw materials first notifies the Department of Environmental Quality and receives written approval:

(A) When authorized by the Department of Environmental Quality, temporary storage areas shall be operated to prevent windblown particulate emissions from being deposited upon property not under the ownership of the person storing the raw materials;

(B) Any temporary storage areas authorized by the Department shall not be operated in excess of six (6) months from the date they are first authorized.

(c) Alternative Means of Control. Any person who desires to control windblown particulate emissions from truck dump and storage areas other than by enclosure shall first apply to the Department for written authorization to utilize alternative controls. The application shall describe in detail the plan proposed to control windblown particulate emissions and indicate on a plot plan the nearest location of property not under ownership of the applicant.

(2) Other Emission Sources:

(a) Hardboard plants which did not exist during the baseline period. No person shall cause or permit the total emissions rate of particulate matter from a hardboard plant which did not exist during the baseline period to exceed one (1.0) pound per 1000 square feet of hardboard produced on a 1/8 inch basis of finished product equivalent.

(b) Hardboard plants which existed during the baseline period. No person shall cause or permit the total emissions rate of particulate matter from a hardboard plant which existed during the baseline period to exceed the lesser of:

(A) Two (2.0) pounds per 1000 square feet of hardboard produced on a 1/8 inch basis of finished product equivalent; or

(B) The sum of the baseline emissions rate of the press/cooling vent and the lesser of:

(i) The baseline emissions rate from the hardboard plant excluding the press/cooling vents; or

(ii) One (1.0) pound per 1000 square feet of hardboard produced on a 1/8 inch basis of finished product equivalent.

(c) Excepted from subsections (a) and (b) of this section are truck dump and storage areas,

fuel burning equipment, and refuse burning equipment.

(3) Emissions from Hardboard Tempering Ovens:

(a) No person shall operate any hardboard tempering oven unless all gases and vapors emitted from said oven are treated in a fume incinerator capable of raising the temperature of said gases and vapors to at least 1500° F. for 0.3 seconds or longer;

(b) Specific operating temperatures lower than 1500° F. may be approved by the Department upon application, provided that information is supplied to show that operation of said temperatures provides sufficient treatment to prevent odors from being perceived on property not under the ownership of the person operating the hardboard plant;

(c) In no case shall fume incinerators installed pursuant to this section be operated at temperatures less than 1000° F.;

(d) Any person who proposes to control emissions from hardboard tempering ovens by means other than fume incineration shall apply to the Department for written authorization to utilize alternative controls. The application shall describe in detail the plan proposed to control odorous emissions and indicate on a plot plan the location of the nearest property not under ownership of the applicant.

State effective: 10/14/99; EPA effective: 3/24/2003

DIVISION 236

EMISSION STANDARDS FOR SPECIFIC INDUSTRIES

340-236-0010 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 340-204-0010, the definition in this rule applies to this division.

(1) "All Sources" means:
(a) as used in OAR 340-236-0100 through 340-236-0150 sources including, but not limited to, the reduction process, alumina plant, anode plant, anode baking plant, cast house, and collection, treatment, and recovery systems. Except for the purposes of 340-236-0120(1)(c) and (3)(d), "all sources" does not include sources of fugitive emissions;
(b) as used in OAR 340-236-0200 through 340-236-0230 all equipment, structures, processes, and procedures directly related to or involved in the production of ferronickel from laterite ore excluding open storage areas and mining activities.

(2) "Ambient Air" means the air that surrounds the earth, excluding the general volume of gases contained within any building or structure.
(3) "Annual Average" means the arithmetic average of the monthly averages reported to the Department during the twelve most recent consecutive months.

(4) "Anode Baking Plant" means the heating and sintering of pressed anode blocks in oven-like devices, including the loading and unloading of the oven-like devices.
(5) "Anode Plant" means all operations directly associated with the preparation of anode carbon except the anode baking operation.
(6) “Average Dry Laterite Ore Production Rate” means the average amount of dry laterite ore produced per hour based upon annual production records.
(7) “Collection Efficiency” means the overall performance of the air cleaning device in terms of ratio of material collected to total input to the collector unless specific size fractions of the contaminant are stated or required.
(8) "Commission" means Environmental Quality Commission.
(9) "Cured Forage" means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.
(10) "Department" means Department of Environmental Quality.
(11) “Dusts” means minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, or sweeping.
(12) “Dry Laterite Ore” means laterite ore free of uncombined water or as it is discharged from an ore drying equipment or process.
(13) "Emission" means a release into the outdoor atmosphere of air contaminants.
(14) "Emission Standards" means the limitation on the release of contaminant or multiple contaminants to the ambient air.
(15) “Ferronickel” means a metallic alloy containing about 50 percent nickel and 50 percent iron.
(16) "Fluorides" means matter containing fluoride ion emitted to the ambient air as measured by EPA Method 13A or 13B and Method 14 in accordance with the Department's Source Sampling Manual or an equivalent test method approved in writing by the Department.
(17) "Forage" means grasses, pasture, and other vegetation that is consumed or is intended to be consumed by livestock.
(18) "Fugitive emissions" means emissions of any air contaminant that escapes to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening.
(19) “Hot Mix Asphalt Plants” means those facilities and equipment which convey or batch load proportioned quantities of cold aggregate to a drier, and heat, dry, screen, classify, measure, and mix the aggregate with asphalt for purposes of paving, construction, industrial, residential, or commercial use.
(20) “Laterite Ore” means a red residual soil containing commercially valuable amounts of nickel, about one percent to two percent by weight.
(21) "Monthly Average" means the summation of the arithmetic average of all representative test results obtained during any calendar month and the emission rates established for sources not subject to routine testing.
(22) "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background as measured by EPA Method 9 in accordance with the Department's Source Sampling Manual.
(23) "Particulate Matter" means:

(a) as used in OAR 340-236-0100 through 340-236-0150 a small discrete mass of solid or liquid matter, but not including uncombined water emitted to the ambient air as measured by EPA Method 5 in accordance with the Department's Source Sampling Manual or an equivalent test method approved in writing by the Department;

(b) as used in OAR 340-236-0200 through 340-236-0230 and 340-236-0400 through 340-236-0440 a small, discrete mass of solid or liquid matter, but not including uncombined water.

(24) "Primary Aluminum Plant" means those plants, which will or do operate for the purpose of, or related to, producing aluminum metal from aluminum oxide (alumina).
(25) “Portable Hot Mix Asphalt Plants” means those hot mix asphalt plants which are designed to be dismantled and are transported from one job site to another job site.
(26) "Pot Line Primary Emission Control Systems" means the system which collects and removes contaminants prior to the emission point. If there is more than one such system, the primary system is that system which is most directly related to the aluminum reduction cell.
(27) “Process Weight by Hour” means the total weight of all materials introduced into any specific process which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. The “process weight per hour” will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle.
(28) "Regularly Scheduled Monitoring" means sampling and analyses in compliance with a program and schedule approved pursuant to OAR 340-236-0140.
(29) "Source test" means a minimum of three (3) individual test runs with the pollutant emissions determined from the arithmetic average of the three tests.
(30) "Standard Dry Cubic Foot of Gas" means that amount of the gas which would occupy a cube having dimensions of one foot on each side, if the gas were free of water vapor at a pressure of 14.7 P.S.I.A. and a temperature of 68° F.

340-025-0105(31) “Special Control Areas” means an area designated in OAR 340-204-0070 and:

(a) Any incorporated city or within six miles of the city limits of said incorporated city;

(b) Any area of the state within one mile of any structure or building used for a residence;

(c) Any area of the state within two miles straight line distance or air miles of any paved public road, highway, or freeway having a total of two or more traffic lanes.

State effective: 10/14/99; EPA effective: 3/24/2002

PRIMARY ALUMINUM STANDARDS

340-236-0100 STATEMENT OF PURPOSE

In furtherance of the public policy of the State as set forth in ORS 468A.010, it is hereby declared to be the purpose of the Commission in adopting the following regulations to:
(1) Require, in accordance with a specific program and time table for each operating primary aluminum plant, the highest and best practicable collection, treatment, and control of atmospheric pollutants emitted from primary aluminum plants through the utilization of technically feasible equipment, devices, and procedures necessary to attain and maintain desired air quality.
(2) Require effective monitoring and reporting of emissions, ambient air levels of fluorides, fluoride content of forage, and other pertinent data, The Department will use these data, in conjunction with observation of conditions in the surrounding areas, to develop emission and ambient air standards and to determine compliance therewith.
(3) Encourage and assist the aluminum industry to conduct a research and technological development program designed to reduce emissions, in accordance with a definite program, including specified objectives and time schedules.
(4) Establish standards which, based upon presently available technology, are reasonably attainable with the

intent of revising the standards as needed when new information and better technology are developed.
State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0110 APPLICABILITY

OAR 340-236-0100 through 340-236-0150 apply to existing and new primary aluminum plants.
State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0120 EMISSION STANDARDS

(1) The emissions from all sources at each primary aluminum plant constructed after January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

(a) Total fluoride emissions shall not exceed:

(A) A monthly average of 1.2 pounds of fluoride ion per ton of aluminum produced; and

(B) An annual average of 1.0 pound of fluoride ion per ton of aluminum produced; and

(C) 12.5 tons of fluoride ions per month from any single aluminum plant without prior written approval by the Department.

(b) The total of organic and inorganic particulate matter emissions shall not exceed:

(A) A monthly average of 7.0 pounds of particulate per ton of aluminum produced; and

(B) An annual average of 5.0 pounds of particulate per ton of aluminum produced.

(c) Visible emissions from any source shall not exceed ten-(10) percent opacity at any time.

(2) Each primary aluminum plant constructed and operated after January 1, 1973, shall be in full compliance with OAR 340-236-0100 through 340-236-0150 no later than 180 days after completing potroom start-up and shall maintain full compliance thereafter.

(3) The emissions from all sources at each primary aluminum plant constructed on or before January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

(a) Total fluoride emissions shall not exceed:

(A) A monthly average of 3.5 pounds of fluoride ion per ton of aluminum produced until one of the following compliance dates, upon which time this limit shall be rescinded and the total fluoride emission limits in 40 CFR 63.843 are effective:

(i) October 7, 1999 for an owner or operator of a plant built before September 26, 1996;

(ii) October 9, 2000 for a plant built before September 26, 1996, provided the owner or operator demonstrates to the satisfaction of the Department that additional time is needed to install or modify the emission control equipment;

(iii) October 8, 2001 for a plant built before September 26, 1996, that is granted an extension by the Department under section 112(i)(3)(B) of the Clean Air Act Amendments of 1990; or

(iv) Upon startup for an owner or operator of a plant built or modified after September 26, 1996; and

(B) An annual average of 2.5 pounds of fluoride ion per ton of aluminum produced.

(b) The total of organic and inorganic particulate matter emissions from all sources at plants using vertical stud Soderberg cells shall not exceed:

(A) A monthly average of 13.0 pounds of particulate per ton of aluminum produced; and

(B) An annual average of 10.0 pounds of particulate per ton of aluminum produced.

(c) The total of organic and inorganic particulate matter emissions from all sources at plants using prebake cells shall not exceed:

(A) A monthly average of 15.6 pounds of particulate per ton of aluminum produced; and

(B) An annual average of 13.5 pounds of particulate per ton of aluminum produced.

(d) Visible emissions from any source shall not exceed 20 percent opacity at any time.

(e) In addition to the standards and requirements contained in OAR 340-236-0100 through OAR 340-236-0150, each primary aluminum plant shall be in full compliance with **40 CFR Part 63, Subpart LL**, National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants as adopted under OAR 340-244-0220.

State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0130 SPECIAL PROBLEM AREAS

The Department may require more restrictive emission limits than the numerical emission standards contained in OAR 340-236-0120 for an individual plant upon a finding by the Commission that the individual plant is located, or is proposed to be located, in a special problem area. Such more restrictive emission limits for special problem areas may be established on the basis of allowable emissions per ton of aluminum produced or total maximum daily emissions to the atmosphere, or a combination thereof, and may be applied on a seasonal or year-round basis.

State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0140 MONITORING

(1) Each primary aluminum plant constructed and operated on or before January 1, 1973, shall submit and conduct a detailed, effective monitoring program. The program shall include regularly scheduled monitoring and testing by the plant of emissions of gaseous and particulate fluorides and total particulates.

(a) Each plant shall test emissions from each operating potline once per calendar month except as allowed in subsection (b) of this section A minimum of three (3) representative test runs shall be taken each month. All such testing shall include simultaneous sampling of control system(s) and/or roof vents unless otherwise authorized in writing by the Department. Anode bake oven control systems shall be tested at least once per month;

(b) Reduced sampling frequency in accordance with **40 CFR 63.848(e)** and emissions monitoring frequency for the pot line primary emission control system and the anode baking plant in accordance with **40 CFR 63.848(a)** and **(c)** may be approved by the Department upon the applicable compliance date in OAR 340-236-0120(3)(a)(A);

(c) All tests shall be taken on prespecified dates. A schedule for measurement of fluoride levels in forage for new plants and ambient air for new and existing plants shall be submitted. The Department shall establish a monitoring program for each plant which shall be placed in effective operation within ninety (90) days after written notice to the plant by the Department of the established monitoring program.

(2) Each primary aluminum plant proposed to be constructed and operated after January 1, 1973 shall submit a detailed pre-construction and post-construction monitoring program as a part of the air contaminant discharge permit application.

(3) All monitoring methods used to demonstrate compliance with OAR 340-236-0100 through 340-236-0150, including sampling and analytical procedures, must be filed with and approved by the Department. Where applicable, methods in the Department Source Sampling Manual, including, but not limited to, EPA Methods 5 and 7 for particulates and Method 13A or 13B and Method 14 or Method 14A for fluorides or other alternative method in **40 CFR 63.849**, shall be used.

State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0150 REPORTING

(1) Unless otherwise authorized in writing by the Department, data for each source and station included in the approved monitoring program shall be reported by each primary aluminum plant within 30 days of the end of each calendar month as follows:

(a) Ambient air: 12-hour concentrations of gaseous fluoride in ambient air expressed in micrograms per cubic meter of air, and in parts per billion (ppb);

(b) Forage: Concentrations of fluoride in forage expressed in parts per million (ppm) of fluoride on a dried weight basis, if applicable;

(c) Particulate emissions: Results of all emission sampling conducted during the month for particulates, expressed in pounds per ton of aluminum produced. The method of calculating pounds per ton shall be as specified in the approved monitoring programs. Particulate data shall be reported as total particulates and percentage of fluoride ion contained therein;

(d) Gaseous emissions: Results of all sampling conducted during the month for gaseous fluorides. All results shall be expressed as fluoride ion in pounds of fluoride ion per ton of aluminum produced;

(e) Total fluoride: Results of all sampling conducted during the month for total fluoride. All results shall be expressed as fluoride ion in pounds of fluoride ion per ton of aluminum produced;

(f) Other emission and ambient air data as specified in the approved monitoring program;

(g) Changes in collection efficiency of any portion of the collection or control system that resulted from equipment or process changes.

(2) Each primary aluminum plant shall furnish, upon request of the Department, such other data as the Department may require to evaluate the plant's emission control program. Each primary aluminum plant shall report the value of each emission test performed during that reporting period, and shall also immediately report abnormal plant operations, which result in increased emission of air contaminants.

(3) No person shall construct, install, establish, or operate a primary aluminum plant without first applying for and obtaining an air contaminant discharge permit from the Department. Addition to, or enlargement or replacement of, a primary aluminum plant or any major alteration thereof shall be construed as construction, installation, or establishment.

State effective: 10/14/99; EPA effective: 3/24/2003

LATERITE ORE PRODUCTION OF FERRONICKEL

340-236-0200 STATEMENT OF PURPOSE

In furtherance of the public policy of the State as set forth in ORS 468A.010, it is hereby declared to be the purpose of the Commission in adopting OAR 340-236-0200 through 340-236-0230 to:

(1) Require, in accordance with a specific program and timetable, the highest and best practicable collection, treatment, and control of atmospheric pollutants through the utilization of technically feasible equipment, devices, and procedures necessary to attain and maintain desired air quality.

(2) Establish standards which based upon presently available technology, are reasonably attainable with the intent of revising the standards as needed when new information and/or better technology are developed.

State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0210 APPLICABILITY

OAR 340-236-0200 through 340-236-0230 apply to laterite ore production of ferronickel.
State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0220 EMISSION STANDARDS

(1) No source shall have visible emissions in excess of 20 percent opacity, provided that where the presence of uncombined water is the only reason for failure of an emission to meet this requirement, such requirement shall not apply.

(2) The total combined emission of particulate matter from all sources shall not exceed 3.5 pounds per ton of dry laterite ore produced, based upon the average dry laterite ore production rate.
State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0230 MONITORING AND REPORTING

(1) Emission testing shall be conducted by the industry using Department approved methods to determine compliance with this rule.

(2) Abnormal operations which adversely affect the emission of air contaminants shall be reported to the Department within one-hour of the occurrence, or as soon as is reasonably possible.
State effective: 10/14/99; EPA effective: 3/24/2003

HOT MIX ASPHALT PLANTS

340-236-0400 APPLICABILITY

OAR 340-236-0400 through 340-236-0440 apply to hot mix asphalt plants.
State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0410 CONTROL FACILITIES REQUIRED

(1) No person shall operate any hot mix asphalt plant, either portable or stationary, located within any area of the state outside special control areas unless all dusts and gaseous effluents generated by the plant are subjected to air cleaning device or devices having a particulate collection efficiency of at least 80 percent by weight.

(2) No person shall operate any hot mix asphalt plant, either portable or stationary located within any special control area of the state without installing and operating systems or processes for the control of particulate emissions so as to comply with the emission limits established by the process weight table, **Table 1**, attached herewith and by reference made a part of this rule and the emission limitations in OAR 340-208-0110(2) and (3), and 340-226-0210.
State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0420 OTHER ESTABLISHED AIR QUALITY LIMITATIONS

The emission limits established under OAR 340-236-0400 through 340-236-0440 are in addition to visible emission and other ambient air standards, established or to be established by the Environmental Quality Commission unless otherwise provided by rule or regulation.
State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0430 PORTABLE HOT MIX ASPHALT PLANTS

Portable hot mix asphalt plants may apply for air contaminant discharge permits within the area of Department jurisdiction without indicating specific site locations. As a condition of said permit, the permittee will be required to obtain approval from the Department for the air pollution controls to be installed at each site location or set-up at least ten days prior to operating at each site location or set-up.
State effective: 10/14/99; EPA effective: 3/24/2003

340-236-0440 ANCILLARY SOURCES OF EMISSION — HOUSEKEEPING OF PLANT FACILITIES

(1) Ancillary air contamination sources from the plant and its facilities which emit air contaminants into the atmosphere such as, but not limited to, the drier openings, screening and classifying system, hot rock elevator, bins, hoppers, and pug mill mixer, shall be controlled at all times so as to maintain the highest possible level of air quality and the lowest possible discharge of air contaminants.

(2) The handling of aggregate and traffic shall be conducted at all times so as to minimize emissions into the atmosphere.

TABLE I
(OAR 340-236-0410)
PROCESS WEIGHT TABLE

Process Wt/hr (lbs)	Maximum Weight Disch/hr (lbs)	Process Wt/hr (lbs)	Maximum Weight Disch/hr (lbs)
50	.24	3400	5.44
100	.46	3500	5.52
150	.66	3600	5.61
200	.85	3700	5.69
250	1.03	3800	5.77
300	1.20	3900	5.85
350	1.35	4000	5.93
400	1.50	4100	6.01
450	1.63	4200	6.08
500	1.77	4300	6.15
550	1.89	4400	6.22
600	2.01	4500	6.30
650	2.12	4600	6.37
700	2.24	4700	6.45
750	2.34	4800	6.52
800	2.43	4900	6.60
850	2.53	5000	6.67

900		2.62	5500	7.03
950		2.72	6000	7.37
1000	2.80	6500	7.71	
1100	2.97	7000	8.05	
1200	3.12	7500	8.39	
1300	3.26	8000	8.71	
1400	3.40	8500	9.03	
1500	3.54	9000	9.36	
1600	3.66	9500	9.67	
1700	3.79	10000	10.00	
1800	3.91	11000	10.63	
1900	4.03	12000	11.28	
2000	4.14	13000	11.89	
2100	4.24	14000	12.50	
2200	4.34	15000	13.13	
2300	4.44	16000	13.74	
2400	4.55	17000	14.36	
2500	4.64	18000	14.97	
2600	4.74	19000	15.58	
2700	4.84	20000	16.19	
2800	4.92	30000	22.22	
2900	5.02	40000	28.30	
3000	5.10	50000	34.30	
3100	5.18	60000	40.00	
3200	5.27	or		
3300	5.36	more		

State effective: 10/14/99; EPA effective: 3/24/2003

DIVISION 240

RULES FOR AREAS WITH UNIQUE AIR QUALITY NEEDS

340-240-0010 PURPOSE

The purpose of this Division is to deal specifically with the unique air quality control needs of the Medford-Ashland AQMA and Grants Pass UGB (OAR 340-240-0100 through 340-240-0270), the La Grande UGB (340-240-0300 through 340-240-0360, and the Lakeview UGB (OAR 340-240-0400 through 340-240-0440).
State effective: 10/14/99; EPA effective: 3/24/2003

340-240-0020 EMISSION LIMITATIONS

Emission limitations established herein and stated in terms of pounds per 1,000 square feet of production are to be computed on an hourly basis using the maximum 8 hour production capacity of the plant.
State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0030 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 340-204-0010, the definition in this rule applies to this division.

(1) "Air contaminant" means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter, or any combination thereof.

(2) "Air Conveying System" means an air moving device, such as a fan or blower, associated ductwork, and a cyclone or other collection device, the purpose of which is to move material from one point to another by entrainment in a moving airstream.

(3) "Average Operating Opacity" means the opacity of emissions determined using EPA Method 9 on any three days within a 12-month period which are separated from each other by at least 30 days; a violation of the average operating opacity limitation is judged to have occurred if the opacity of emissions on each of the three days is greater than the specified average operating opacity limitation.

(4) "Charcoal Producing Plant" means an industrial operation which uses the destructive distillation of wood to obtain the fixed carbon in the wood.

(5) "Collection Efficiency" means the overall performance of the air cleaning device in terms of ratio of weight of material collected to total weight of input to the collector.

(6) "Department" means Department of Environmental Quality.

(7) "Design Criteria" means the numerical as well as verbal description of the basis of design, including but not necessarily limited to design flow rates, temperatures, humidities, contaminant descriptions in terms of types and chemical species, mass emission rates, concentrations, and specification of desired results in terms of final emission rates and concentrations, and scopes of vendor supplies and owner-supplied equipment and utilities, and a description of any operational controls.

(8) "Domestic Waste" means combustible household waste, other than wet garbage, such as paper, cardboard, leaves, yard clippings, wood, or similar materials generated in a dwelling housing four (4) families or less, or on the real property on which the dwelling is situated.

(9) "Dry 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.

(10) "Emission" means a release into the outdoor atmosphere of air contaminants.

(11) "EPA Method 9" means the method for Visual Determination of the Opacity of Emissions From Stationary Sources described as Method (average of 24 consecutive observations) in the Department Source Sampling Manual (January, 1992).

(12) "Facility" means an identifiable piece of process equipment. A stationary source may be comprised of one or more pollutant-emitting facilities.

(13) "Fuel Burning Equipment" means a device that burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat or power by indirect heat transfer. All stationary gas turbines are considered Fuel Burning Equipment. Marine installations and internal combustion engines are not considered Fuel Burning Equipment.

(14) "Fuel Moisture Content By Weight Greater Than 20 Percent" means bark, hogged wood waste, or other wood with an average moisture content of more than 20 percent by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing.

(15) "Fuel Moisture Content By Weight Less Than 20 Percent" means pulverized ply trim, sanderdust, or other wood with an average moisture content of 20 percent or less by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing.

(16) "Fugitive Emissions" means dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof not easily given to measurement, collection and treatment by conventional pollution control methods.

(17) "Grants Pass Urban Growth Area" and "Grants Pass Area" means the area within the Grants Pass Urban Growth Boundary as shown on the Plan and Zoning Maps for the City of Grants Pass as of 1 February 1988.

(18) "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.

(19) "La Grande Urban Growth Area" means the area within the La Grande Urban Growth Boundary as shown on the Plan and Zoning Maps for the City of La Grande as of 1 October 1991.

(20) "Lakeview Urban Growth Area" means the area within the Lakeview Urban Growth Boundary as shown on the Plan and Zoning Maps for the Town of Lakeview as of 25 October 1993.

(21) "Liquefied petroleum gas" has the meaning given by the American Society for Testing and Materials in ASTM D1835-82, "Standard Specification for Liquid Petroleum Gases."

(22) "Lowest Achievable Emission Rate" or "LAER" is defined in OAR 340-200-0020.

(23) "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).

(24) "Medford-Ashland Air Quality Maintenance Area" (AQMA) means the area defined as beginning at a point approximately two and quarter miles northeast of the town of Eagle Point, Jackson County, Oregon at the northeast corner of Section 36, Township 35 South, Range 1 West (T35S, R1W); thence South along the Willamette Meridian to the southeast corner of Section 25, T37S, R1W; thence southeast along a line to the southeast corner of Section 9, T39S, R2E; thence south-southeast along line to the southeast corner of Section 22, T39S, R2E; thence South to the southeast corner of Section 27, T39S, R2E; thence southwest along a line to the southeast corner of Section 33, T39S, R2E; thence West to the southwest corner of Section 31, T39S, R2E; thence northwest along a line to the northwest corner of Section 36, T39S, R1E; thence West to the southwest corner of Section 26, T39S, R1E; thence northwest along a line to the southeast corner of Section 7, T39S, R1E; thence West to the southwest corner of Section 12, T39S, R1W,

T39S, R1W; thence northwest along a line to southwest corner of Section 20, T38S, R1W; thence West to the southwest corner of Section 24, T38S, R2W; thence northwest along a line to the southwest corner of Section 4, T38S, R2W; thence West to the southwest corner of Section 6, T38S, R2W; thence northwest along a line to the southwest corner of Section 31, T37S, R2W; thence North and East along the Rogue River to the north boundary of Section 32, T35S, R1W; thence East along a line to the point of beginning.

(25) "Modified Source" means any source with a major modification as defined in OAR 340-200-0020.

(26) "Natural gas" means a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal component is methane.

(27) "New Source" means any source not in existence prior to April 7, 1978 or any source not having a Permit as of April 7, 1978.

(28) "Odor" means that property of an air contaminant that affects the sense of smell.

(29) "Offset" is defined in OAR 340-200-0020.

(30) "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background as measured in accordance with the Department's Source Sampling Manual (January, 1992). Unless otherwise specified by rule, opacity must be measured in accordance with EPA Method 9. For all standards, the minimum observation period must be six minutes, though longer periods may be required by a specific rule or permit condition. Aggregate times (e.g. 3 minutes in any one hour) consist of the total duration of all readings during the observation period that exceed the opacity percentage in the standard, whether or not the readings are consecutive. Alternatives to EPA Method 9, such as a continuous opacity monitoring system (COMS), alternate Method 1 (LIDAR), or EPA Methods 22, or 203, may be used if approved in advance by the Department, in accordance with the Source Sampling Manual.

(31) "Open Burning" means burning conducted in such a manner that combustion air and combustion products may not be effectively controlled including, but not limited to, burning conducted in open outdoor fires, burn barrels, and backyard incinerators.

(32) "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binders.

(33) "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured in accordance with the Department Source Sampling Manual. Particulate matter emission determinations must consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ Method 7, each run must have a minimum sampling time of one hour, a maximum sampling time of eight hours, and a minimum sampling volume of 31.8 dscf. For sources tested using DEQ Method 8, each run must have a minimum sampling time of 15 minutes and must collect a minimum particulate sample of 100 mg. Wood waste boilers and charcoal producing plants must be tested with DEQ Method 5; veneer dryers, wood particle dryers, fiber dryers and press/cooling vents must be tested with DEQ Method 7; and air conveying systems must be tested with DEQ Method 8 (January, 1992).

(34) "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.

(35) "Press/Cooling Vent" means any opening through which particulate and gaseous emissions from plywood, particleboard, or hardboard manufacturing are exhausted, either by natural draft or powered fan, from the building housing the process. Such openings are generally located immediately above the board press, board unloader, or board cooling area.

(36) "Rebuilt Boiler" means a physical change after April 29, 1988, to a wood-waste boiler or its air-contaminant emission control system which is not considered a "modified source" and for which the fixed, depreciable capital cost of added or replacement components equals or exceeds fifty percent of the fixed depreciable cost of a new component which has the same productive capacity.

(37) "Source" means any structure, building, facility, equipment, installation or operation, or combination thereof, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person, or by persons under common control.

(38) "Standard Conditions" means a temperature of 60° Fahrenheit (15.6° Celsius) and a pressure of 14.7 pounds per square inch absolute (1.03 Kilograms per square centimeter).

(39) "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.

(40) "Veneer Dryer" means equipment in which veneer is dried.

(41) "Wood-fired Veneer Dryer" means a veneer dryer which is directly heated by the products of combustion of wood fuel in addition to or exclusive of steam or natural gas or propane combustion.

(42) "Wigwam Fired Burner" means a burner which consists of a single combustion chamber, has the general features of a truncated cone, and is used for the incineration of wastes.

(43) "Wood Waste Boiler" means equipment which uses indirect heat transfer from the products of combustion of wood waste to provide heat or power.

[**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 4-1978, f. & ef. 4-7-78; DEQ 9-1979, f. & ef. 5-3-79; DEQ 3-1980, f. & ef. 1-28-80; DEQ 14-1981, f. & ef. 5-6-81; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 3-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0010; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

The Medford-Ashland Air Quality Maintenance Area and the Grants Pass Urban Growth Area

340-240-0100 Applicability

OAR 340-240-0100 through 340-240-0250 apply in the Medford-Ashland Air Quality Maintenance Area (AQMA) and the Grants Pass Urban Growth Area (Area), except that OAR 340-240-0130, 340-240-0180, and 340-240-0190 apply only in the Medford-Ashland AQMA.

[**NOTE:** These rules are 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 468A.025

Hist.: DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0012; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0110 Wood Waste Boilers

(1) No person may cause or permit the emission of particulate matter from any boiler with a heat input capacity greater than 35 million Btu/hour unless the boiler has been equipped with emission control equipment which:

(a) Limits emissions of particulate matter to LAER as defined by the Department at the time the Department approves the control device; and

(b) Limits visible emissions such that their opacity does not exceed 5% for more than an aggregate of 3 minutes in any one hour, unless the permittee demonstrates by source test that emissions can be limited to LAER at higher visible emissions, but in no case may emissions equal or exceed 10% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits will be included in the Permit for each affected source.

(2) For boilers existing in the Baseline Period with a heat input capacity greater than 35 million Btu/hour, boiler mass emission limits for the purpose of establishing the facility's netting basis under OAR 340-200-0020 will be based on particulate matter emissions of 0.030 grains per dry standard cubic foot, corrected to 12% CO2.

(3) Rebuilt Boilers are subject to OAR 340-240-0110(1). Boiler mass emissions for purposes of OAR 340-222-0041 will be based on LAER at the time the Department approves the rebuilt boiler.

[**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 4-1978, f. & ef. 4-7-78; DEQ 29-1980, f. & ef. 10-29-80; DEQ 14-1986, f. & ef. 6-20-86; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 22-1996, f. & cert. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0015; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0120 Veneer Dryer Emission Limitations

(1) No person is allowed to operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed the opacity limits specified in subsections (a) and (b) of this section or such that emissions of particulate matter exceed the mass emission limits of subsections (c) through (g) of this section:

(a) An average operating opacity of five percent; and

(b) A maximum opacity of ten percent, unless the permittee demonstrates by source test that the emission limits in subsections (c) through (g) of this section can be achieved at higher visible emissions than specified in subsections (a) and (b) of this section, but in no case may emissions exceed the visible air contaminant limitations of OAR 340-234-0510(1)(b). Specific opacity limits will be included in the Permit for each affected source;

(c) 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct natural gas or propane fired veneer dryers;

(d) 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for steam heated veneer dryers;

(e) 0.40 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct wood fired veneer dryers using fuel which has a moisture content by weight less than 20 percent;

(f) 0.45 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct wood fired veneer dryers using fuel which has a moisture content by weight greater than 20 percent;

(g) In addition to subsections (e) and (f) of this section, 0.20 pounds per 1,000 pounds of steam generated in boilers which exhaust combustion gases to the veneer dryer.

(2) Exhaust gases from fuel-burning equipment vented to the veneer dryer are exempt from OAR 340-228-0210.

(3) No person is allowed to operate a veneer dryer unless:

(a) The owner or operator has submitted a program and time schedule for installing an emission-control system which has been approved in writing by the Department as being capable of complying with subsections (1)(a) through (g) of this rule;

(b) The veneer dryer is equipped with an emission-control system which has been approved in writing by the Department and is capable of complying with subsections (1)(a) through (g) of this rule; or

(c) The owner or operator has demonstrated and the Department has agreed in writing that the dryer is capable of being operated and is operated in continuous compliance with subsections (1)(a) through (g) of this rule.

(4) Each veneer dryer must be maintained and operated at all times such that air contaminant generating processes and all contaminant control equipment are at full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable levels.

(5) No person is allowed to willfully cause or permit the installation or use of any means, such as dilution, which, without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission which would otherwise violate this rule.

(6) Where effective measures are not taken to minimize fugitive emissions, the Department may require that the equipment or structures in which processing, handling and storage are done, be tightly closed, modified, or operated in such a way that air contaminants are minimized, controlled, or removed before discharge to the open air.

[**NOTE:** These rules are 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 468A.025

Hist.: DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0021; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0130 Air Conveying Systems (Medford-Ashland AQMA Only)

All air conveying systems emitting greater than ten tons per year of particulate matter to the atmosphere must, with the prior written approval of the Department, be equipped with a control system with collection efficiency of at least 98.5 percent.

[**NOTE:** These rules are 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 468A.025
Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0025; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0140 Wood Particle Dryers at Particleboard Plants

(1) No person is allowed to cause or permit the total emission of particulate matter from all wood particle dryers at a particleboard plant site to exceed 0.40 pounds per 1,000 square feet of board produced by the plant on a 3/4" basis of finished product equivalent.

(2) No person is allowed to cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed ten percent opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) of this rule can be achieved at higher visible emissions. In no case are emissions allowed to equal or exceed 20 percent opacity. Specific opacity limits will be included in the Permit for each affected source.

[**NOTE:** These rules are 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 468A.025
Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 14-1981, f. & ef. 5-6-81; DEQ 14-1986, f. & ef. 6-20-86; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0030; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0150 Hardboard Manufacturing Plants

(1) Emissions from Hardboard plants excluding press vents. No person is allowed to cause or permit the total emissions of particulate matter from a hardboard plant, excluding press/cooling vents, to exceed 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

(2) Emissions from Hardboard plants including press vents. No person is allowed to cause or permit the total emissions of particulate matter from a hardboard plant, including press/cooling vents, to exceed 0.55 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

(3) When calculating emissions for this rule, emissions from truck dump and storage areas, fuel burning equipment, and refuse burning equipment are not included.

[**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 14-1981, f. & ef. 5-6-81; DEQ 14-1986, f. & ef. 6-20-86; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 2-1996, f. & cert. ef. 1-29-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0031; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0160 WIGWAM WASTE BURNERS

No person owning or controlling any wigwam burner is allowed to cause or permit the operation of the wigwam burner.
State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0170 CHARCOAL PRODUCING PLANTS

(1) No person is allowed to cause or permit the emission of particulate matter from charcoal producing plant sources including, but not limited to, charcoal furnaces, heat recovery boilers, and wood dryers using any portion of the charcoal furnace off-gases as a heat source, in excess of a total from all sources within the plant site of 10.0 pounds per ton of char produced (5.0 grams per Kilogram of char produced).

(2) Emissions from char storage, briquette making, boilers not using charcoal furnace off-gases, and fugitive sources are excluded in determining compliance with section (1) of this rule.

(3) Charcoal producing plants as described in section (1) of this rule are exempt from the limitations of OAR

340-226-0210 sections (1) and (2), and 340-226-0310 which concern particulate emission concentrations and process weight.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0180 Control of Fugitive Emissions (Medford-Ashland AQMA Only)

(1) All sawmills, all plywood mills and veneer manufacturing plants, particleboard and hardboard plants, charcoal manufacturing plants, asphalt plants, rock crushers, animal feed manufacturers, and other major industrial facilities as identified by the Department, must prepare and implement site-specific plans for the control of fugitive emissions.

(2) Fugitive emission-control plans must identify reasonable measures to prevent particulate matter from becoming airborne. Special care will be taken by the facility to avoid the migration of material onto the public road system. Such reasonable measures include, but are not limited to the following:

(a) The systematic paving of all unpaved roads and areas on which vehicular traffic occurs. Until an area is paved, subsection (2)(b) applies;

(b) Scheduled application of asphalt, oil, water, or other suitable chemicals on unpaved roads, log storage or sorting yards, materials stockpiles, and other surfaces which can create airborne dust. Dust suppressant material must not adversely affect water quality;

(c) Periodic sweeping or cleaning of paved roads and other areas as necessary to prevent migration of material onto the public road system;

(d) Full or partial enclosure of materials stockpiled in cases where application of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;

(e) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;

(f) Adequate containment during sandblasting or other similar operations;

(g) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and

(h) Procedures for the prompt removal of earth or other material from paved streets.

(3) Reasonable measures may include landscaping and using vegetation to reduce the migration of material onto public and private roadways.

(4) The facility owner or operator must supervise and control fugitive emissions and material that may become airborne caused by the activity of outside contractors delivering or removing materials at the site.

(5) The site-specific fugitive dust emissions control plan must be submitted to the Department prior to or within 60 days of permit issuance or renewal. The Department will approve or deny the plan within 30 days.

[**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.025
Hist.: DEQ 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ16-1998, f. & cert. ef. 9-23-98; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0043; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0190 Requirement for Operation and Maintenance Plans (Medford-Ashland AQMA Only)

(1) Operation and Maintenance Plans must be prepared by all holders of Permits other than a Basic ACDP. All sources subject to regular permit requirements are subject to operation and maintenance requirements.

(2) The purposes of the operation and maintenance plans are to:

(a) Reduce the number of upsets and breakdowns in particulate control equipment;

(b) Reduce the duration of upsets and downtimes; and

(c) Improve the efficiency of control equipment during normal operations.

(3) The operation and maintenance plans should consider, but not be limited to, the following:

(a) Personnel training in operation and maintenance;

(b) Preventative maintenance procedures, schedule and records;

(c) Logging of the occurrence and duration of all upsets, breakdowns and malfunctions which result in excessive emissions;

(d) Routine follow-up evaluation of upsets to identify the cause of the problem and changes needed to prevent a recurrence;

(e) Periodic source testing of pollution control units as required by the permit;

(f) Inspection of internal wear points of pollution control equipment during scheduled shutdowns; and

(g) Inventory of key spare parts.

[**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 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 4-1995, f. & cert. ef. 2-17-95; DEQ 10-1995, f. & cert. ef. 5-1-95; DEQ 22-1996, f. & cert. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0044; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0200 EMISSION-LIMITS COMPLIANCE SCHEDULES

(1) Compliance with the emission limits for wood-waste boilers in the Grants Pass area and veneer dryers

established in OAR 340-240-0110(1) and (2) and 340-240-0120 must be provided according to the following schedules:

(a) By December 25, 1989, submit Design Criteria and a Notice of Intent to Construct for emission-control systems for Department review and approval;
(b) Within three months of receiving the Department's approval of the Design Criteria, submit a General Arrangement and copies of purchase orders for the emission-control devices;
(c) Within two months of placing purchase orders for emission-control devices, submit vendor drawings as approved for construction of the emission-control devices and specifications of other major equipment in the emission-control system (such as fans, scrubber-medium recirculation and make up systems) in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;
(d) Within one year of receiving the Department's approval of Design Criteria, complete construction;
(e) Within 15 months of receiving the Department's approval of Design Criteria, but no later than June 30, 1991, demonstrate compliance.

(2) Compliance with the emission limits for wood-waste boilers in OAR 340-240-0110(3) must be provided according to OAR 340-240-0240 or the following schedule, whichever occurs first:

(a) By no later than September 1, 1993, submit Design Criteria and a Notice of Intent to Construct for emission-control systems for Department review and approval;
(b) Within three months of receiving the Department's approval of the Design Criteria, submit a General Arrangement and copies of purchase orders for the emission-control devices;
(c) Within two months of placing purchase orders for emission-control devices, submit vendor drawings as approved for construction of the emission-control devices and specifications of other major equipment in the emission-control system (such as fans, scrubber-medium recirculation and make up systems) in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;
(d) Within one year of receiving the Department's approval of Design Criteria, complete construction;
(e) Within 15 months of receiving the Department's approval of Design Criteria, but no later than December 31, 1994, demonstrate compliance.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0210 Continuous Monitoring

(1) The Department will require the installation and operation of instrumentation for measuring and recording emissions and/or the parameters which affect the emission of air contaminants from wood-waste fired boilers, veneer dryers, fiber dryers, and particle dryers to ensure that the sources and the air pollution control equipment are operated at all times at their full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable level. The instrumentation must be periodically calibrated. The method and frequency of calibration must be approved in writing by the Department. Continuous monitoring equipment and operation must be in accordance with continuous emission monitoring systems guidance provided by the Department and must be consistent, where applicable, with the EPA performance specifications and quality assurance procedures outlined in 40 CFR 60, Appendices B and F, and the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III. The recorded information must be kept for a period of at least one year and must be made available to the Department upon request.

(2) At a minimum, the monitoring required under paragraph (1) of this section must include:

(a) Continuous monitoring and monthly reporting of carbon monoxide concentration and oxygen concentration for any wood-waste fired boiler with a heat input capacity greater than 35 million BTU/hr or for any wood-waste boiler using a wet scrubber as pollution control equipment and steam production rate for any wood-waste fired boiler;

(b) Continuous monitoring and monthly reporting of pressure drop, scrubber water pressure, and scrubber water flow or other parameters deemed by the Department to be equal or better indicators of proper operation of the wet scrubber used as pollution control equipment for any wood-waste fired boiler, veneer dryer, particle dryer, or fiber dryer.

(c) Continuous monitoring and monthly reporting of opacity for any wood-waste fired boiler not controlled by a wet scrubber.

[**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 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1996, f. & cert. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0050; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0220 Source Testing

(1) The person responsible for the following sources of particulate emissions must make or have made tests to determine the type, quantity, quality, and duration of emissions, and/or process parameters affecting emissions, in conformance with test methods on file with the Department at the following frequencies:

(a) Wood Waste Boilers with heat input capacity greater than 35 million Btu/hr. -- Once every year;

(b) Veneer Dryers -- Once every year during 1991, 1992, and 1993 and once every 3 years thereafter;

(c) Wood Particle Dryers at Hardboard and Particleboard Plants -- Once every year;

(d) Charcoal Producing Plants -- Once every year.

(e) Wood Waste Boilers with heat input capacity equal to or less than 35 million BTU/hr with dry emission control equipment -- Once in 1992 and once every 3 years thereafter.

(2) Source testing must begin at these frequencies within 90 days of the date by which compliance is to be achieved for each individual emission source.

(3) These source testing requirements will remain in effect unless waived in writing by the Department because of adequate demonstration that the source is consistently operating at lowest practicable levels, or that continuous emission monitoring systems are producing equivalent information.

(4) Source tests on wood waste boilers must not be performed during periods of soot blowing, grate cleaning, or other abnormal operating conditions. The maximum steaming rate for the boiler may not exceed the average steam production rate measured during the source test by more than ten percent (10%).

(5) Source tests must be performed within 90 days of the startup of air pollution control systems.

[**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 4-1978, f. & ef. 4-7-78; DEQ 14-1986, f. & ef. 6-20-86; DEQ 22-1988, f. & cert. ef. 9-26-89; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 22-1996, f. & cert. 10-22-96; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0055; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0230 New Sources

New sources are required to comply with OAR 340-240-0110(1) and 340-240-0120 through 340-240-0250 immediately upon initiation of operation.

[**NOTE:** These rules are 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 468A.025
Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1988, f. & cert. ef. 9-26-89; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-030-0065; DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01; DEQ 1-2005, f. & cert. ef. 1-4-05

State effective: 1/4/05; EPA effective: 8/18/2006

340-240-0240 REBUILT BOILERS

Rebuilt boilers must immediately comply with the requirements of OAR 340-240-0110(3) except that in the Grants Pass Urban Growth Area this provision will apply to sources that are rebuilt after they have complied with OAR 340-240-0110(1).
State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0250 OPEN BURNING

No open burning of domestic waste is allowed on any day or at any time when the Department advises fire permit issuing agencies that open burning is not allowed because of adverse meteorological or air quality conditions.
State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0270 DUAL-FUELING FEASIBILITY STUDY FOR WOOD-WASTE BOILERS

(1) On or before July 1, 1994, the owner or operator of a plant site in the Medford-Ashland AQMA where the total heat input capacity from all wood-waste boilers is greater than 35 million Btu/hr must submit to the

Department the results of a dual-fueling feasibility study conducted in accordance with a study protocol submitted under section (2) of this rule which has been approved by the Department.

(2) On or before January 1, 1993, a person subject to section (1) of this rule must submit to the Department for approval a study protocol to evaluate the feasibility, costs and benefits of implementing a program to provide alternate fueling capability after December 31, 1994, for wood-waste boilers during periods of actual, anticipated or potential exceedance of the ambient air quality standard for PM_{10}. The protocol must identify the methodology and schedule for evaluating the adequacy of supply of natural gas and other alternate fuels during the winter months, the cost and technical feasibility of modifying existing wood-waste boilers, the air quality benefits and costs of fuel switching prior to or during periods of poor air quality, and relevant maintenance and operational concerns including start-up and shut-down impacts.

(3) One or more persons subject to section (1) of this rule may submit a combined study protocol to the Department, conduct a combined study and submit combined results to the Department. Such a combined study must evaluate the cost and technical feasibility of modifying existing wood-waste boilers at the plant site of each participating person. The combined study may jointly evaluate fuel supply, air quality, and maintenance and operational concerns applicable to all participating persons. A combined study must be conducted by an independent contractor hired by the participating persons and approved by the Department.

State effective: 7/1/01; EPA effective: 3/24/2003

LA GRANDE URBAN GROWTH AREA

340-240-0300 APPLICABILITY

OAR 340-240-0300 through 340-240-0360 apply in the La Grande Urban Growth Area.

State effective: 10/14/99; EPA effective: 3/24/2003

340-240-0310 COMPLIANCE SCHEDULE FOR EXISTING SOURCES

(1) Except as provided in sections (2) and (3) of this rule, compliance with applicable requirements of OAR 340-240-0300 through 340-240-0360 for a source that is located in the La Grande Urban Growth Area prior to November 15, 1991 must be demonstrated as expeditiously as possible, but in no case later than the following schedule:

(a) No later than May 15, 1992, the owner or operator must submit Design Criteria and a Notice of Intent to Construct for emission-control systems for Department review and approval; and if the Department disapproves the Design Criteria, the owner or operator must revise the Design Criteria to meet the Department's objections and submit the revised Design Criteria to the Department no later than one month after receiving the Department's disapproval;

(b) No later than three months after receiving the Department's approval of the Design Criteria, the owner or operator must submit to the Department a General Arrangement and copies of purchase orders for any emission-control devices;

(c) No later than eight months after receiving the Department's approval of the Design Criteria, the owner or

operator must submit to the Department vendor drawings as approved for construction of any emission-control devices and specifications of any other major equipment in the emission-control system in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;

(d) No later than nine months after receiving the Department's approval of the Design Criteria, the owner or operator must begin construction of any emission-control devices;

(e) No later than sixteen months after receiving the Department's approval of Design Criteria, the owner or operator must complete construction in accordance with the Design Criteria;

(f) No later than May 15, 1994, the owner or operator must demonstrate compliance with the applicable contingency requirements.

(2) Section (1) of this rule does not apply if the owner or operator has demonstrated by May 15, 1992 that the source is capable of being operated and is operated in continuous compliance with applicable requirements of OAR 340-240-0300 through 340-240-0360 and the Department has agreed with the demonstration in writing. The Department may grant an extension until November 15, 1992 for a source to demonstrate compliance under this section. The applicable requirements will be incorporated in the Permit issued to the source.

(3) The Department may adjust the schedule specified in subsections (1)(a) through (e) of this rule if necessary to ensure timely compliance with subsection (1)(f) of this rule or if necessary to conform to an existing compliance schedule with an earlier compliance demonstration date.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0320 WOOD-WASTE BOILERS

No person is allowed to cause or permit the emission into the atmosphere from any wood-waste boiler that is located on a plant site where the total heat input capacity from all wood-waste boilers is greater than 35 million Btu/hr:

(1) Any air contaminant for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than ten percent opacity, unless the permittee demonstrates by source test that the source can comply with the emission limit in section (2) of this rule at higher opacity but in no case are emissions equal or exceed 20 percent opacity for more than an aggregate of three minutes in any one hour allowed. Specific opacity limits will be included in the Permit for each affected source.

(2) Particulate matter in excess of 0.05 grains per standard cubic foot, corrected to 12 percent CO_2.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0330 WOOD PARTICLE DRYERS AT PARTICLEBOARD PLANTS

(1) No person is allowed to cause or permit the total emission of particulate matter from all wood particle dryers at a particleboard plant site to exceed 0.40 pounds per 1,000 square feet of board produced by the plant on a

3/4" basis of finished product equivalent.

(2) No person is allowed to cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed ten percent opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) of this rule can be achieved at higher visible emissions, but in no case are emissions equal or exceed 20 percent opacity allowed. Specific opacity limits will be included in the Permit for each affected source.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0340 HARDBOARD MANUFACTURING PLANTS

No person is allowed to cause or permit the total emissions of particulate matter from all sources within a hardboard plant, other than press/cooling vents, in excess of 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0350 AIR CONVEYING SYSTEMS

(1) No person is allowed to cause or permit the emission of particulate matter in excess of 0.1 grains per standard cubic foot from any air conveying system emitting less than or equal to ten tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990.

(2) All air conveying systems emitting greater than ten tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990 must be equipped with a control system with a collection efficiency of at least 98.5 percent or equivalent control as approved by the Department.

(3) No person is allowed to cause or permit the emission of any air contaminant which is equal to or greater than five percent opacity from any air conveying system subject to section (2) of this rule.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0360 FUGITIVE EMISSIONS

The owner or operator of a large sawmill, any plywood mill or veneer manufacturing plant, particleboard plant, hardboard plant, or charcoal manufacturing plant that is located in the La Grande Urban Growth Area must comply with OAR 340-240-0180.

State effective: 7/1/01; EPA effective: 3/24/2003

THE LAKEVIEW URBAN GROWTH AREA

340-240-0400 APPLICABILITY

OAR 340-240-0400 through 340-240-0440 apply to the Lakeview Urban Growth Area.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0410 CONTROL OF FUGITIVE EMISSIONS

(1) Large sawmills, all plywood mills and veneer manufacturing plants, particleboard and hardboard plants, charcoal manufacturing plants, stationary asphalt plants, stationary rock crushers, and sources subject to OAR 340-240-0420 must prepare and implement site-specific plans for the control of fugitive emissions.

(2) Fugitive emission control plans must identify reasonable measures to prevent particulate matter from becoming airborne. Such reasonable measures include, but not be limited to the following:

(a) Scheduled application of asphalt, oil, water, or other suitable chemicals on unpaved roads, log storage or sorting yards, materials stockpiles, and other surfaces which can created airborne dust;

(b) Full or partial enclosure of materials stockpiled in cases where application of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;

(c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;

(d) Adequate containment during sandblasting or other similar operations;

(e) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and

(f) Procedures for the prompt removal from paved streets of earth or other material which does or may become airborne.

State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0420 REQUIREMENT FOR OPERATION AND MAINTENANCE PLANS

(1) Operation and Maintenance Plans must be prepared by all holders of Permits other than a Regulated Source ACDP. All sources subject to regular permit requirements are subject to operation and maintenance requirements.

(2) The purposes of the operation and maintenance plans are to:

(a) Reduce the number of upsets and breakdowns in particulate control equipment;
(b) Reduce the duration of upsets and downtimes; and
(c) Improve the efficiency of control equipment during normal operations.

(3) The operation and maintenance plans should consider, but not be limited to, the following:

(a) Personnel training in operation and maintenance;
(b) Preventative maintenance procedures, schedule and records;
(c) Logging of the occurrence and duration of all upsets, breakdowns and malfunctions which result in excessive emissions;
(d) Routine follow-up evaluation of upsets to identify the cause of the problem and changes needed to prevent a recurrence;
(e) Periodic source testing of pollution control units as required by a permit;

(f) Inspection of internal wear points of pollution control equipment during scheduled shutdowns; and
(g) Inventory of key spare parts.
State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0430 SOURCE TESTING

The person responsible for the following sources of particulate emissions must make or have made tests to determine the type, quantity, quality, and duration of emissions, and/or process parameters affecting emissions, in conformance with test methods on file with the Department at the following frequency: Wood Waste Boilers with total heat input capacity equal to or greater than 35 million Btu/hr. -- Once every three years.
State effective: 7/1/01; EPA effective: 3/24/2003

340-240-0440 OPEN BURNING

No open burning of domestic waste is allowed to be initiated on any day or at any time when the local air stagnation advisory forecasts adverse meteorological or air quality conditions.
State effective: 7/1/01; EPA effective: 3/24/2003